Chronic HIV Care with ARV Therapy and Prevention

INTEGRATED MANAGEMENT OF ADOLESCENT AND ADULT ILLNESS INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

INTERIM GUIDELINES FOR HEALTH WORKERS AT HEALTH CENTRE OR DISTRICT HOSPITAL OUTPATIENT CLINIC



WHO Library Cataloguing-in-Publication Data

Chronic HIV care with ART and prevention : Integrated Management of Adolescent and Adult Illness, Integrated Management of Childhood Illness interim guidelines for health workers at health centre or district hospital outpatient clinic.

Revision of: Chronic HIV care with ARV therapy, 2004 (WHO/CDS/IMAI/2004.2).

"WHO/HTM/2007.02"

HIV infections - therapy. 2.HIV infections - prevention and control. 3.Acquired immunodeficiency syndrome - therapy.
 Acquired immunodeficiency syndrome - prevention and control. 5.Antiretroviral therapy, Highly active. 6.Chronic disease - therapy. 7.Long-term care - methods. 8.Practice guidelines. I.World Health Organization.

ISBN 978 92 4 159551 3

(NLM classification: WC 503.2)

© World Health Organization 2007

- All rights reserved. Publications of the World Health Organization can be obtained from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: bookorders@who.int). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press, at the above address (fax: +41 22 791 4806; e-mail: permissions@who.int).
- The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.
- The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.
- All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

IMAI/IMCI (Integrated Management of Adolescent and Adult Illness/Integrated Management of Childhood Illness) is a multi-departmental project in WHO producing guidelines and training materials for first-level facility health workers in low-resource settings. IMAI/IMCI are part of the WHO model essential package for HIV prevention, care and treatment.

This is one of six IMAI/IMCI guideline modules relevant for HIV care:

- * Acute Care
- * Chronic HIV Care with ART and Prevention
- * General Principles of Good Chronic Care
- * Palliative Care: Symptom Management and End-of-Life Care
- * TB Care with TB-HIV Co-management
- IMCI Chart Booklet for High HIV Settings

These generic operationalized guidelines are for country adaptation and use to help with the scale-up of HIV prevention, care and antiretroviral therapy (ART) in resource-limited settings. These guidelines are revised periodically to reflect implementation experience and new data.

The IMAI/IMCI guidelines are aimed at first-level facility health workers and lay providers in lowresource settings using a public health approach. These health workers and lay providers may be working in a health centre or as part of a clinical team at the district outpatient clinic. The clinical guidelines have been simplified and systematized so that they can be used by nurses, clinical aids, and other multi-purpose health workers, working in good communication with a supervising MD/MO at the district clinic. The adherence, education and psychosocial support guidelines are aimed at delivery by lay providers or health workers after training in counselling skills. This module is designed to be used both as learning aid (during training) and as a job aid.

This guideline module cross-references the IMAI **Acute Care** guidelines (which includes management of opportunistic infections and when to suspect TB and HIV) and **Palliative Care: Symptom Management and End-of-Life Care** (page references to Palliative Care guideline module are preceded by a capital P). If these are not available, national guidelines for the acute care of adults and palliative care can be substituted.

This IMAI guideline module has been updated based on the 2006 WHO normative treatment guidelines: Antiretroviral therapy of HIV infection in infants and children in resource-limited settings, Antiretroviral therapy for adults and adolescents in resource-limited settings, Antiretroviral drugs for treating pregnant women and preventing HIV infection in infants, and WHO case definitions of HIV for surveillance and revised clinical staging and immunological classification of HIV-related disease in adults and children.

For more information about IMAI/IMCI please go to http://www.who.int/hiv/capacity/en. The entire IMAI/IMCI toolkit can be accessed by clicking on sharepoint registration at the bottom of the page. You may also contact the appropriate WHO country or regional office or imaimail@who.int.

WHO HIV Department—IMAI Project

TABLE OF CONTENTS

Prevention, care and treatment for patients with HIV infection

These guidelines assume the patient's HIV test is positive.

Su	mmary	v of care at follow-up visit	H8		
		e			
		ate and support the patient on each visit			
		Assess: clinical review of symptoms and signs, medication use, side effects,			
	compl	ications			
	3.1	Ask	H12		
	3.2	Look	H13		
	3.3	Lab	H14		
	3.4	Determine WHO HIV clinical stage			
	3.5	Determine functional status			
	3.6	WHO Adult HIV Clinical Staging	H16		
4.	Assess	family status including pregnancy, family planning			
	and H	V status of partner(s) and children	H18		
5.		v TB status in all patients on each visit			
		e clinical care			
	6.1	Respond to problems	H21		
	6.2	Advise/discuss updated recommendations			
	6.3	Agree on Treatment Plan			
	6.4	Assist to follow revised plan	H22		
	6.5	Arrange follow-up	H22		
7.	Proph	ylaxis	H23		
	7.1	INH prophylaxis			
	7.2	Cotrimoxazole prophylaxis	H24		
	7.3	Fluconazole prophylaxis			
	7.4	Other OI prophylaxis as prescribed by doctor	H24		
8.	ARV th	nerapy	H25		
	8.1	Initiate first-line regimen for patients without complications			
	8.2	Treat opportunistic infections before starting ART			
	8.3	Treat mental health problems/substance use before starting ART			
	8.4	First-level facility TB management in HIV patient			
	8.5	First-line ARV regimen instructions			
	8.6	Special considerations for ART and other PMTC interventions in pregnancy			
	8.7*	Patient/treatment supporter education card			
	8.8	Summary of patient flow to initiate ART			
	8.9*	ARV therapy: adherence preparation, support and monitoring			
	8.10*	Prepare a treatment supporter			
	8.11*	Special adherence support			
	8.12	Respond to new signs and symptoms/possible side effects in patient on ART			
9.		ge chronic problems			
	9.1	Manage persistent diarrhœa			
	9.2	Manage recurrent or severe candidiasis			
	9.3	Manage persistent fever			
	9.4	Manage weight loss			
	9.5	Special interventions for injecting drug users	H62		

10.	Disp	ense medications, schedule follow-up, record data	H63
	10.1	Dispense medications according to Treatment Plan	H63
	10.2	First-line ARV drug interactions	
	10.3	Arrange follow-up visit in clinic	H65
	10.4	Follow-up on defaulers	
	10.5	Link to community care and arrange home visits as needed	
	10.6	Record data	
11.		itive prevention by PLHIV	
		Prevent sexual transmission:	
		Prevent transmission of HIV through non-sexual means	
	11.3	Counsel on reproductive choice and family planning	
	11.4*	Positive living by PLHIV	
	11.5	Infant feeding in HIV-positive women	
12.	Spec	ial considerations in chronic HIV care/ART for children	
	12.1	Ask	H78
	12.2	Look	
	12.3	WHO Pædiatric HIV Clinical Staging	
	12.4	Provide clinical care	H83
	12.5	Cotrimoxazole prophylaxis	H84
	12.6	Possible first-line ARV regimens	
	12.7	Treat opportunistic infections before starting ART	
	12.8	Monitor ARV therapy	
	12.9	Nutrition management	
		* Psychosocial support for HIV-infected children	
	12.11	Pædiatric ARV drug dosages	H97
Anr	ex A*	: Educate and support for all patients at each visit	H103
	A.1	Post-test support	
	A.2	Explain what is available for chronic HIV care	H104
	A.3	Initiate chronic HIV care	
	A.4	Provide ongoing support	
	A.5	Discuss disclosure	
	A.6	Prepare for/support adherence to care, prophylaxis, ART	
	A.7	Support for special circumstances	H109
Ann	ex B:	Care for health workers and lay providers	
	B.1	Use universal precautions	
	B.2	Post-exposure prophylaxis	
	B.3	Care for HIV-infected staff	
	B.4	Help staff cope with stigma of caring for patients with HIV/AIDS	
	B.5	Recognize and prevent burn-out	H116
Ann	ex C:	HIV Care/ART Card	H118

^{*} Sections with an asterisk can be done by a trained PLHIV or other trained lay provider (or nurse or other health worker), using communication aids.

HIV Care Entry Points

Self-referral

Outreach IDU Adolescents Sex workers

Family Partners

Children

Community-based organizations

Peer groups Home-based care PLHIV organizations Orphans and vulnerable children projects

Traditional healers

Outpatient clinics

TB STI Medical Pædiatric/under 5 Antenatal/postpartum and newborn care/PMTCT Mental health programmes Family planning Dental Eye Drug substitution treatment

Inpatient wards

Maternity Medical Pædiatrics Surgical Nutrition rehabilitation units

Prisons and closed setting

Provider-initiated Testing and Counselling

νст

Transfusion services

Blood safety

Private providers

HIVÐ

- Confirmed test
- Written documentation
- Post-test counselling
- Educate on care services and treatment available

Company health care

Patient chooses to enroll in Chronic HIV Care H8



3 Assess



- Determine HIV clinical stage and functional status.
- Assess adherence to medications. (Use counsellor's assessment and your own.)



Chronic care based at the primary care facility near the patient's home



1 Triage

- Greet the patient
- Register if new patient
- If follow-up, retrieve records
- Weigh
- Determine reason for visit
- Take interval history
- Decide if patient needs to see health worker on this visit. Patient should see the health worker if:
 - scheduled for clinical visit
 - · any new symptoms except for simple nausea
- If coughing, advise to cover mouth and have patient wait in a separate, well-ventilated area

2 Educate and support the patient on each visit

Detailed *Education and Support* guidelines are provided in Annex A at the end of this module and are also supported by communication aids.

- A1 Post-test support
- A2 Explain what is available for chronic HIV care
- A3 Initiate chronic HIV care (if this is the first visit)
- A4 Provide ongoing support to patient and family
- A5 Discuss disclosure
- A6 Prepare/support adherence to care, prophylaxis, ARV therapy
- A7 Support for special circumstances

When an HIV-positive patient returns for follow-up care, greet the patient and give education and support. Support to adherence is of key importance in chronic HIV care. These tasks can be done by a lay provider or nurse.

3 Assess: Clinical review of symptoms and signs, (for children use section 12)

3.1 Ask

If this is first visit:

Review history. Check record for TB, other opportunistic infections, chronic problems.

For all visits:

- How have you been?
- What problems have you developed?
- Have you had any of the following? *If yes*, ask for how long and use *Acute Care* guidelines:
 - Cough?
 - Night sweats?
 - Fever?
 - STI signs? (Use locallyadapted screening question.)
 - Diarrhœa?
 - Mouth sores?
 - New skin rash?

- Fatigue?
- Nausea or vomiting?
- Poor appetite?
- Tingling, numb or painful feet/legs?
- Any other pain? If yes, where?
- Problems sleeping at night?
- Sexual problems?

- Headache?
- Have you been feeling sad or unhappy or have you lost interest in your normal activities recently?
- Have you been feeling scared or frightened recently?
- Have you been worried about drinking too much alcohol or taking drugs recently?
- Have you needed urgent medical care? *If yes*, ask for record/diagnosis.
- Which medications are you taking and how often?
- Assess adherence (If on ART, see 8.9.)
- What problems have you had taking the medicines/how taken?
- Taking any other drugs (traditional remedies, TB, ARVs, illicit drugs, etc)?
- How are things at home?
- What usual physical activities are you doing?
- What else do you want to talk about?

medication use, side effects, complications

3.2 Look

In all patients:

- Look for pallor. If pallor, check hæmoglobin.
- Look at whites of the eye—yellow?
- Look for thrush.
- Weigh. Calculate weight gain or loss. Record. If weight loss, ask about food intake and availability.
- Count pills to estimate adherence.
- If patient is sad or has lost interest, assess for depression.

If any new symptoms:

- Measure temperature.
- Check for nodes. If >2 cm, use *Acute Care* guideline module.
- Look for rash.
- Look for evidence of violence.
- Do further assessment of symptoms. (See pp. 15-52 of IMAI *Acute Care* guideline module or other adult guidelines.)

lf first visit

Check height

First visit and every 6 months

Check memory (skip if known problem)

- Tell patient you want to check his memory.
 - Name 3 unrelated objects, clearly and slowly. Ask patient to repeat them:
 - Can he or she repeat them? (registration problem?)

If yes, wait 5 minutes and again ask, "Can you recall the 3 objects?" (recall problem?)

Check visual acuity.

3.3 Lab:

If first visit and tests available:

- Do RPR if none in last year.
- Do CD4 if available. Absence of CD4 should not delay ART.

For returning patients, check for results of TB sputums and any other laboratory tests sent last visit.

- For patients on AZT, check haemoglobin (Hgb) at 0, 4, 8 and 12 weeks.
- For women started on nevirapine with CD4 > 250, monitor transaminase (if available).

If CD4 testing is available but limited, priorities are:

Highest priority:

- Pregnant women: WHO clinical stage 1 or 2—to decide whether to start ART (versus ARV prophylaxis, see section 8.6)
- Non-pregnant adults or children—WHO clinical stage 3*
- Children in WHO clinical stage 1 or 2 (especially <2 years)
- Suspect treatment failure (decide whether to switch, after checking adherence)
- Detect immunosuppression to aid in clinical diagnosis in some severely ill HIV-positive patients (for example, PCP pneumonia)

Lower priority:

- Non-pregnant adults— WHO clinical stage 1 or 2
- Enrolment into HIV care to determine if ART is required
- At initiation of ART

Low priority:

• CD4 at 6 months on ART then yearly

Note: ARV drug substitutions (as opposed to switch of regimens) do not require CD4. Substitutions are in response to toxicity or idiosyncratic reactions.

^{*} Determines urgency of ART initiation; lower priority if national guidelines call for treating all patients with WHO stage 3 when CD4 not available.

- 3.4 Determine HIV clinical stage (3.6), then record
- 3.5 Determine functional status.

Decide (record) whether:

- Able to work, go to school, do housework, harvest or play (in child) (W)
- Ambulatory but not able to work (A)
- ✤ Bedridden (B)

Laboratory Request Form for CD4		
Name of Health Centre	Date	
Name of Patient	AgeSex	
Address		
Patient's ID Number (unique)		
Reason:	ART:	
Staging	□ Startedmonth/year	
Enrolment HIV care	Planned	
Initiation ART	Uncertain eligibility	
🗖 6 months		
12 months		
24 months		
Suspect treatment failure		
🗖 Other		
Signature of Person Requesting Examination_		
Result Communicated to Health Centre—Date		

3.6 WHO Adult HIV Clinical Staging

	WHO Clinical Stage 1 Asymptomatic	WHO Clinical Stage 2 Mild Disease
Symptoms Treat common and opportunistic infections according to <i>Acute Care</i> guideline module and/or guidelines in this module. Follow the Treatment Plan from district clinic.	No symptoms or only: Persistent generalized lymphadenopathy	 Weight loss 5-10 %** Sores or cracks around lips (angular cheilitis) Itching rash (seborrhoea or prurigo) Herpes zoster Recurrent upper respiratory infections such as sinusitis or otitis Recurrent mouth ulcers
Prophylaxis		 Cotrimoxazole prophylaxis INH prophylaxis
ARV therapy	 ♦ Only if CD4 < 200 ♦ Consider ART if CD4 between 200-350* 	 Only if CD4 < 200 or TLC < 1200/mm3 Consider ART if CD4 between 200-350*
 * When initiating nevirapine-containing ART in a woman with CD4 > 250, carefully monitor clinical symptoms and liver funtion tests (transaminase) if available, due to increased risk of severe NVP-related rash and liver toxicity. TLC = Total lymphocyte count 		

WHO Adult HIV Clinical Staging continued:

WHO Clinical Stage 3 Advanced Disease	WHO Clinical Stage 4 Severe Disease (AIDS)
 Weight loss >10%** Oral thrush (or hairy leukoplakia) More than 1 month: Diarrhœa or Unexplained fever Severe bacterial infections (pneumonia, muscle infection, etc.) Pulmonary TB TB lymphadenopathy Acute necrotizing ulcerative gingivitis/periodontitis 	 HIV wasting syndrome Oesophageal thrush More than 1 month: Herpes simplex ulcerations Recurrent severe pneumonia within 6 months Lymphoma* Kaposi sarcoma Invasive cervical cancer* CMV retinitis* Pneumocystis pneumonia* Extrapulmonary TB°* Toxoplasma* Cryptococcal meningitis* Visceral leishmaniasis* HIV encephalopathy+*
 Cotrimoxazole prophylaxis INH prophylaxis Other prophylaxis in Treatment Plan 	 Cotrimoxazole prophylaxis INH prophylaxis Other prophylaxis in Treatment Plan
 Give ART: If CD4 not available If CD4<200 If pregnant or pulmonary TB or severe bacterial infection and CD4<350 In other patients, consider ART if CD4 200-350 and initiate ART before CD4 	 All in stage 4 are medically eligible. Treat. Evaluate for ART (8.1). Prepare for adherence (8.9). Conditions marked with an asterisk require a clinician diagnosis—this can be from records of a previous hospitalization.
count drops below 200	Muscle infection, pneumocystis or any other severe pneumonia, toxoplasma, cryptococcal meningitis, and extrapulmonary TB, etc., are all infections which should be referred for hospital diagnosis and treatment.

° Except TB lymphadenopathy

** Or failure to gain weight in a pregnant woman,

Assess family status including pregnancy, family planning and HIV status of partner(s) and children

- Women of child-bearing age?
- Sexually active?
- Determine pregnancy status.
- Using contraception?
- Breastfeeding?

If pregnancy status uncertain

and she is taking efavirenz (EFV), perform pregnancy test if possible.

If pregnant:

 See 8.6 for considerations for ART and other PMTCT interventions during antenatal or postpartum care.

If not pregnant:

 If using family planning, ask if she is satisfied or has any problems.

How to be reasonably sure a woman is NOT pregnant—Ask her the following questions:

- Did your last menstrual period start within the past 7 days?
- Have you given birth in the last 4 weeks?
- Are you fully or nearly fully breastfeeding AND gave birth less than 6 months ago AND had no menstrual period since then?
- Have you had a miscarriage or abortion in the past 7 days?
- Have you had no sexual intercourse since your last menstrual period?
- Have you been using a reliable contraceptive method consistently and correctly?

If she answers **YES** to any **ONE** of the questions, and has no signs or symptoms of pregnancy, you can be reasonably sure she is NOT pregnant.

- If not using family planning and wishes to, discuss and offer. See 11.3.
- If considering pregnancy, counsel on reproductive choices. See 11.3.

Encourage and actively facilitate HIV testing of partner(s)

- See section 11.1.
- Record results on HIV Care/ART Card.

Recommend HIV testing for:

- All children born to an HIV-infected mother
- $\label{eq:alpha}$ All children brought for child health service in a generalized epidemic setting .
- All children who present with signs and symptoms suggestive of HIV infection in concentrated or low-level HIV epidemic settings

Recommend HIV testing for parents and siblings of an HIV-infected child (especially those not tested in PMTCT services)

If PCR or other virological test is available, test from 6 weeks.

Interpreting PCR or other virological test results			
Test result	Positive	Negative	
Not breastfeeding	HIV-infected	HIV-negative	
or not breastfed in last 6 weeks	See section 12	Child is not HIV-infected.	
Breastfeeding	HIV- infected	Child can still be infected by breastfeeding.	
	Manage as if they could be infected (see section 12).	Repeat test once breastfeeding has been discontinued for more than 6 weeks.	

If PCR or other virological test is not available, use HIV antibody test.

- * If the child becomes sick, recommend HIV antibody test.
- * If the child remains well, recommend HIV antibody test at 9–12 months.
- * If child > 12 month has not yet been tested, recommend HIV antibody test.

Interpreting the HIV antibody test results in a child < 18 months				
Test result	HIV antibody test is positive	HIV antibody test is negative		
Not breastfeeding	HIV-exposed and/or HIV-infected	HIV-negative		
or not breastfed in last 6 weeks	Manage as if they could be infected (see section 12). Repeat test at 18 months.	Child is not HIV-infected.		
Breastfeeding	HIV- exposed and/or HIV- infected	Child likely to not be HIV-infected		
	Manage as if they could be infected (see section 12).	Child can still be infected by breastfeeding.		
	Repeat test at < 18 months or once breastfeeding has been discontinued for more than 6 weeks.	Repeat test once breastfeeding has been discontinued for more than 6 weeks.		

Interpreting the HIV antibody test results in a child \ge 18 months			
Test result	HIV antibody test is positive	HIV antibody test is negative	
Not breastfeeding	HIV-infected	HIV-negative	
or not breastfed in last 6 weeks	See section 12.	Child is not HIV-infected.	
Breastfeeding	HIV- infected	Child likely to not be HIV-infected	
	See section 12.	Child can still be infected by breastfeeding.	
		Repeat test once breastfeeding has been discontinued for more than 6 weeks.	

Follow up all children with suspected HIV infection and all children born to HIV-infected mothers. Give cotrimoxazole prophylaxis, counselling and support on feeding and nutrition, immunization and regular monitoring or growth and development. Use the *IMCI Chart Booklet for High HIV Settings*.

5 Review TB status in all patients on each visit

In what section does the patient fit? (Every patient should be assigned to one segment.)

Take the necessary action, then record on HIV Care/ART Card.

Start TB treatment unless already on ARV therapy—consult or refer these patients to district medical officer.

See 8.4 for when to refer TB patients for ARV therapy (in those not already on treatment).



Provide clinical care

6.1 Respond to problems according to Treatment Plan and new signs/symptoms:

	Then
If pain or other new signs or symptoms (new	Use the <i>Acute Care</i> guideline module and, if on ART, the side effects table (8.12).
or first presentation)	For all patients, assure adequate pain and symptom management (see <i>Palliative Care</i> module).
If new signs of clinical	Start cotrimoxazole prophylaxis.
stage 3 or 4 or CD4 < 200	Evaluate for ART (8.1). Prepare patient for ART adherence (8.9).
	If on ART, this may represent failure or immune reconstitution syndrome (8.12). Consult/refer.
If clinical stage 2	Start cotrimoxazole prophylaxis.
If recently received treatment in hospital	Follow Treatment Plan sent by district medical officer. Re-evaluate before initiating ART if patient is eligible.
If persistent diarrhœa	Manage diarrhoea (9.1 and P27).
If weight loss or wasting	Advise on nutrition (9.4 and P23).
If hazardous alcohol use or depression or drug use (injecting drug use or other illicit drug use)	Use brief interventions to reduce alcohol use. Treat depression according to <i>Acute Care</i> . Manage substance use (9.5). All can interfere with prophylaxis and treatment adherence. Special adherence support will often be needed (8.11).
If on ART	Monitor and support adherence (8.9) and respond to side effects (8.12).
lf pregnant	Arrange for PMTCT interventions. Review medications. In first trimester, switch from efavirenz to a safer ARV drug. See section 8.6.
lf not pregnant	Give reproductive choice and family planning counselling (11.3).

6.2 Advise/discuss updated recommendations

6.3 Agree on treatment plan

6.4 Assist to follow revised plan

6.5 Arrange follow-up (see 10.3)

Use the General Principles of Good Chronic Care

See IMAI guideline module with this title for more detail.

- 1. Develop a treatment partnership with your patient.
- 2. Focus on your patient's concerns and priorities.
- 3. Use the 5 A's—Assess, Advise, Agree, Assist, Arrange.
- 4. Support patient education and self-management.
- 5. Organize proactive follow-up.
- 6. Involve "expert patients", peer educators and support staff in your health facility (these are referred to in these guidelines as lay providers).
- 7. Link the patient to community-based resources and support.
- 8. Use written information—registers, Treatment Plan, patient calendars, treatment cards—to document, monitor, and remind.
- 9. Work as a clinical team (and hold team meetings). Each team must include a district ART clinician.
- 10. Assure continuity of care.

Prophylaxis

7.1 INH prophylaxis to prevent TB (when active TB has been excluded)

Before starting prophylaxis, ensure adequate supply of INH and patient desire to take daily treatment for 6 months.

Adults:

- Give 5 mg/kg isoniazid (INH=H) daily for 6 months—up to maximum dose of 300 mg daily. Also give pyridoxine 50 mg/day.
- Explain treatment to patient and need to continue for 6 months.
- Explain common side effects and when to seek care.
- If patient drinks alcohol, advise to stop or reduce to low risk levels.

Monitor INH prophylaxis:

- Check adherence.
- Assess for side effects and respond as needed.
- Assess for any symptoms or signs suggestive of TB. (Consult or investigate if any suspicion)
- Schedule monthly visits as needed to complete 6 months treatment.
- Dispense a month's supply of INH at each visit.
- Follow-up if patient does not return.

Respond to side effects		
 Minor Side Effects Anorexia, nausea, abdominal pain 	Continue INH and: Give INH at bedtime	
• Joint pains	Give aspirin	
Burning sensation in the feet	Give pyridoxine 100 mg daily	
Major Side Effects		
 New itching of skin or skin rash Dizziness (vertigo & nystagmus) Jaundice Vomiting Confusion Convulsions 	Stop INH	

7.2 Cotrimoxazole prophylaxis

Indications: patients in clinical stage 2, 3 or 4 (if no CD4 available) or CD4 <350 in stage I.

Advise patient on advantages of cotrimoxazole prophylaxis. Cotrimoxazole protects against PCP, toxoplasmosis, bacterial infections, pneumonia and malaria.

Initiate

Ask about previous history of sulpha allergy (to cotrimoxazole/Septrin®, S-P/Fansidar®) Dose: one double strength tablet or two single strength tablets once daily.

Dispense a month's supply

- Schedule follow-up visit 2 days before the supply runs out.
- Give one double strength (960 mg) or two single-strength (480 mg) tablets daily.

Monitor

- Ask about symptoms.
- Check for rash and pallor.
- Assess adherence—ask; count pills left in bottle. Record on card.

Response to side effects		
Nausea	Continue drug and take with food. If severe or persistent vomiting, consult or refer.	
Rash	If generalized rash or fixed drug reaction, or peeling or eye or mouth involvement, stop the drug and refer urgently to hospital (see <i>Acute Care</i> guideline module p. 43). Do not give drug again.	
Pallor or hæmoglobin < 8 gm or bleeding gums	Stop the drug. Call for advice or refer.	
New jaundice	Stop the drug. Call for advice or refer.	

7.3 Fluconazole prophylaxis

Give after full treatment for cryptococcal meningitis (secondary prophylaxis)—fluconazole 200 mg/day for rest of life or until immune status reconstituted from ARV therapy.

When on ART, stop fluconazole prophylaxis when CD4 has been greater than 100 for 6 months, after at least 6 months treatment.

Discuss risks and benefits if pregnant or planning pregnancy.

7.4 Other OI prophylaxis as prescribed by doctor **H24**



8.1 Initiate first-line regimen for patients without complications: AZT-3TC-NVP

Seven requirements to initiate ARV therapy at the health centre (working under supervision of MD/MO). AZT-3TC-NVP requires no lab to start besides a positive HIV test and haemoglobin. (CD4 is desirable.)

1 HIV infection confirmed by written documentation.

2 Medical eligibility—see clinical staging pages.

If not medically eligible, do not start ART. Repeat CD4 in 6 months if available.

3 Patient fits criteria to be started on ART at the first-level facility.

- 1. Does the patient have a condition requiring referral to district clinician? The conditions are:
 - severe illness
 - any condition in stage 4 (with 2 exceptions: non-severe oesophageal thrush or chronic herpes simplex ulcerations?
 - persistent fever
- 2. Is the patient currently on TB treatment?
- 3. Is there severe anaemia and peripheral neuropathy?
- 4. Is there jaundice or known liver problem?
- 5. Chronic illness such as diabetes mellitus, heart or kidney disease, etc.?
- 6. Injecting drug user, now or past?
- 7. Prior ARV use except nevirapine for PMTCT?

NO to all

Give AZT-3TC-NVP unless hgb <8 (<7 in pregnant woman). If anaemia give d4T-3TC-NVP.

These regimens can be initiated at the first-level facility.

Instructions are on 8.5.

YES to any question

Do not start first-line regimen at health centre—consult or refer to district ARV clinician for ARV therapy plan.

If patient is on treatment for TB, see 8.4 for when to refer or start treatment.

If patient is pregnant, see 8.6.

These generic guidelines assume AZT-3TC-NVP is the preferred first-line ARV regimen in resource limited setting. Other first-line regimens (d4T-3TC-NVP, AZT-3TC-EFV, d4T-3TC-EFV) could be substituted or added during country adaptation. For operational reasons, WHO recommends the use of fixed dose combination as the most suitable regimens for rapid scale-up in resource limited settings.

4 Any opportunistic infection has been treated/stabilized (at health centre or if severe at district clinic/hospital). *See summary on next page*.

5 Patient is ready for ARV therapy—after using sections 8.3 and 8.7

- Patient understands ARV therapy, possible side effects, limitations, adherence schedule, etc and wants treatment.
- Patient ready for treatment adherence.
- Patient actively involved in own care.
- Family and/or social support available.
- Treatment supporter if possible.
- No recent non-adherence to care or medication (several visits are required before treatment initiation).
- Barriers to adherence have been addressed such as highly unstable social situation, heavy alcohol dependence or serious psychiatric illness.

6 Supportive clinical team prepared for chronic care

7 Reliable drug supply

Remember: ARV therapy for the individual patient is rarely an emergency!

The public health emergency is to get large numbers of the right patients on treatment with good adherence and good overall HIV chronic care.

For the individual patient, management of life-threatening opportunistic infections can be an emergency.

8.2 Treat opportunistic infections before starting ART

If patient has this opportunistic infection or other clinical problem:	Follow these instructions (using <i>Acute Care</i> guideline module):
Severe illness or any severe (pink) classification in <i>Acute Care</i> guideline module.	Refer to district clinic/hospital for OI management and to decide on ARV regimen. Follow Treatment Plan when patient returns.
Non-severe pneumonia and is being treated with antibiotics.	Wait for 2 weeks after completing antibiotics (to be sure this was not TB) before starting ART.
Malaria, on antimalarial treatment, or mouth/throat infection, STI, UTI, reactive lymphadenopathy or other condition requiring antibiotics.	Treat as in <i>Acute Care</i> guideline module. Do not start ART until treatment completed and no longer febrile. Refer if persistent fever.
Drug reaction.	Do not start ART during an acute reaction (if already on ART, see section 8.12).
Prurigo or other known chronic skin problem.	Do not delay ART. Manage skin problems. (see Acute Care guideline module).
Oesophageal thrush and able to swallow fluconazole (if severe oesophageal thrush, refer).	Start ART after fluconazole treatment if patient can swallow.
Persistent diarrhœa and has already had empirical treatment, and clinician evaluation and symptoms are controlled.	Do not delay ART waiting for resolution.
Non-severe anæmia.	Treat anaemia (see Acute Care). If anaemia does not respond to treatment, do not delay ART (this is often anaemia of chronic disease due to HIV infection.
Old diagnosis (after hospitalization and full treatment) of cryptococcal meningitis, toxoplasma brain abscess, HIV encephalopathy AND now stable (no new signs).	Start ART or refer to district clinician for treatment plan.
Persistent fever without explanation.	Refer for evaluation by district clinician.

8.3 Treat mental health problems/substance use before starting ART*

If patient has this disorder:	Follow these instructions (using <i>Acute Care</i> guideline module and other guidelines)		
Delirium	Refer for treatment of underlying cause (p. 48 <i>Acute Care</i>) before starting ARV therapy.		
Dementia	If HIV-related, consider ART (p. 48 <i>Acute Care</i>) with additional adherence support.		
Suicide risk	Ensure patient safety, stabilise before starting ART (p. 51 <i>Acute Care</i>). Refer if high risk of suicide.		
Major depression	Treat depression first and start ART when person well enough to participate in treatment.		
Minor depression/ complicated bereavement	No reason to postpone ART.		
Psychosis	Treat psychosis (p. 51 <i>Acute Care</i>) and start ART when person well enough to participate in treatment.		
Mental retardation	Do not exclude from ART but requires additional adherence support		
Anxiety disorder	No reason to postpone ART if indicated. May need additional adherence support		
Harmful or hazardous alcohol use or alcohol dependency	 Do brief interventions for harmful or hazardous alcohol use. Advise on health risks and interaction with ARVs (liver damage). Assess capacity to adhere before starting ART. Refer to peer support group. May need additional adherence support. 		
	 If alcohol dependency: If in acute withdrawal, treat or immediately refer to hospital for treatment Refer if possible for detoxification and treatment for alcohol dependency 		
IDU (injection drug use) with dependency	 In health centre/district outpatient department: Advise on prevention for IDU (9.5). Refer to drug substitution programme if available. If not refer to detoxification programme if available. Give additional adherence support (partial or fully observed therapy). In drug substitution or ward or detoxification programme: 		
	 Start ART after 1-2 weeks, when patient is stable with fully observed therapy. Methadone dose adjustment needed with NVP or EFV. 		
IDU with problematic use (no dependency)	 Advise on prevention for IDU (9.5). If available, refer to therapeutic support centre/group. 		

* If a person on ARV therapy develops a psychiatric disorder, do not stop ART. Treat the disorder. Refer if taking efavirenz.

First-level facility TB management in HIV patient 8.4

Patient already on ART*:

If patient already on ART when positive TB sputums or suspect TB, refer to district ARV doctor or medical officer for treatment plan. Do not start TB treatment at first-level facility.

Patient not on ART and CD4 not available:

Patient clinical status	How to manage—when to consult or refer to doctor or medical officer	
Smear-positive pulmonary TB only (no other signs stage 3 or 4) and patient is gaining weight on treatment.	Start TB treatment.** Reassess after intensive phase of TB treatment to determine whether to start ART during TB treatment or after completing it.	
Smear-negative pulmonary TB only (no other signs 3 or 4) and patient is gaining weight on treatment.	Start TB treatment.** Reassess after intensive phase of TB treatment to determine whether to start ART during TB treatment or after completing it.***	
Any pulmonary TB and patient has signs of clinical stage 4 or thrush, pyomyositis, recurrent pneumonia, persistent diarrhœa, new prolonged fever, or losing weight on treatment or if no clinical improvement.	Start TB treatment.** Refer now to district medical officer for ART co-treatment plan. ART needs to be started immediately.***	
Extrapulmonary TB	Start TB treatment.** Refer now to district medical officer for ART co-treatment plan. ART needs to be started immediately.	

Patient not on ART and CD4 is available:

	* For national adaptation		
CD4	How to manage	** Regimen should include pyridoxine. *** Consult/refer to district medical officer for TB/ART plan.	
If CD4 < 200/mm ³	Start TB treatment. Refer now to district medical officer for ART co-treatment plan. This needs to be started as soon as TB treatment is tolerated (between 2 weeks and 2 months).		
lf CD4 between 200-350/mm ³	Start TB treatment. Refer to district medical officer for ART co-treatment after intensive phase (unless non-TB Stage 3 or 4 conditions are present, in that case refer at once).		
If CD4 > 350/mm ³	Start TB treatment. Defer ART until TB treatment is completed unless non-TB Stage 4 conditions are present.		

8.5 First-line ARV regimen instructions

This is

recommended regimen for pregnant woman if CD4 < 250. If 250-350, consider

AZT-3TC-EFV starting in second trimester.

Doses for children are in section 12

How to give AZT-3TC-NVP:

Give every 12 hours

Usual adult and adolescent dose:

- nevirapine (NVP) 200 mg once daily for
 2 weeks then 200 mg twice daily (first
 2 weeks it is necessary to use separate tablets)
- lamivudine (3TC) 150 mg twice daily
- zidovudine (AZT) 300 mg twice daily

No food restrictions

Lab: measure hæmoglobin before starting AZT and at 4, 8 and 12 weeks of treatment. Do not start or continue AZT if hgb<8gm (<7 gm in pregnancy).

How to give AZT-3TC-EFV :

Give AZT-3TC every 12 hours plus EFV at night

Usual adult and adolescent dose:

- zidovudine (AZT) 300 mg twice daily
- lamivudine (3TC) 150 mg twice daily
- efavirenz (EFV) 600 mg once daily at night

Do not take efavirenz with high-fat meal.

Lab: measure hæmoglobin before starting AZT and at 4, 8 and 12 weeks of treatment. Do not start or continue AZT if hgb<8gm (<7 gm in pregnancy).

Must exclude pregnancy in woman of childbearing age (pregnancy test desirable); ask about menstrual periods and possibility of pregnancy each visit; ensure reliable contraception. Defer efavirenz until second trimester.

Avoid if serious psychiatric problems (now or by history).

Note that NVP requires once daily dosing for 2 weeks. Then step up to twice daily.

For first 2 weeks only:

- In the morning: combined tablet with AZT-3TC-NVP
- In the evening: separate tablets for AZT and 3TC

After this:

 Morning and evening: combined tablet with AZT-3TC-NVP

> If pregnant woman with CD4 250-350, use this regimen starting in second trimester.

This regimen is often used for patients also on TB treatment if no anaemia—see doctor or medical officer treatment plan

How to give d4T-3TC-NVP:

Give every 12 hours

Usual adult and adolescent dose:

- nevirapine (NVP) 200 mg once daily for
 2 weeks then 200 mg twice daily (first
 2 weeks it is necessary to use separate tablets)
- stavudine (d4T) 30 mg twice daily
- lamivudine (3TC) 150 mg twice daily

These are available in fixed-dose combinations for the two doses of d4T (40 mg and 30 mg).

No food restrictions

No lab requirement

How to give d4T-3TC-EFV:

Give d4T-3TC every 12 hours plus EFV at night

Usual adult and adolescent dose:

- stavudine (d4T) 30 mg twice daily
- lamivudine (3TC) 150 mg twice daily
- efavirenz (EFV) 600 mg once daily at night

Do not take efavirenz with fatty meal.

Must exclude first-trimester pregnancy in woman of childbearing age (pregnancy test desirable); ask about menstrual periods and possibility of pregnancy each visit; ensure reliable contraception. Defer efavirenz until second trimester.

Avoid if serious psychiatric problems (now or by history).

Note that NVP requires once daily dosing for 2 weeks. Then step up to twice daily.

For first 2 weeks only:

- In the morning: combined tablet with d4T-3TC-NVP
- In the evening: separate tablets for d4T and 3TC

After this:

 Morning and evening: combined tablet with d4T-3TC-NVP

This regimen is often used for patients also on TB treatment—see doctor or medical officer treatment plan

Side effects of first-line ART

	Very common side effects— warn patient and suggest ways patients can manage; also be prepared to manage when patients seek care (8.12)	Potential serious side effects—warn patients and tell them to seek care	Side effects occuring later during treatment
AZT zidovudine (abbreviated as ZDV also)	Nausea Diarrhœa Headache Fatigue Muscle pain	Seek care urgently: Pallor (anæmia) - Fatigue AND shortness of breath	
3TC Lamivudine	Nausea Diarrhœa		
NVP nevirapine	Nausea Diarrhœa	Seek care urgently: - Yellow eyes - Skin rash - Fever	
d4T stavudine	Nausea Diarrhœa	 Seek care urgently: Severe abdominal pain Fatigue AND shortness of breath Seek advice soon: tingling, numb or painful feet or legs or hands 	Changes in fat distribution: Arms, legs, buttocks, and cheek become THIN. Breasts, belly, back of neck become FAT.
EFV efavirenz	Nausea Diarrhœa Headache Strange dreams Difficulty sleeping Memory problems Dizziness	Seek care urgently: Severe depression Thinking of suicide	

Side effects of first-line ART continued:

	Very common side effects— warn patient and suggest ways patients can manage; also be prepared to manage when patients seek care (8.12)	Potential serious side effects—warn patients and tell them to seek care	Side effects occuring later during treatment
ABC abacavir	Nausea Diarrhœa	Seek care urgently: - Fever - Fatigue - Signifigant gastrointestinal symptoms - Shortness of breath - Rash - Sore throat These symptoms may be a sign of a hypersensitivity reaction. If such reaction suspected, ABC should be discontinued and never given to patient again.	
TDF tenofovir	Nausea Diarrhœa Headache	Seek care urgently: - Severe abdominal pain - Fatigue and shortness of breath Seek advice soon: weakness	

8.6 Special considerations for ART and other PMTCT interventions during pregnancy, labour and childbirth, postpartum and newborn care

Special management needs:

- Good coordination between chronic HIV care and antenatal, postpartum, and under 5 child care.
- Family-centred chronic HIV care where the woman, her infant, other children, and partner are cared for together.
- Obtain CD4 count as early as possible.

Give ART to treat mother and prevent MTCT OR ARV prophylaxis to prevent MTCT

Medical eligibility for ART in pregnant women:

- If CD4 is not available, treat all in clinical stage 3 or 4
- ✤ If CD4 is available,
 - treat all with CD4 <200
 - treat CD4< 350 in clinical stage 3
 - treat all in clinical stage 4

If not eligible for ART, start AZT 300 mg twice daily at 28 weeks

* Preferred ART regimen in pregnancy is AZT-3TC-NVP if CD4 < 250.

***** ART or ARV prophylaxis: special adherence support and monitoring:

- Rapid adherence preparation and extra support are often needed.
- If on AZT, check haemoglobin before initiation and at 4, 8, and 12 weeks
- If ARV regimen includes nevirapine (NVP) and CD4 is greater than 250, it is important to carefully monitor clinical symptoms and to measure liver function tests (transaminase) if available, due to increased risk of NVP-related rash and liver toxicity.
- Differentiate between common problems of pregnancy, pregnancy complications, HIV- related illness, ARV side effects, and immune reconstitution (see section 8.12).
- Manage pregnancy-related nausea and vomiting. Do not stop ARV drugs. Consult with district ARV clinician if severe. Instruct her to repeat dose if she vomits and sees pills (see section 8.12).

Antenatal care summary

First visit:

Recommend HIV test (with confidentiality, informed consent, post-test counselling)

If positive, do HIV clinical review , clinical staging, CD4, haemoglobin, RPR, determine medical eligibility for ART.

Recommend ART or ARV prophylaxis and begin rapid preparation for adherence

Fill out PMTCT special card for HIV-positive women and HIV care/ART card

Every antenatal visit:

- Check for emergency signs (B2-B7)*
- Assess pregnancy status, update birth and emergency plan (C2)
 - Advise on signs of labour and danger signs in pregnancy and HIV
 - HIV positive women should give birth in facility with a skilled provider able to provide PMTCT interventions, if possible
- Check for pre-eclampsia (C3)
- Check for and treat anaemia (C4)
- Check for syphilis (C5)*
- Respond to other observed signs or volunteered problems-assess, classify, treat (C7-C11)
 Check for STI and treat
- * Chronic HIV care-follow sequence of care
 - Do clinical review and respond to problems
 - Give cotrimoxazole prophylaxis**
 - Prepare for/monitor adherence to ART or ARV prophylaxis

Preventive measures (C12)* on every antenatal visit:

- Advise on safer sex and use condoms during pregnancy (G2)
- Support disclosure and partner testing
- Give infant feeding counselling (G7-G8, see section 11.5)
- Give tetanus toxoid if due
- Give iron/folate; counsel on adherence and safety
- * Encourage sleeping under insecticide-treated bednet
- Advise and counsel on nutrition and self-care (C13, G6)*
- Advise to stop smoking and avoid alcohol, drugs
- * If adolescent, provide special care

Interventions in bold help prevent MTCT.

* these pages refer to IMPAC-PCPNC

** If not on CTX, give intermittent malaria preventive therapy.
ART-see 8.5

ARV prophylaxis: AZT 300 mg twice daily from 28 weeks.

First trimester only:

Do not give efavirenz—it can be teratogenic.

- Substitute nevirapine for efavirenz.
- Efavirenz use is not indication for abortion.

Start ART if medically eligible

In advanced HIV disease, ART benefits outweigh potential risk to newborn child. Help woman weigh risks and benefits especially if CD4 250 to 350.

Second or third trimester only, also:

Give mebendazole once

Repeat RPR testing in third trimester if at risk

Counsel on family planning

Prepare for ARV drugs during labour and to the newborn:

- Advise that as soon as labour starts or her water ruptures:
 - Take special labour double dose AZT prophylaxis (600 mg) plus 200 mg NVP or continue ART.
 - Go to health facility
- If woman cannot give birth at the facility, provide the woman with ARV drugs for herself and the newborn, and provide careful instructions about how to take them.
 - Provide ART or ARV prophylaxis for the woman to take at home—for herself and her newborn
 - Provide AZT and NVP syrup in small bottles and instruct carefully on how to give to the newborn
 - · Reinforce the advice on later visits to clinic
 - Arrange for treatment supporter, TBA or CHW to help with ART or ARV prophylaxis in the home

see next page: Labour and Childbirth

Labour-Stage 1:

Ensure that woman takes the ARV drugs as soon as labour starts.

Ensure presence of a skilled birth attendant

Use standard precautions

Early active labour

Active labour:

Use partograph to measure labour progress and respond if unsatisfactory progress

Avoid prolonged labour

Avoid routine rupture of membranes

Minimize cervical examinations

Imminent delivery

Labour- Stage 2 (childbirth):

Adherence to safe delivery practices that reduce fetal contact with maternal blood and secretions (section D in IMPAC PCPNC) and using standard precautions for all patient care (B.1) can reduce risk of MTCT and protect health workers

- Wipe baby with clean dry cloth (wear gloves)
- Careful cord cutting
- No routine episiotomy

Keep warm

Labour- Stage 3 (deliver placenta):

Avoid PPH by active management third stage

Ensure safe transfusion practices

ARV drugs as soon	Mother on ART:
as labour starts then continue throughout labour	Continue regular schedule ART every 12 hours (no additional prophylaxis)
Give extra adherence support during labour	Mother on ARV prophylaxis (or no ARV drugs during antenatal care):
	AZT 600 mg once stat
	NVP 200 mg once stat (can skip if >4 weeks AZT)
	3TC 150 mg then
	3TC 150 mg every 12 hours until delivery
ARV drugs to mother	Mother on ART:
after delivery	Continue regular schedule ART every 12 hours
	Mother on ARV prophylaxis (or no ARV drugs during antenatal care):
	3TC 150 mg plus AZT 300 mg — twice daily for 7 days

Postpartum and newborn care

Newborn: give ARV prophylaxis as soon after birth as possible.
Duration depends on how long mother took AZT prophylaxis
or ART

> 4 weeks AZT prophylaxis	Single dose NVP plus AZT for 1 week
< 4 weeks AZT prophylaxis or no prophylaxis	Single dose NVP plus AZT for 4 weeks
> 4 weeks ART	AZT for 1 week
< 4 weeks ART	AZT for 4 weeks

AZT dose for newborn: 4 mg/kg twice daily

NVP dose for newborn:

2 mg/kg as soon as possible

If capacity to deliver combinatin ARV prophylaxis does not exist, give single dose NVP to mother and newborn.

See H98 and H101 dosing tables

Within first hour of delivery of placenta (D19):

Monitor mother and newborn every 15 minutes- check for emergency signs

Give ARV drugs to newborn (see prior page)

If mother has chosen exclusive breastfeeding, **encourage mother to initiate breastfeeding** when baby shows signs of readiness.

If mother has chosen replacement feeding (RF), for the first few feeds after delivery, **prepare the formula for her.**

First hour up to 12 hours/ discharge:

Monitor mother and baby at 2, 3 and 4 hours then every 4 hours (D20). Check for emergency signs

Explain ARV doses for mother and newborn (use patient-held card)

If mother has chosen RF, then **teach her how to prepare the formula and feed the** baby by cup.

Counsel on family planning

Advise when to seek care

Advise mother on postpartum care and nutrition and when to return for HIV testing of her newborn

Postpartum care

- Check for emergency signs.
- Perform postpartum examination of the woman (E2)*.
- Check for elevated blood pressure (E3)*.
- Check for anaemia (E4)*—clinical exam plus, if on AZT, do hæmoglobin at 4, 8 and 12 weeks. Treat anaemia.
- Provide chronic HIV care—do clinical review and staging (section 3) and provide clinical care (section 6).
- Respond to other observed signs or volunteered problems—assess, classify, and treat
 - Treat breast and breastfeeding problems and other acute problems.
 - If on ARVs, differentiate between complications/common problems in the postpartum and HIV-related illness, ARV side effects and immune reconstitution syndrome.

* Pages refer to IMPAC-PCPNC (Integrated Management of Pregnancy and Childbirth–Pregnancy, Childbirth, Postpartum, and Newborn Care: A Guide for Essential Practice).

- Provide acute care for OIs, malaria, and other HIV-related complications.
- Provide psychosocial support.

Give preventive measures (F1-F4)*; advise and counsel (M4)*

- Develop emergency plan (M4)*—advise on postpartum and HIV danger signs; routine and follow-up visits.
- * Advise on safer sex and use condoms during lactation.
- * Support disclosure and partner testing.
- * Provide condoms and instruct on use.
- Give tetanus toxoid if due.
- Give iron/folate; counsel on adherence and safety.
- Give mebendazole once every six months.
- Encourage sleeping under insecticide-treated bednet.
- Advise her that lochia can cause infection in other people and therefore she should dispose of blood stained pads/cloths safely.
- Provide infant feeding support according to the mother's choice. Assess feeding practices.

Support feeding according to her choice: exclusive breastfeeding or replacement feeding

- Advise on breast care and advise the woman to return immediately if she has breast or breastfeeding problems.
- * Counsel on and provide family planning methods.
- Advise and counsel for disclosure of HIV status and partner counselling and testing.
- Advise and counsel on nutrition and self-care.
- Advise to stop smoking and avoid alcohol.

Newborn care

- Explain and agree on plan and timing of HIV testing for the newborn (see section 4).
- Provide care as per IMCI Chart Booklet for High HIV Settings for high HIV settings and section 12.
- Start cotrimoxazole from 6 weeks.
- Regular assessment and early identification of HIV-related symptoms are key to ensuring growth and development.
- Evaluate at 1 week postpartum and again at 6 weeks.

8.7 Patient/treatment supporter education card

Now you are on ART



A	ZT - 3	ТС - Г	NVP	

zidovudine lamivudine nevirapine

Week 1-2	Week 3 and after
Morning: AZT-3TC-NVP (combined tablet)	Morning: combined tablet
Evening: AZT and 3TC (2 separate tablets)	Evening: combined tablet

Remember that

- If you miss doses (even 3 doses in a month) DRUG RESISTANCE can develop. This is bad for you and your community. (These drugs will stop working.)
- Drugs must be taken twice daily, and miss no doses.
- This is very important to maintain blood levels so ART can work.
- If you forget a dose, do not take a double dose.
- If you stop your medicines, you can become ill within months or year.
- Drugs MUST NOT be shared with family and friends.
- If you find it difficult taking your pills twice daily, DISCUSS with health workers. ASK for support from your treatment supporter, family or friends.

It is common to have side effects. They usually go away in 2-3 weeks.

If you have:	Do the following:
Nausea	Take the pill with food.
Diarrhœa	Keep drinking and eating.
Muscle pain, fatigue	These will go away.

If nausea or diarrhœa persist or get worse, report to the health worker at the next visit.



Seek care urgently if:

- Yellow eyes
- Skin rash
- Pale or do not have enough blood
- Fatigue AND shortness of breath



Now you are on ART



AZT - 3TC - EFV

zidovudine | lamivudine | efavirenz

Morning: AZT and 3TC (2 separate tablets) Evening: AZT and 3TC and EFV (3 separate tablets)

Remember that

- If you miss doses (even 3 doses in a month) drug resistance can develop. This is bad for you and your community. (These drugs will stop working.)
- Drugs must be taken twice daily, and miss no doses.
- This is very important to maintain blood levels so ART can work.
- If you forget a dose, do not take a double dose.
- If you stop your medicines, you can become ill within months or year.
- Drugs **must not** be shared with family and friends.
- For women, make sure you are using reliable contraception.
- If you find it difficult taking your pills twice daily, DISCUSS with health workers. ASK for support from your treatment supporter, family or friends.

It is common to have side effects. They usually go away in 2-3 weeks.

If you have:	Do the following:
Nausea	Take the pill with food.
Diarrhœa 🔶	Keep drinking and eating.
EFV can cause brain effects such as sleepiness, dizziness, bad dreams, or problems with sleep or memory	These side effects usually go away. Taking the efavirenz at night is important.
Muscle pain, fatigue	These will go away.

If nausea or diarrhœa persist or brain effects get worse, report to the health worker **at the next visit.**

- Seek care urgently if:
- Bizarre thoughts/confusion
- Yellow eyes
- Pale or do not have enough blood
- Skin rash
- New pregnancy (first trimester)

Now you are on ART

stavudine lamivudine efavirenz



Morning: d4T and 3TC (2 separate tablets)

Evening: d4T and 3TC and EFV (3 separate tablets)

Remember that

- If you miss doses (even 3 doses in a month) DRUG RESISTANCE can develop. This is bad for you and your community (these drugs will stop working).
- Drugs must be taken twice daily, and miss no doses.
- This is very important to maintain blood levels so ART can work.
- If you forget a dose, do not take a double dose.
- If you stop your medicines, you can become ill within months or year.
- Drugs **MUST NOT** be shared with family and friends.
- For women, make sure you are using reliable contraception.
- If you find it difficult taking your pills twice daily, DISCUSS with health workers. ASK for support from your treatment supporter, family or friends.

It is common to have side effects. They usually go away in 2-3 weeks.

If you have:	Do the following:
Nausea	Take the pill with food.
Diarrhœa 🔶 🗡	Keep drinking and eating.
EFV can cause brain effects such → as sleepiness, dizziness, bad dreams, or problems with sleep or memory	These side effects usually go away. Taking the efavirenz at night is important.

If nausea or diarrhœa persist or get worse, or you have any of the following, report to the health worker **AT THE NEXT VISIT.**

- Tingling, numb or painful feet or legs or hands.
- Arms, legs, buttock, and cheeks become THIN.
- Breasts, belly, back of neck become FAT.

SEEK CARE URGENTLY if:

- Bizarre thoughts/confusion
- Yellow eyes
- Severe abdominal pain
- Fatigue AND shortness of breath
- Skin rash
- New pregnancy (first trimester)









Now you are on ART

d4T - 3TC - NVP

stavudine | lamiv

lamivudine | nevirapine



Week 1-2	Week 3 and after
Morning: d4T-3TC-NVP (combined tablet)	Morning: combined tablet
Evening: d4T and 3TC (2 separate tablets)	Evening: combined tablet

Remember that

- If you miss doses (even 3 doses in a month) DRUG RESISTANCE can develop. This is bad for you and your community (these drugs will stop working).
- Drugs must be taken twice daily, **and miss no doses**. This is very important to maintain blood levels so ART can work.
- If you forget a dose, do not take a double dose.
- If you stop your medicines, you can become ill within months or year.
- Drugs **MUST NOT** be shared with family and friends.
- If you find it difficult taking your pills twice daily, DISCUSS with health workers. ASK for support from your treatment supporter, family or friends.

It is common to have side effects. They usually go away in 2-3 weeks.

If you have:	Do the following:
Nausea	Take the pill with food.
Diarrhœa ————	Keep drinking and eating.

If nausea or diarrhœa persist or get worse, or you have any of the following, report to the health worker **AT THE NEXT VISIT**.

- Tingling, numb or painful feet or legs or hands.
- Arms, legs, buttock, and cheeks become THIN.
- Breasts, belly, back of neck become FAT.



SEEK CARE URGENTLY if:

- Severe abdominal pain
- Yellow eyes
- Skin rash
- Fatigue AND shortness of breath



8.8 Summary of patient flow to initiate ART



8.9 ARV therapy: adherence preparation, support and monitoring

Prepare for ARV therapy:

Assess	 Patient's goals for today's visit. Understanding of ARV therapy. Interest in receiving therapy.
A DVISE ON	 HIV illness, expected progression (locally adapted). ARV therapy. Benefits: lifesaving drugs. Your life depends on taking them every day at the right time. Very strong medicines. The pills do not cure HIV. The pills do not prevent HIV transmission to others—you must still use condoms and practice safer sex. Need for complete adherence to daily treatment (more than other drugs you may be familiar with—essential to maintain drug levels in the blood for ARV therapy to work). Must be taken twice daily, without interruption. If you forget a dose, do not take a double dose. Must be taken at right time, every 12 hours (adjust this if on a different regimen). If you stop, you will become ill (not immediately—after weeks, months or years). Possibility of side effects and drug interactions. Importance of disclosure of HIV+ status (Annex A.1 and A.5). Importance of testing partner and children. Drugs must not be shared with family or friends—patient must take full dose.

Establish that the patient is willing and motivated and agrees to treatment, before initiating ARV therapy.
 Has the patient demonstrated ability to keep appointments, to adhere to other medications?
 Has the patient disclosed his or her HIV status? If not, encourage him/her to do so. Disclosure to at least one person who can be the treatment supporter is important (required in many programmes).
 Does the patient want treatment and understand what treatment is?
 Is the patient willing to come for the required clinic follow-up?

Assist	 Help the patient develop the resources/support/arrangements needed for adherence: Ability to come for required schedule of follow-up. Discuss
	how patient will do this. (Do you live close to here? If not, how will you manage to come for the scheduled appointments?)
	 Home and work situation that permits taking medications every 12 hours without stigma.
	 Regular supply of free or affordable medication.
	Supportive family or friends.
	ARV adherence support group.
	Treatment supporter—prepare him/her (8.10).

ARRANGE

When patient is ready for ARV therapy, discuss at clinical team meeting, then make plan.

Support ARV initiation (as patient first starts on medications):

Assess	 Patient's goals for today's visit. Check understanding of the information given before—make sure the patient understands the illness, treatment and possible side effects.
A dvise on	 Reinforce the information given before. Advise on details of first-line regimen:
	 Explain the purpose of and how to take each pill. Provide and explain card summarizing treatment (with drawing of each pill and common side effects).
	 Make sure patient understands the importance of adherence. Advise on diet (insert recommendations appropriate to first-line regimen).
	Explain limits on alcohol and drug use (counsel on low risk drinking or abstinence—see Brief Intervention module). These are important for adherence.
	 Explain side effects.
	 Prepare patient and treatment supporter to handle common side effects. Most side effects can be treated symptomatically.
	 Explain which side effects are likely to be transitory (related to initiation of treatment) and their likely duration.
	 Explain which are more serious and require return to clinic.

Explain that patient can still transmit HIV infection when on ARV therapy. It is very important to still practice safer sex and utilize other practices to prevent transmission (11.1).

AGREE	 Make sure the patient agrees to ART and is a true partner in the treatment plan. Make sure patient understands that his/her life depends on taking the medicine every day. Agree on plan for support by treatment buddy and support groups.
_	
Assist	Develop (then reinforce on each visit) a concrete plan for the specific ARV regimen.
	 When to take/times for every 12 hour dosing/how to make it a habit.
	Explain step-up dose of nevirapine.
	 How to remember—provide and explain written schedule, pillbox, pill chart, other aids.
	Prepare patient and treatment buddy for adherence, possible common side effects, what to do if they occur and when to seek care (give education card).
	 Provide psychosocial support (Annex A.4).
	 Encourage patient to join ART adherence support group.
	 Arrange home visit, if feasible.
-	

Next follow-up visit in clinic, home visit if feasible, and next visit with district clinician (if required).

- Agree on best way to access help between visits.
- Make sure patient understands where/when s/he will see health worker (see follow-up 10.3).

ARRANGE

Monitor and support adherence

Assess	 Review the medications with the patient and their treatment supporter. Determine whether there is an adherence problem. 			
		respectful and non-judgmental way. Ask in a asier for patients to be truthful:		
	 "Many patients have trouble taking their medications. What trouble are you having?" 			
		d how you take each pill?"		
	 "When is it most difficult f 	, ,		
		, ,		
	 "It is sometimes difficult to take the pills every day and on time. How many have you missed in the last 4 days (insert agreed time period)?" 			
	Ask about the common and locally important factors that may interfere with adherence.			
	Ask about stigma related to to	aking the pills.		
	 Count pills. 	5		
	 How many pills forgotten yes 	sterday, last 3 days, last month?		
	If poor adherence: Determine	what the problem is:		
	Side effects?	 Transport problems 		
	Simply forgot?	Problems with diet		
	Ran out of pills?	(food availability)?		
	Which dose missed:	 Another medical problem? 		
	morning or evening? Why?	Screen for excess alcohol		
	• Cost?	use and depression,		
	Reminds you of HIV?	and treat, if present		
	Misunderstood?	Other locally common		
	(explain, use aids)	constraints:		
	Changed work situation?			
	Not comfortable taking			
	medication around			
	others?			
	• Stigma?			
	 Different timing when away from home or 			
	holiday, travel, weekend?			
	 Seldom at home and 			
	disorganized?			

· · · · · · · · · · · · · · · · · · ·	
Advise	 Reinforce the information given before. Give additional information that may help with adherence problem. Advise on any suggested changes in the regimen (after consulting with clinician). (If treatment needs to be stopped, or if patient decides to stop a drug, stop all medications at once and consult with clinician. Usually side effects require only changing one drug, not stopping—consult with clinician if this is necessary).
	 Agree on any changes in Treatment Plan and solutions to adherence problems (if present).
	 Discuss the agreements you have reached and check for their commitment.
Acces	 Provide adherence support.
Assist	Reinforce interventions which match the patient's needs and adherence problems, if present (see Assist in 8.9).
	Make sure that the patient has:
	Plan to link taking medications with daily events such as meals.
	 Any device or skills (e.g. how to use a diary) that s/he needs.
	Make sure patient has the support s/he needs:
	Get help from treatment buddy, other family and friends or peers.
	 Help patient and treatment supporter to find solutions.
	 If adherence problem:
	 Get help! Call for advice or refer back sooner but do not "just refer". Link with home-based care for help and home visits.
	 Seek help from district clinic adherence staff if regimen is too complicated or not tolerated or low adherence.
	 If repeated missed doses, use special interventions (home visit, etc).
	 Record adherence estimate on patient's card.
	 Arrange for refills.
	Arrange for next follow-up visits:
	• in clinic
	home visits
	Make sure that the patient and supporter understand the follow-

up plan and how to contact the clinic team if there is a problem.

8.10 Prepare a treatment supporter (guardian/buddy)

Help the patient choose an ART or ART/TB treatment supporter. He or she should be someone who:

- ✤ Is chosen by the patient.
- Has accepted the patient's HIV-positive status.
- Is committed to support the patient with ART for a long time.
- Has gained the patient's trust over time.
- Is available to go to the preparatory visits and to be educated on HIV, ART and TB issues.
- Is available twice daily especially in the first months of therapy and after that as necessary to support adherence.
- Is somebody who will treat all information as confidential.
- Examples: partner, parent, son/daughter, someone from support group, friend, neighbour, teacher, spiritual guide, etc.

How to prepare the treatment supporter:

- Have a meeting with the supporter before getting commitment to explain what is required (commitment, confidentiality, knowledge on HIV, ART and TB related needs and also emergency resource needs such as money, help with household, children, which can arise while on treatment).
- Educate on what "being confidential" means.
- Educate the treatment supporter with the Patient Education Flipchart, Patient Education Card, Patient Self-Management Booklet and Caregiver Booklet. Also use the TB Treatment Supporter material if patient is on TB treatment.
- Educate on how to remind the patient to:
 - take the medicine (and to work out with the patient how best to do so),
 - be present at the follow-up appointments,
 - remember (and if patient not capable to keep track of) all important test results and clinic history over time, and
 - to accompany patient to support group meeting if possible.
- Educate to prevent his/her burn-out (see Annex B.5).
- Prepare to provide psychosocial support.
- Request his/her presence at the three preparatory visits prior ART initiation.

What health worker can do in addition:

- Hold treatment supporter meetings at facilities every two weeks to deal with issues facing treatment supporter (burn out, patient not being adherent, barriers to treatment and adherence, etc.).
- Explain how the clinical team can be reached by phone or any other quick way of consultation if urgent problems with the patient arise.
- Mobilize people living with HIV to know who to contact for as treatment supporters and to enlist people to be treatment supporters.

8.11 Special adherence support

Special adherence support is needed for patients dealing with:

- Complex medical problems
 - Initial weeks of combined TB- ART treatment
 - Second-line ART regimens
 - MDR TB
 - · Patients experiencing adverse effects of treatment
 - Co-morbidities
- Difficult social situations
 - Children or adolescents with poor understanding of their disease
 - Patients who live far away from the health facility
 - Alcohol or drug use
 - Psychiatric or neurological problems
 - Orphans or vulnerable children

Adherence support should not just focus on medical issues since there are many other issues that affect adherence. Additional adherence support may include the following:

- Transportation costs for health center visits
- Home visits
- Additional education—about TB, HIV, importance of adherence and regular visits
- Peer support groups—People facing similar life situations, especially adverse or unpleasant situations, often find comfort, support and strength in being together with others who are in the same or similar situations. Some people need a therapeutic support group led by a trained PLHIV or professional or other paraprofessional.
- Food supplements (for country adaptation)

8.12 Respond to new signs and symptoms/ possible side effects in patient on ART

These may be:

- ✤ A side effect of the ARV therapy.
- ✤ A new opportunistic infection.
- Immune reconstitution syndrome.
 (The stronger immune system reacting to an infection that had been invisible; usually within 2 to 3 months of starting treatment.)
- A common infection or other problems (not related to HIV) or
- If pregnant or postpartum, a pregnancy-related problem or complication.

Clinical monitoring at the first-level facility requires the ability to consult with the district clinician on your clinical team. This will require support for communication by phone or radio.

WHO clinical staging while on ART

When a patient is on ART, record their clinical stage with a "T" for treatment in front of it. Often the patient's clinical stage will improve (for example, from T3 to T2). Or the clinicial stage can deteriorate (for example, a patient in T2 develops thrush while on treatment, he/she is now T3). If a patient develops a new stage 3 or 4 condition while on treatment then consult/refer to a doctor. This may represent IRIS or treatment failure.

Signs or	Response	
symptoms	Special additional considerations in managing pregnant or postpartum women are in italics at the end.	
Nausea or vomiting	Take with food (except for ddl or IDV).If on zidovudine, assure that this is common, usually self-limited. Treat symptomatically (see <i>Palliative Care</i> P.23). If persists for more than 2 weeks or worsens, call for advice or refer.	
	This is a common pregnancy problem in first 14 weeks gestation. Morning sickness can be made worse by nausea from ARV drugs. If no response to dietary changes and no other signs or symptoms, try vitamin B6 (25 mg 3-4 times daily, not to exceed 100 mg/day). If no response and vomiting interferes with ART or fluid intake, give phenergan IM or rectally. If no response, consult or refer.	
Headache	Give paracetamol. Assess for meningitis (see <i>Acute Care</i>). If on AZT or EFV, reassure that this is common and usually self-limited. If persists more than 2 weeks or worsens, call for advice or refer.	
	Measure BP. If diastolic BP>90 mm Hg, consider pre-eclampsia —see IMPAC PCPNC	
Diarrhœa	Hydrate. Follow diarrhoea guidelines in <i>Acute Care</i> . Reassure patient that if due to ARV, will improve in a few weeks. Follow up in 2 weeks. If not improved, call for advice or refer.	
Fatigue / anaemia	Consider anaemia especially if on AZT. Check haemoglobin. Fatigue commonly lasts 4 to 6 weeks especially when starting AZT. If severe or longer than this, consider drug substitution or call for advice/refer.	
	Fatigue is common in pregnancy. Rule out other causes.	
Anxiety, nightmares, depression	This may be due to efavirenz. Give at night; counsel and support (usually lasts < 3 weeks). Call for advice or refer if severe depression or suicidal or psychosis. Initial difficult time can be managed with amitriptyline at bedtime.	
	Consider depression during pregnancy and postpartum depression in first weeks after birth.	
Blue/black nails	Reassure. It's common with AZT.	
Rash	If on nevirapine or abacavir, assess carefully. Is it a dry or wet lesion? Call for advice. If generalized or peeling or with mucous membrane involvement, stop drugs and refer to hospital.	
	If pregnant woman is on nevirapine, a new rash is likely due to this. Pregnancy-related rashes are rare and this diagnosis is made clinically. Any pregnant woman with unrelenting pruritis should be evaluated by district doctor urgently.	

Signs or symptoms	Response		
Fever	Check for common causes of fever (see <i>Acute Care</i>). Call for advice or refer (this could be a side effect, an opportunistic or other new infection, or immune reconstitution syndrome).		
	Consider a pregnancy- or postpartum-related infection. See IMPAC PCPNC		
Yellow eyes (jaundice)	Stop drugs. Call for advice or refer (abdominal pain may be pancreatitis from ddl or d4T). If jaundice or liver tenderness, send for ALT test and stop ART. (nevirapine is most common cause). Call for advice or refer.		
Abdominal or flank pain	Jaundice in pregnancy can be caused by many diseases, some of which can be fatal if not managed correctly and urgently. All pregnant women with jaundice should have an urgent evaluation including liver function tests by a doctor.		
	Abdominal or flank pain: consider abuptio placenta, labour, and conditions more common in pregnant women such as pyelonephritis. Consult or refer.		
Pallor: anaemia	If possible, measure haemoglobin. Refer/consult (and stop AZT/ substitute d4T) if severe pallor or symptoms of anaemia, or very low haemoglobin (<8 grams; <7 grams in pregnancy). If non-severe anaemia, use Acute Care page 18. Make sure patient is given iron/folate; mebendazole if none in last 6 months; and antimalarial if at risk.		
Tingling, numb or painful feet/legs or hands	If new or worse on treatment, call for advice or refer. Patient on d4T-3TC- NVP should have the d4T discontinued—substitute AZT if no anaemia (check haemoglobin).		
Cough or difficult breathing	This could be an opportunistic infection or immune reconstitution syndrome or, if difficult breathing, lactic acidosis. Use Acute Care section on cough or difficult breathing and consult/refer if suspect IRIS or if difficult breathing.		
Changes in fat distribution	Discuss carefully with your patient—can she/he accept it?		
In patients on abacavir:	Consider abacavir hypersensitivity syndrome, a life threatening syndrome. If suspected, discontinued immediately.		
fever, fatigue, rash, sore throat, or shortness of breath	Abacavir should never be restarted in a patient who has had abacavir hypersensitivity syndrome.		
In patients on tenofovir	Refer if suspected kidney problem. If possible measure serum urea and creatinine. If abnormal, consult or refer.		

Single drug substitutions for patients already on treatment with first line regimens

In some cases, it is appropriate to substitute one drug for another for a specific toxicity. These substitutions can usually be made without having to stop the other drugs in a patient's regimen. Extra care must be taken when substituting a drug in a patient on a fixed dose combination to single drugs.

In patients on	When to substitute
AZT <u>substitute to</u> → d4T	If patient has anaemia (low Hgb) probably caused by AZT, then d4T may be substituted for AZT.
d4T <u>substitute to</u> AZT →	If patient has tingling/numb or painful feet and hands, this may be caused by d4T. Substitute AZT for d4T if hgb>8g/dl*. The hgb should be checked at 4, 8 and 12 weeks and then if symptomatic after starting AZT.

TDF and ABC are alternative substitutions for d4T or AZT toxicity.

Manage chronic problems

* Most of the problems in section 9 should improve on ART. If patient is on ART and these problems develop, make sure the patient is adherent, and consult or refer to district clinician—this may indicate toxicity from the treatment or that ART is not working. Exclude TB if fever or weight loss—this may require referral to the district clinic.

9.1 Manage persistent diarrhœa*

Give empirical antimicrobial treatment if no blood in stool:

- Treat with: cotrimoxazole + metronidazole. Follow up in 7 days.
- If no response, refer. If referral is difficult, treat with: albendazole or mebendazole.
- If good response to an antimicrobial, continue for 2 weeks total treatment.
- If diarrhœa does not stop within 2 weeks or after second treatment. Refer for management, including possibility of starting ARV therapy.
- If on ART, consider whether this is a side effect (see Section 8.12)

Give supportive/palliative care:

- Increase fluid intake.
 - This is very important to prevent dehydration.
 - Give ORS if large volume diarrhœa (see Fluid Plan B in Acute Care).
- Give constipating drug unless blood in stool or fever or elderly (see P25 in *Palliative Care*).
- Advise on special care of the rectal area (see P26 in *Palliative Care*).
- Advise on a supportive diet for patients with diarrhœa (P27 in *Palliative Care67*).
- Monitor weight (patient can monitor change in fit of clothes).
- Follow up regularly.

9.2 Manage recurrent or severe candidiasis*

For recurrent candida vaginitis which does not respond to first-line antifungal (nystatin):

- Give fluconazole 200 mg on the first day, then 100 mg/day for 10 days. Do not give during pregnancy.
- Follow up in 2 weeks.
- If vaginitis persists on follow-up, or is recurrent, treat woman and partner at the same time.
- If still recurrent, consult or refer (she may need an intermittent treatment regimen or ART).

For oral thrush which does not respond to the first-line antifungal:

- Use miconazole gum patch if only nystatin or gentian violet was used previously.
- If still no response, give fluconazole for 10 days.
- Follow up in 2 weeks.
- If oral thrush persists on follow-up or is recurrent, consult or refer. Patient may need intermittent treatment regimen.

9.3 Manage persistent fever*

Antimicrobial treatment

- Treat for malaria if:
 - result is smear-positive, or
 - result is smear-negative or unavailable, and no treatment within past month (adapt locally).
- Always consider TB when persistent fever, even if there is no cough. Refer to district clinician or consult for possibility of empirical TB treatment.
- See Acute Care, section on fever, to consider common causes of fever.

Refer patient to district for consideration of ART when eligible. If on ART already, this may be immune reconstitution syndrome or a side effect—consult/refer.

Give supportive care:

- Increase fluid intake. This is very important to prevent dehydration.
- Paracetamol, but avoid excessive dose (see page 34 in Palliative Care).
- Tepid sponging if patient likes it.
- Follow-up regularly.

9.4 Manage weight loss (or in a pregnant woman, no weight gain)*

- Assess nutritional status (use MUAC or BMI in adults—see page 19 Acute Care)
- Assess for possible causes and treat:
 - Assess diet and give advice to increase high energy and nutrient-rich foods.
 - Make sure painful oral or oesophageal infections are not interfering with eating.
 - If persistent diarrhœa, treat.
 - If lack of appetite or nausea, see recommendations on page 23 *Palliative Care*. Consider TB (consult or refer if necessary).
- Start ART when eligible.

9.5 Special interventions for injecting drug users

People who inject drugs are particularly vulnerable to HIV and may have difficulties in dealing with health professionals (and vice-versa). Extra care is therefore needed to ensure they get the best service available and keep using the services.

- Encourage them to:
 - Use sterile injecting equipment each time they inject.
 - Not pass on or share needles or syringes with others.
- Make clean needles and syringes available.
- Check for common infections such as local abscesses, pneumonia, tuberculosis and hepatitis.
- Help them to stabilize their lifestyles. Integrate care with drug substitution and other drug treatment and support services.
- When methadone is used for drug substitution, be aware that some medications may induce withdrawal:
 - Rifampicin.
 - Several ARV medications: efavirenz (EFV), nevirapine (NVP), or protease inhibitors.
- Special considerations in ART:

EFV or NVP can decrease plasma levels of methadone and lead to opiate withdrawal. Patients should be monitored for signs of withdrawal and their methadone dose increased as required to alleviate withdrawal symptoms.

10 Dispense medications, schedule follow-up, record data

10.1 Dispense medications according to Treatment Plan

- Check the Treatment Plan.
- Adherence:
 - Make sure adherence has been assessed and supported (see 8.9).
 - Record estimate on HIV Care/ART Card.
- Make sure patient understands:
 - how to take the drugs
 - how to store the medications
 - what to do if a dose is forgotten
 - what to do if a dose is vomited
 - · common side effects and how to manage them
 - when to seek care (use Patient Education Card)
 - whom to contact when there is a problem

Explain, then ask checking questions.

- Observe patient swallowing first dose. If partial directly observed treatment is planned, do this on each visit and mark treatment calendar.
- When on ARV medication, be careful if another drug is started for another problem, or if the patient's condition has changed (use 10.2).
- Ask patient about:
 - other drugs
 - herbal remedies
- Follow drug management supply guidelines.
- Dispense drugs (record).
- Advise to return on follow-up visit with:
 - stock of drugs
 - treatment supporter

10.2 First-line ARV drug interactions

If patient is taking:	Do not co-administer these drugs (call for advice for alternative treatment).	Other cautions:
nevirapine (NVP)	 ✤ rifampicin ✤ ketoconazole 	If using combined oral contraceptives, advise also to use condoms. If on methadone, will need to increase dose. Monitor for withdrawal signs.
lamivudine (3TC)	No major drug interactions.	
stavudine (d4T)	zidovudine (AZT, ZDV)	Higher risk of d4T neuropathy when also taking INH.
zidovudine (AZT, ZDV)	stavudine (d4T)ganciclovir	Higher risk of anæmia when also taking aciclovir or sulpha drugs.
efavirenz (EFV)	 diazepam (OK for convulsions in emergency). other benzodiazepines other than lorazepam phenobarbitol phenytoin protease inhibitor ARVs 	Do not take with high-fat meal. If on methadone, will need to increase dose. Monitor for withdrawal signs. Do not give in first trimester pregnancy.

Consult with clinician if patient is taking other ARV drugs. Insert local traditional medicines which interact with first-line ARV drugs.

10.3 Arrange follow-up visit in clinic

Clinical Stage	Patient Status	Follow-up Schedule More frequent visits may be needed for more counselling.
Stage 1 or 2	Pregnant woman	Follow-up at antenatal visits—at least once in first trimester, once in second trimester, and twice in third trimester; more may be needed for adherence preparation and monitoring if eligible for ART and to provide PMTCT interventions.
	Postpartum or lactating mother	At 6 hours, 6 days and 6 weeks postpartum and during newborn's immunization visits, then every 3 months.
	All other adults	Every 6 months (unless new problem arises).

Stage 3 or 4	On TB treatment	Every month—combine with follow-up visit for TB.
	All patients, including pregnant women	 If not on ART, every month. When starting ART: Every week for 2 weeks, then every 2 weeks for 2 months, then monthly. Once stable and symptom-free for 1 month, patient may only need to see health worker every 3 months. For patients with complicating conditions who require close monitoring and lab by district clinician: District clinic initiates and checks every 1-2 weeks for 2 months. If no problem, follow up at: Nurse or first-level facility at month 2 and 3. District clinician at month 4. Nurse or first-level facility at month 5 and 6.
		 District clinician at month 7. Nurse or first-level facility at month 8 and 9. Etc.

10.4 Follow-up defaulters

- Arrange home visit.
- Consult with treatment supporter and relevant CBO/FBO.

10.5 Link to community care and arrange home visits as needed

Link and refer to community services—community health workers; CBO's; NGO's; FBO's; and traditional practitioners as appropriate.

10.6 Record data

- Transfer key HIV Care/ART Card data to Pre-ART or ART registers.
- Arrange for electronic data entry from register, according to national system.
- Summarize data in monthly (or quarterly) report and cohort analysis report.

The following information will be used to determine whether the ART is working:

- Weight
- Patient's function
- Adherence estimate
- New opportunistic infection after 6 months
- CD4 where available

11 Positive prevention by PLHIV

11.1 Prevent sexual transmission

Counsel on safer sex and reducing risk of transmission

- Counsel on partner reduction while emphasizing consistent condom usage during all sexual encounters.
- Counsel on less risky sex—choose sexual activities that do not allow semen, fluid from the vagina, or blood to enter the mouth, anus or vagina of the partner.
- Emphasize that even if a client is on ART, HIV transmission can still occur.
- Educate on symptoms of STIs and counsel to receive prompt treatment if they suspect a STI.
- Dispel any prevailing myths on cleansing of HIV infection through sexual intercourse with minors or others. Discuss any other local myths that may impact on positive prevention, for example, belief that condoms transmit HIV (refer to patient flipchart).
- For adult men, emphasize not having sex with teenagers or girls (or boys).
- Respond to concerns about sexual function. Encourage questions from clients. Emphasize that normal sexual activity can continue, with above stated precautions.
- Help patient assess current risk of transmission and make an individual risk reduction plan.

Counsel on consistent and correct use of condoms during every sexual encounter

- Educate that it is essential to consistently use condoms even if already infected with HIV or if both partners are HIV-positive.
- Use condoms for vaginal, anal and oral intercourse.
- Demonstrate how to use both male and female condoms.
 - use model to demonstrate correct use
 - educate to put condom on before penetrative sex, not just before ejaculation
 - · request client to demonstrate correct use of condoms
- Educate on advantages/disadvantages of both male and female condoms.
- Advise to use water-based lubricants.
- Provide condoms and discuss how client will assure a regular supply of condoms

Discuss potential barriers to consistent and correct use of condoms

- Explore options to overcome barriers.
- Provide techniques/skills for negotiating condom use according to the needs expressed by clients.
- Role-play condom negotiation with client.

Discuss disclosure (See Annex A.5) and encourage partner testing

- Discuss barriers and explore benefits of disclosure.
- Develop strategy for disclosure if client is ready.
- Refer to PLHIV support groups or others for additional support, if required.
- Strongly encourage and facilitate partner testing (record result on HIV Care/ART Card).
 - Explain that it is common for partners of PLHIV to still be HIV negative
 - HIV is not transmitted on every exposure
 - HIV negative partners in discordant couples are at very high risk of infection
 - If discordant couple, explain effective risk reduction options:
 - condoms
 - abstinence
 - STI treatment
 - separation

Discuss testing of children (see section 4).

Provide ongoing counselling for discordant couples.

11.2 Prevent transmission of HIV through non-sexual means

- Explain how sharing needles or syringes or razor blades or tattoo instruments can infect others.
- Educate clients to cover any open sores or cuts.
- Educate caregivers to wear protective covering, and clean up any blood or body fluids with gloves and disinfectants. Explain that this is normal procedure.

11.3 Counsel on reproductive choice and family planning

For women of childbearing age or any man, counsel on reproductive choice and family planning (use the *Reproductive Choice and Family Planning for People Living with HIV flipchart*).

If considering pregnancy:

- Advise on the risks associated with pregnancy:
 - Infections such as malaria, TB, pneumonia are more dangerous in pregnancy.
 - Greater risk of postpartum complications.
- Pregnancy does not cause faster progression of HIV for the woman.
- Discuss risks of transmission from HIV positive woman to her baby during pregnancy, delivery or breastfeeding. Also increased risk of miscarriage, stillbirth, and low birth weight.

Risk of mother-to-child transmission of HIV		
Out of 20 babies born to women with HIV: (Risk of transmission can be lowered with treatment.)		
Not infected 13		
Infected during pregnancy and delivery	4	
Infected during breastfeeding	3	

If man is not infected with HIV, discuss artificial insemination. If not possible, advise having sex without condoms only at fertile time of month.

If pregnancy is not desired, discuss family planning:

- Encourage condom use in all to protect from STIs, and to prevent transmission to sexual partners.
- Condoms are also an effective method of contraception when used correctly and consistently (offering dual protection from both pregnancy and STIs/HIV). However, if a woman desires further pregnancy protection, she may wish to use condoms with another contraceptive method.

Methods that are easy to provide						
Method	How to use	Effectiveness (pregnancies p in 100 women	ber year	Common side effects	Considerations for HIV-infected	
Male condom	Use every time you have sex	Highly effective when used corr each time (2 pregnancies/ Less effective at commonly used (15 pregnancies)	rectly ⁄year.) s d	No side effects	Condoms are the only method that protects from STIs and transmission of HIV	
Female condom	Use every time you have sex	Effective when used correctly each time (5 pregnancies /year.) Less effective as commonly used (21 pregnancies/year)		No side effects	Condoms are the only method that protects from STIs and transmission of HIV	
Combined oral contraceptive pills or progesterone- only pills	Take a pill every day	Highly effective when used correctly (<1 pregnancy/year) Less effective as commonly used (8 pregnancies/year)		Menstrual changes, spotting, headaches, also possible nausea with combined pills	Women on ART should be advised to be very careful to take pills on time and consider using condoms for additional pregnancy protection and to avoid STIs and HIV transmission	
Injectables (DMPA or NET-EN)	Get an injection every 3 months (DMPA) or 2 months (NET-EN)	Highly effective when used correctly (<1 pregnancy/year) Less effective as commonly used (3 pregnancies/year)		Spotting at first, then no monthly bleeding for some women; weight gain	Women on ART should be advised not to be late for injections	
Referral methods			These methods provide long-term highly effective contraception and can be used by women with HIV.			
Emergency contraceptive pills			Provide to all women in case condom is not used, breaks or slips or as back-up for other method.			

- Further special considerations about contraception use for women with HIV include:
 - An IUD should not be inserted in a woman with gonorrhoea or chlamydia, or if a woman is at very high risk for these infections. Women with HIV or successfully treated AIDS can use the IUD.
 - If a woman is taking rifampicin, she should not use pills, monthly injectables or implants as the contraceptive effectiveness may be lessened.
 - Spermicides, or barrier methods with spermicides, should not be used by women with HIV infection or AIDS.
 - Women on ART who are using hormonal methods are advised to also use condoms, as ART may reduce the contraceptive effectiveness.

If pregnant:

- Use antenatal guidelines.
- During pregnancy, condoms should be used to protect against STIs and to prevent HIV transmission to sexual partner(s).
- Provide family planning counselling and services during pregnancy to enable her to prevent or delay future pregnancies.
- Discuss whether she is considering pregnancy termination. Warn about dangers of unsafe abortion. If abortion is safe and legally available and desired by the woman, discuss option of pregnancy termination. Discussion should be nondirective and nonjudgmental.

Special family planning considerations in postpartum woman					
	If breast feeding	If not breast feeding			
Combined oral contraceptive pills	Do not use until 6 months postpartum	Begin after 21 days postpartum			
Implants, injectables or progesterone-only pills	Do not use until 6 weeks postpartum	May begin immediately postpartum			
Female sterilization	Within 7 days of birth or delay to 6 weeks				
	If copper IUD: insert < 48 hours postpartum or delay to 4 weeks If LNG IUD: delay to 4 weeks				
LAM (lactational amenorrhea method)	Can be used for 6 months postpartum if woman is exclusively breastfeeding and her menses have not returned.				

11.4 Positive living by PLHIV

People with HIV can live full and healthy lives if they take care of themselves and access treatments.

* Advise how to prevent other infections.

- Avoid STIs and re-infection with other strains of HIV—see 11.1
- Avoid others with infections (flu, boils, impetigo, herpes zoster, chickenpox, pulmonary TB until 2 weeks on treatment).
- Use safe drinking water—chlorinate or drink boiled water or tea when possible. Store water in container which prevents contamination. (Use spigot; do not dip hand or used cup into water.)
- Eat well-cooked food.
- Wash fruits and vegetables (with iodine or chlorine tablets in water, especially if eating raw).
- Practice good hand washing—especially after toilet of themselves or others. Caregivers and patient should wash hands often: after using toilet; before preparing food; after sneeze or cough; after touching the genitals; after handling garbage; after touching any blood, semen, vaginal fluid, feces.
- HIV patients should have a local antiseptic (such as gentian violet or chlorhexidine) at home to apply to minor wounds after washing.
- Use insecticide-treated bednet to prevent malaria.

* Encourage physical activity as appropriate.

- Help patient develop his/her own programme.
- Exercise can make the person feel better and maintain muscle tone.
- Physical activity is important to prevent weight loss:
 - stimulates appetite
 - reduces nausea
 - improves functioning of the digestive system
 - strengthens muscles

Advise to avoid harmful or ineffective expensive treatments or food supplements (adapt locally).
* Support nutrition.

- Advise on nutrition (local adaptation is essential):
 - Advise on adequate nutrition, encouraging a diet with adequate energy, protein and micronutrients:
 - Nutriet-dense foods include (adapt to national guidelines):

Avocados, coconut, full-cream milk powder, yoghurt or sour milk, soya products, cheese, meat, fish, chicken, peanut butter, nuts and seeds, dried fruit, eggs, beans, lentils, potatoes, sweet potatoes, bananas, olives, cassava, millet, sorghum, oats, rice, barley, wheat, maize.

- Avoid refined sugar and sweets as these increase the risk of dental and oral problems.
- Some tips to help improve taste, intake and digestion of food:

Squeeze fresh lemon juice over fatty foods like meat, chicken and nuts.

Add the grated skin of oranges and lemons to fatty foods.

Eat many small meals a day to increase intake.

Chew food well and move around in mouth to stimulate taste.

Drink between meals, not with meals.

Eat fermented foods such as yoghurt or fermented porridge, or use nutritional pastes (where available).

- Avoid excessive alcohol/drugs.

Address food security: arrange for patient/family nutritional support if available and needed (requires local adaptation).

 Give priority to patients with moderate or severe malnutrition. Manage with appropriate feeding regimens as available (adapt locally).

* Have peer demonstrate preparation of nutritious foods.

11.5 Infant feeding in HIV-positive women

* Provide general information about:

- The risk of HIV transmission through breastfeeding (see table in section 11.3).
- The risks and benefits of locally available infant feeding options.

If you have not been trained to do in-depth counselling to help the mother make an infant feeding choice:

- Refer the mother to a trained counselor.
- If a mother has already delivered and her baby is less than 6 months old, encourage her to exclusively feed her infant however she has chosen, either by breastfeeding or replacement feeding, until she has seen a counselor.
- Support the mother, however she decides to feed her baby.
- If the mother has chosen to exclusively breastfeed, use the skills you learned through IMCI or other training to support her to initiate breastfeeding and to exclusively breastfeed until she is ready to make a safe transition to another feeding choice. When she is ready to make that change, she should return for further infant feeding counselling and support.
- Similarly, use your skills to teach a breastfeeding mother to express breastmilk and feed it with a cup.
- If you have been trained in infant and young child feeding, including HIV and infant feeding, provide this counselling according to the flow chart, as appropriate to the woman's situation:
 - 1. If this is the mother's first infant feeding counselling session :

And she is pregnant:

- Follow Steps 1-5.
- If she needs time to decide which feeding option to choose, follow Steps 1-4 and ask her to return to discuss Step 5.
- If she is early in her pregnancy, counsel her but also ask her to return again closer to her delivery date to review how to implement the feeding method.

If she already has a child:

- Follow Steps 1-4. If the mother is not breastfeeding at all, however, do not discuss the advantages and disadvantages of breastfeeding.
- Continue with Steps 5 and 6.

2. If the mother has already been counselled and has chosen a feeding method, but has not yet learned how to implement it :

And she is pregnant:

• Do Step 5 only.

If she already has a child:

• Begin with Step 5, and then continue with Step 6.

3. If this is a follow-up visit:

- Begin with Step 6.
- Review how to implement the feeding method.

Counselling flow chart



12 Special considerations in chronic HIV care/ART for children

Key differences between adults and children

- Young children have immature immune systems and are susceptible to common infections as well as opportunistic infections.
- Maternal HIV antibodies are passed to the child and last for up to 18 months, so understanding HIV positive antibody results is more difficult in children under 18 months. Positive HIV antibody testing can indicate exposure to HIV or HIV infection in the child.
- Negative HIV antibody testing in a child no longer breast feeding usually indicates the child is not HIV infected.
- Children at any age who continue to breastfeed are at risk of acquiring HIV infection throughout the time they are breastfed.
- Normal CD4 counts are higher in young children than in adults and decrease with age. For children under 6 years of age, it is better to use a %CD4, not an absolute count.
- ARV drugs are handled differently in children's bodies, affecting the doses that are needed.
- It can be difficult to communicate with children. This makes care and adherence more difficult. As children grow they need counselling and disclosure of their HIV status.
- Where one child is HIV infected in a family it is possible that some of the siblings are also infected. Make sure testing and counselling is offered to all other siblings.

ASSESS: Clinical review of symptoms and signs, medication use, and side effects and complications in children

12.1 Ask

- Review clinical history and check record if available for TB, other OIs and chronic problems.
- Ask caregiver what the child's problems are*.
- Check for general danger signs*:
 - Ask for history of convulsion.
 - Is the child able to drink or breast-feed?
 - Does the child vomit everything?
- Ask if the child has the following symptoms and, if yes, ask for how long:
 - Cough or difficult breathing*?
 - Diarrhœa*?

If yes, blood in stool?

- Fever*?
- Ear problem or ear discharge*?
- Mouth sores?
- Weakness?
- Nausea or vomiting?
- Poor feeding/reduced appetite difficulty swallowing?
- Tingling or numbness on the feet or legs?
- Rash or swelling?
- Any other pain?
- Has the child needed urgent medical care? If yes, ask for record/diagnosis?
- Which medications is the child taking and how often?
- Assess adherence (if on ART, see 8.9).
- What problems has the child had taking medicines, or how have the medicines been taken?
- Assess for side effects of ARV drugs.
- What problems has the child had taking the medicine?
- Ask if there is anything else the child or the treatment caregiver/ parent would like to talk about.
- Ask if the development milestones of the child has been normal.

^{*} See IMCI guidelines

12.2 Look

- Check for general danger signs:
 - See if the child is lethargic or unconscious*.
- If cough or difficult breathing*:
 - Count the breaths for one minute.
 - Look for chest indrawing.
 - Look and listen for stridor.
- ✤ If diarrhœa*:
 - Assess for dehydration.
- If hot body or high body temperature*:
 - Look or feel for stiff neck.
 - Look for signs of measles, herpes zoster or other rash conditions.
- Look for palmar pallor*.
- Look in mouth for oral thrush.
- Check for swollen glands in the neck, axillary and groin areas.
- Check for parotid enlargement.
- Assess for severe wasting. Look for increased skin folding at the buttocks? Look for the "baggy-pants" sign. Is the child "skin and bones"? If yes, this is severe wasting.
- ✤ Weigh the child.
- ✤ Measure MUAC
- Check for oedema.
- Check for developmental milestones. Regression indicates loss of a previously attained milestone, e.g. a child who was walking can no longer walk. Common developmental milestones include:
 - Child able to smile.
 - Child able to stand without support—about 12 months.
 - Child able to climb stairs—about 12 months.
 - Child has bladder control—about 24 months.
 - Child able to say 2 words—about 24 months.
 - In older children and adolescents, sexual development.
- Look for new signs. If new symptoms are present, use *IMCI-HIV Chart Booklet* for high HIV settings or the national guidelines.

^{*} See IMCI guidelines

12.3 WHO Pædiatric HIV Clinical Staging (any one condition in the highest staging determines stage; clinical staging can only be performed if HIV infection is confirmed)¹

	WHO Pædiatric Clinical Stage 1 Asymptomatic	WHO Pædiatric Clinical Stage 2 Mild Disease	
Growth			
Symptoms/ signs	No symptoms or only: Persistent generalized lymphadenopathy	 Unexplained persistent enlarged liver and/or spleen Unexplained persistent enlarged parotid Angular cheilitis Minor mucocutaneous conditions (e.g. chronic dermatitis, fungal nail infections or warts (molluscum contagiosum) Chronic/recurrent URTI (sinusitis, ear infections, pharyngitis, tonsillitis) Herpes zoster Recurrent mouth ulcers 	
ARV Therapy	Indicated only if CD4 shows severe immunodeficiency: < 11 months %CD4 < 25 (CD4<1500 cells) 12-35 months %CD4 < 20 (CD4<750 cells) 36-59 months %CD4<15 (CD4<350) 5 years or older as for adults (CD4 count<200 or <15%)	Indicated only if CD4 shows severe immunodeficiency [◊] If CD4 not available then TLC may be used (subject to national adaptation). < 11 months TLC < 4000 cells 12-35 months TLC < 3000 36-59 months TLC < 2500 5-8 years TLC < 2000 9 years or older as for adults	

WHO Pædiatric Clinical Stage 3 Advanced Disease	WHO Pædiatric Clinical Stage 4 Severe Disease (AIDS)
 Moderate unexplained malnutrition not responding to standard therapy 	Severe unexplained wasting or stunting or severe malnutrition unexplained and not responding to standard therapy
 Oral thrush (outside neonatal period) Oral hairy leukoplakia Unexplained and unresponsive to standard therapy: Diarrhoea >14 days Fever >1 month Thrombocytopenia for > 1 month* (< 50,000/mm³) Neutropenia for > 1 month* (< 500/mm³) Anæmia for > 1 month (haemoglobin < 8 gm)* Recurrent severe bacterial pneumonia Pulmonary TB TB lymphadenopathy Symptomatic LIP* Acute necrotizing ulcerative gingivitis/periodontitis 	 ♦ Oesophageal thrush ♦ Herpes simplex ulceration > 1 month ♦ Severe multiple or recurrent bacterial infections ≥ 2 episodes in a year (not including pneumonia) ♦ Pneumocystis pneumonia (PCP)* ♦ Kaposi sarcoma ♦ Extrapulmonary tuberculosis °* ♦ Toxoplasma* ♦ Cryptococcal meningitis* ♦ HIV encephalopathy* * Conditions marked with an asterisk require clinician diagnosis—this can be from records of a previous hospitalization. Pneumocystis or any other severe pneumonia, LIP, toxoplasma, cryptococcal meningitis, and extrapulmonary TB are all infections which should be referred for hospital diagnosis and treatment.
ART indicated if child <12 months or if CD4 shows severe immunodeficiency in children ≥ 12 months If CD4 count not available, consider ART for all children with clinical stage 3. In general those with only LIP, oral hairy leukoplakia, TB confined to the lymph nodes or low platelet count are not as immunodeficient as those with other stage 3 illnesses.	ART indicated irrespective of CD4 count If HIV infection cannot be confirmed, presumptive diagnosis of severe HIV disease can be made (see next page) and ART can be started.

Presumptive diagnosis of severe HIV disease if virological testing not available in a child <18 months:

HIV antibody positive (confirmed by EIA/rapid test)

and

- One of the following:
 - AIDS defining condition
 - or
 - Symptomatic with two or more of the following:
 - oral thrush
 - severe pneumonia > As defined in IMCI
 - severe sepsis
- Other factors that support the diagnosis of severe HIV disease in a HIV antibody positive child include:
 - recent HIV-related maternal death
 - advanced HIV disease in the mother
 - CD4 < 20%

Confirmation of the diagnosis of HIV infection should be sought as soon as possible see section 4.

CD4 criteria for severe immunodeficiency

Age	CD4 percentage or CD4 count
< 11 months	%CD4 < 25 or CD4<1500 cells/mm3
12-35 months	%CD4 < 20 or CD4<750 cells/mm3
36-59 months	%CD4<15 or CD4<350 cells/mm3
5 years or older as for adults	%CD4<15 or CD4<200 cells/mm3

12.4 Provide clinical care

Respond to problems according to treatment plan and new signs and symptoms. Use IMCI guidelines to classify severity of signs.

14	 Then
IT	Inen

If fever, pain or other	* Use IMCL guidelines
new symptoms or signs	 Use IMCI guidelines. If on ART, use the side effects table (8.12).
	 Answer adequate pain and symptom
	management (see Palliative Care).
If child exposed to HIV and HIV status not yet	 Counsel on infant feeding. Follow national PMTCT guidelines.
determined	 Follow up at 1 or 2 weeks, 6, 10, 14 weeks, then monthly until the age of 12 months, and every 3 months afterwards.
	 Ensure adequate nutrition, growth monitoring and immunization.
	 Cotrimoxazole prophylaxis from 4-6 weeks of age.
	 Determine HIV status as soon as possible.
If child is HIV infected	 Start or continue cotrimoxazole prophylaxis.
and new signs of clinical stage 2, 3 or 4	 Evaluate for ART. Prepare child for ART adherence (8.9). If on ART, this may represent failure or immune reconstitution syndrome.
	♦ Consult/refer.
If recently received	 Follow treatment plan sent by district clinician.
treatment in hospital	 Reevaluate before initiating ART if patient is eligible.
If on ART	 Monitor and support adherence and respond to side effects (8.12).
If household contact	✤ Evaluate for TB.
of TB patient	Consider INH prophylaxis—see TB Care with TB-HIV Co-management.

12.5 Cotrimoxazole prophylaxis

Start cotrimoxazole at 4-6 weeks or when first seen:

In all HIV-exposed children:

- Any child born to an HIV-infected mother.
- Any child breastfeeding from an HIV infected mother.

Continue cotrimoxazole until HIV infection can be excluded and child is no longer breastfeeding.

In all HIV-infected children if:

- CD4 < 25% in children 1-5 years or < 200 in children > 5 years (follow national adult guidelines)
- Any clinical symptoms and CD4 not available (WHO paediatric clinical stage 2, 3 or 4).

Note: some countries may choose to give cotrimoxazole prophylaxis to all HIV-infected children if CD4 is not available.

Age	5 ml syrup 40mg/200mg once daily	Single strength paediatric tablet 20 mg/100mg once daily	Single strength adult tablet 80 mg/400mg once daily	Double strength adult tablet 160 mg/800 mg once daily
6 months	2.5 ml	1 tablet		
6 months – 5 years	5 ml	2 tablets	½ tablet	
> 6 – 14 years	10 ml	4 tablets	1 tablet	1/2 tablet
> 15 years	-	-	2 tablets	1 tablet

Cotrimoxazole dose

12.6 Possible first-line ARV regimens

Possible first-line regimens:

* AZT or d4T plus 3TC plus NVP or EFV*

AZT-3TC-NVP AZT-3TC-EFV d4T-3TC-NVP d4T-3TC-EFV

* ABC-3TC-NVP or EFV*

ABC-3TC-NVP ABC-3TC-EFV

 * $\,$ If < 3 years, use NVP. EFV cannot be used in this age group.

** d4T not recommended if child is unable to tolerate solid forms.

12.7 Treat opportunistic infections before starting ART

If patient has this opportunistic infection or other clinical problem:	Follow these instructions (using IMCI Chart Booklet for High HIV Settings):
TB suspected (according to national guidelines)	Consult/refer.
Any severe classification in IMCI	Consult/refer.
Non-severe pneumonia	Treat as in IMCI. Do not start ART until treatment is completed. Refer if persistent cough.
Persistent diarrhœa	Put on nutritional management and re-hydrate with ORS as in IMCI. Do not delay ART waiting for resolution.
Oesophageal thrush and able to swallow fluconazole	Start ART after fluconazole treatment. If not able to swallow, refer.
Drug reactions	Do not start ART during an acute reaction. (If already on ART, see 10.2.)
Anæmia	Severe anæmia: refer.
	Non-severe anæmia: start treatment, see IMCI. Measure haemoglobin before starting AZT. Do not delay ART.
Persistent fever without explanation	Consult/refer. Do not start ART until clinician evaluation.
Skin problem	Treat as in IMAI Chart Booklet for High HIV Settings.
Mouth problem	Treat as in IMAI Chart Booklet for High HIV Settings.

12.8 Monitor ARV therapy

Children put on ART need careful monitoring (see schedule follow-up in 10.3).

- For possible side effects on d4T, AZT, 3TC, NVP, EFV, see section 8.5.
 For abacavir see section 12.11.
- Clinical monitoring of children should include monitoring of:
 - weight and height gain using growth charts (monthly) (catch-up growth)
 - developmental milestones, or onset encephalopathy (monthly)
 - new or recurrent stage 3 or 4 conditions

Where CD4 is available, it is a useful adjunct CD4 % is more reliable for children under 6 years than CD4 counts.

Support adherence to treatment

Children's adherence depends largely on the understanding, perseverance and inventiveness of the parent or other caregiver. An older HIVinfected child who understands his/her infection can be actively involved in adherence to ARV treatment, but will need constant support to maintain it.

Assess	 HIV+ parent's own adherence to treatment if s/he is the caregiver Caregiver's awareness of risks to the child deriving from incorrect adherence Whether the caregiver is anxious that the medication could harm the child Caregiver's cognitive capacity to understand the nature of the treatment and importance of adherence Older child's awareness of importance of adherence to treatment Presence of depression or "giving up" in the caregiver or older child
Advise	 Child's health depends on strict regularity of pill-taking Identify strategies to facilitate child's correct adherence (taste, association of pill-taking with regular daily occurrences or game, respect for confidentiality) ART has possible transitory side-effects that vary in duration and severity Let the child take part in choosing the best way to take medicine regularly
Agree	To develop a treatment plan which respects the child's privacy and allows him/her to carry on with regular activities
Assist	 To access a support group for caregivers and/or for older children on ART
ARRANGE	 Next follow-up visit and facilitate linkages/home visits

12.9 Nutrition management

Where an IMCI adaptation has been made to determine local foods for various age groups, use those recommendations with a 50-100% increase in calorie requirement for weight.

12.10 Psychosocial support for HIV-infected children

Note: These recommendations are also useful for HIV-affected children of HIV infected parents.

Support for HIV-infected children

HIV-infected children have the same basic needs as all children. They should be encouraged and assisted to lead the life of any other child and helped to develop in a healthy way. (See also Section A.7 for children whose parents or other family members are PLHIV)

The HIV-infected child has further serious needs:

- to face her/his own infection and learn to live with HIV
- to look after his/her health
- to grow and develop without transmitting HIV to others
- to overcome discrimination/ignorance/fear in others in a positive way

Support for families

Caregivers may not know how to provide essential care and attention to the child. Helping caregivers to strengthen their coping skills will allow them to better support the children.

A caregiver is a parent, or another adult providing care for the children. A caregiver may also be a sibling or young adult.

The recommendations for support for children living with an HIV+ family member (see Annex A.6 Support for special circumstances, for older child with HIV-infected parents) should also be applied to the infected children themselves likely to be living with an infected or sick family member who may die one day or be too ill to care for them. Or they may have already lost one or more family members.

Encourage and help caregiver of HIV-infected or-affected children to:

Assess	 Family needs: psychological and social with special attention to stigma, financial needs linked to lack of income due to illness and death, practical needs particularly concerning child care, legal needs. The child's needs: quality of care and support; exposure to developmental stimuli such as communication, play, school, learning new skills, recreational activities; psychological conditions linked to fear and understanding of her/his and other family member's HIV status; understanding of HIV/AIDS and on the importance of taking treatment regularly; possible risks of discrimination and stigma. Caregiver's own support and guidance needs, in relation to issues such as disclosure, adherence, support for a sick or dying child, coping with stigma, accessing available services. Availability of further adult support in family or community to ensure respite care and support to a sick child.
Advise	 Identify ways of generating further income Identify potential support figure or service in family circle and/or community Encourage caregiver to meet own support needs Advise on age-appropriate disclosure and development Access legal services for coping with stigma, inheritance issues, child abuse or exploitation
Agree	 Develop a plan addressing these needs. Involve the child in planning for his/her future.
Assist	 Provide support and information on available services. Disclose his/her HIV status (or the HIV status of a family member, as appropriate) gradually to the child, starting as soon as possible and in a way appropriate to his/her age (see <i>Support for disclosure</i>).

Link with relevant support and guidance services available in the community:			
 social welfare income generation activities home care child counselling peer support groups for caregivers/older children 	 educational services community volunteer support spiritual support organizations of PLHIVs 		
 Link with relevant services for chi educational, artistic and recreatio older children, child-counselling, community volunteer support se Arrange follow-up meetings or vi and to modify it if necessary 	nal activities, peer groups for services providing school fees, rvices, meals for children.		

Support for disclosure

It is important for a child to know his/her HIV status and/or that of a family member. Open communication about the infection or illness will allow the child to express his/her fears, obtain support, understand the infection and participate in finding ways of taking treatment regularly.

A caregiver is a parent, or another adult providing care for the children. A caregiver may also be a sibling or young adult.

Assess	Caregiver's awareness of the child's right to understand what is happening to him/her or to someone in the family and be involved in planning for the future			
	 Protection from painful topics leaves the child to cope with his/her fears alone: fantasies may be worse than reality 			
	Children become frightened when they sense fear in adults: talk naturally to the child about the infection/illness and let her/him understand the caregiver feels comfortable with this			
	Be attentive to a child's ways of expressing anxiety (withdrawal, anger, acting out, regression, craving attention, difficulty sleeping) and encourage him/her to talk about it			
	 Start disclosing HIV status as soon as possible in an age-appropriate way 			
	 Ideally the caregiver should be the one to disclose to the child, and should provide ongoing support and loving empathy throughout the process 			
	Disclosure to children should be done little by little, encouraging questions, providing truthful answers, and making the child understand s/he can come back with more questions at any time			
	Provide a loving context, use child-friendly language			
	 Listen to the child and encourage him/her to express fears and emotions 			
	Always be truthful to gain the child's trust			
	Involve the child in decisions concerning his/her future			

Advise

- Reassure the child that it is not his/her fault if s/he or a family member are sick
- Tell the child whom s/he can talk to about the illness, not that it is a secret
- Explain that many people do not know much about HIV. If they seem frightened to let their children come close to the child, it is because they don't understand, not because they want to hurt him/her.
- Link caregiver with peer support group for caregivers of a child infected by HIV
- Counsel caregiver for guidance on disclosure of HIV status to a child according to his/her age, as follows:

Up to 2 years 2-3 years 3-5 years 6-9 years Talk to the child Be aware of Start the disclosure Stimulate questions by simply and children's asking the child what s/he process as soon naturally about understands about having sensitivity to as possible, paying attention to non-verbal his/her health. adult's feelings to go to the clinic, taking expressions of anxietv through body medicine, being sick, and Avoid language. what s/he fears. and denial. transmitting anxiety to the Talk openly Listen carefully and answer Encourage and stimulate baby through truthfully and naturally, questions by the child. and naturally about child's giving a little information at If the child does not ask body language or voice tone. health without a time, as the child seems questions, ask him about his fears. transmitting ready to take it in. anxiety. Talk about the illness Use simple language, such If the child is openly and simply, giving as "a virus (or germ) inside sick, talk gently you that can make you information about his/her sick", "medicine will make a little at a time. illness, and the body stronger to fight as the child seems ready to provide against the virus", "the same take it in. constant virus vour mother has that Provide information about sometimes makes her sick". loving care. HIV infection/illness, its name, and availability Answer questions about dying: "Everyone will die of treatment. Answer one day, no one knows questions about dying when. All children need to (see 3-5yrs). look forward to playing, Explain that medicine will learning new skills, making fight against the infection friends and growing up". and make him/her feel Provide ongoing loving better, but that it needs to reassurance and support. be taken very regularly. Tell the child that s/he can Reassure the child that play with, hug and hold s/he can lead a life like hands with other children all children, and can go without giving them the to school, play games, virus, and that if some hold hands and hug adults seem afraid it is other children without because they don't know transmitting the infection. enough about this.

Age-specific advice on disclosure

Support development in HIV-infected children

All ages

- Assess caregiver's awareness of the child's need to lead the life of any other child and for stimulation for healthy development
- Advise:
 - · do not overprotect the child
 - make sure that the child leads a full life, including play, educational and recreational activities with other children
 - the child will not infect other children
 - · show appreciation for the childs achievements
 - report discriminatory episodes to relevant services and organizations working to fight against stigma
- Counsel caregiver on age-specific needs to ensure healthy development, as follows:

Up to 4 Months of Age	4 Months up to 6 Months	6 Months up to 12 Months	12 Months up to 2 Years	2 Years and Older
Play: Provide ways for your child to see, hear, feel, and move.	Play: Have large colourful things for your child to reach for, and new things to see.	Play: Give your child clean, safe household things to handle, bang and drop.	Play: Give your child things to stack up, and to put into containers and take out.	<i>Play:</i> Help your child count, name, and compare things. Make simple toys for your child. Encourage play with other children.
Communicate: Look into your child's eyes and smile at him or her. When you are breastfeeding is a good time.	Communicate: Talk to your child and get a conversation going with sounds or gestures.	Communicate: Respond to your child's sounds and interests. Tell your child the names of things and people.	Communicate: Ask your child simple questions. Respond to your child's attempts to talk. Play games like "bye."	Communicate: Encourage your child to talk. Answer your child's questions. Teach your child stories, songs and games.

Care and support in illness and death*

Assess	 caregiver's own need for support availability of respite caregiver child's needs (pain, fear, loneliness, need for distraction) sibling's needs (may feel guilty, left out, not loved, bewildered)
	 join a support group for caregivers of sick children
	 access counselling and/or spiritual support
	 Let the child/baby experience physical closeness and care through holding and voice contact
	 Encourage the child to express his/her pain and fears, and listen carefully
	Encourage the child to take part in quiet play or educational activities which can take his/her mind off the illness and pain
	 Find inventive ways of helping to relieve pain, such as light massage, story-telling, singing, changing position
	 Provide spiritual support according to the family's religious beliefs
	 explain to a sibling about the child's sickness
	 Encourage a close sibling to spend time with the child and assist with small services
	 Encourage siblings to create a memory box together
	Reassure the child that if s/he dies s/he will not be alone
	 Let a terminal child in pain understand that s/he can "let go", not hold on to life to protect the caregiver or other family member from pain.
Assist	 Caregiver to identify further caring respite support to ensure ongoing care during the child's illness
	 Caregiver to identify support for him/herself.
	 link to volunteer community or spiritual support, counseling, support group for caregivers of sick children
	Iink to children's services providing drama, painting, music, play and sports activities for the sibling/s
	opportunities for ongoing support to caregiver and sibling/s

^a See IMAI **Palliative Care** guideline module. This includes a section on children.

12.11 Pædiatric ARV drug dosages

To ensure that correct ARV doses are dispensed to children, doses should be calculated per kilogram body weight or surface area. Drug doses have to be increased as the child grows; otherwise there is a risk of under dosage and development of resistance. However, health workers may find it difficult to calculate doses from weight or surface area. Therefore, tables with drug doses that can be administered according to a "weight band" are developed as shown below.

These tables provide suggested simplified dose schedules based upon the existing formulations available in most countries. They provide the closest dosing possible using the specified formulation, and indicate where it is not possible to get a reasonable dosing range with a given formulation or where the drug is usually not recommended for use in this age.

When adolescent reaches Tanner Stage 4 or 5, use adult dose.

DISCLAIMER:

These drug dosages by weight band have not been validated against pharmacokinetic values. Whenever possible, a health professional should calculate the dosage using the child's actual weight or body surface area.

lamivudine (3TC)

TREATMENT DOSE:

4 mg-kg-dose (to maximum 150 mg/dose) - give twice daily

Weight (kg)	Syrup 10) mg/ml		150 m	g tablet
	AM	РМ		АМ	РМ
30 days or older:					
5 – 6.9	3 ml	3 ml			
7 – 9.9	4 ml	4 ml			
10 – 11.9	5 ml	5 ml			
12 – 13.9	6 ml	6 ml	or	0.5	0.5
14 – 19.9				0.5	0.5
20 – 24.9				1	0.5
25 +				1	1

stavudine (d4T)

TREATMENT DOSE:

1 mg/kg-dose (to maximum 30 mg/dose) - give twice daily

Weight (kg)	Solution 1mg/ml		15 mg, 20 mg	g, 30 mg capsules
	АМ	РМ	АМ	РМ
5 – 5.9	6 ml	6 ml		
6 – 9.9			half 20 mg	half 20 mg
10 – 13.9			one 15 mg	one 15 mg
14 – 24.9			one 20 mg	one 20 mg
25 +			one 30 mg	one 30 mg

zidovudine (AZT or ZDV)

TREATMENT DOSE:

180 -240 mg-m2/dose to maximum 300 mg- give twice daily

Weight (kg)	Syrup 1 AM	0 mg/ml PM		100 mg capsule AM	100 mg capsule PM		300 mg tablet AM	300 mg tablet PM
5 – 5.9	6 ml	6 ml						
6 – 6.9	7 ml	7 ml						
7 – 7.9	8 ml	8 ml						
8 – 8.9	9 ml	9 ml	or	1	1			
9 – 11.9	10 ml	10 ml	or	1	1			
12 – 13.9	11 ml	11 ml	or	1	1			
14 – 19.9				2	1	or	0.5	0.5
20 – 24.9				2	2	or	0.5	0.5
25 – 29.9				2	2	or	1	0.5
30 +				3	3	or	1	1

zidovudine (AZT) for PMTCT prophylaxis in newborns syrup 10 mg-ml

TREATMENT DOSE: 4 mg/kg-dose - give twice daily

	АМ	РМ
unknown weight	1.2 ml	1.2 ml
1 – 1.9	0.4 ml	0.4 ml
2 – 2.9	0.8 ml	0.8 ml
3 – 3.9	1.2 ml	1.2 ml
4 – 4.9	1.6 ml	1.6 ml

efavirenz (EFV)

TREATMENT DOSE: 15 mg/kg/day if capsule or tablet Give once daily

Weight (kg)	Combinations of 200, 100 and 50 mg capsules	or	600 mg tablet
10 – 13.9	one 200 mg		
14 –19.9	one 200 mg + one 50 mg		
20 – 24.9	one 200 mg + one 100 mg		
25 – 29.9	one 200 mg + one 100 mg + one 50 mg		
30 – 39.9	two 200 mg		
40 +	three 200 mg	or	one

¹ This is not usually recommended for use in this age or formulation

² This is the closest dosing possible using the specified formulation

abacavir (ABC)

TREATMENT DOSE: 8 mg/kg/dose (to maximum dose >16 years or > 37.5 kg: 300 mg/dose)

Give dose twice daily

Weight (kg)	Syrup 2	Syrup 20 mg/ml		300 m	g tablet
	AM	PM		AM	PM
5 – 5.9	2 ml	2 ml			
6 – 6.9	3 ml	3 ml			
7 – 9.9	4 ml	4 ml			
10 – 10.9	5 ml	5 ml			
11 – 11.9	5 ml	5 ml	or	0.5	0.5
12 – 13.9	6 ml	6 ml	or	0.5	0.5
14 – 19.9				0.5	0.5
20 – 24.9				1	0.5
25 +				1	1

nevirapine (NVP)

TREATMENT: MAINTENANCE DOSE: 160-200 $\,mg/m^2\,$ (to maximum 200 $mg\,$ twice daily dose)

Lead-in dose during weeks 1 and 2 = half of total daily maintenance dosing (use the AM dose in table only)

Weight (kg)	Syrup 1	0 mg/ml		200 mg	g tablet
	АМ	РМ		АМ	РМ
5 – 5.9	6 ml	6 ml			
6 – 6.9	7 ml	7 ml			
7 – 7.9	8 ml	8 ml			
8 - 8.9	9 ml	9 ml			
9 – 9.9	9 ml	9 ml	or	0.5	0.5
10 – 11.9	10 ml	10 ml	or	0.5	0.5
12 – 13.9	11 ml	11 ml	or	0.5	0.5
14 – 24.9				1	0.5
25 +				1	1

nevirapine for PMTCT prophylaxis in newborns - syrup 10 mg/ml

2 mg/kg within 72 hours of birth - once only

Unknown weight	0.6	
1 – 1.9	0.2	
2 – 2.9	0.4	
3 – 3.9	0.6	
4 – 4.9	0.8	

Fixed dose combinations using adult formulation

Dual FDCs

zidovudine/lamivudine (AZT-3TC)

300 mg AZT-150 mg 3TC—Give twice daily

Weight (kg)	AM	РМ
14 – 19.9	0.5	0.5
20 – 29.9	1	0.5
30 +	1	1

stavudine/lamivudine (d4T-3TC)

30 mg d4T-150 mg 3TC—Give twice daily

Weight (kg)	AM	РМ
10 – 13.9	0.5	0.5
14 – 24.9	1	0.5
25 +	1	1

Triple FDCs

stavudine/lamivudine/nevirapine (d4T-3TC-NVP)

30 mg d4T-150 mg 3TC-200 mg NVP—Give twice daily

Weight (kg)	AM	РМ
10 – 13.9	0.5	0.5
14 – 24.9	1	0.5
25 +	1	1

zidovudine/lamivudine/abacavir (AZT-3TC-ABC)

300 mg AZT-150 mg 3TC-300 mg ABC—Give twice daily

Weight (kg)	AM	РМ
14 – 19.9	0.5	0.5
20 – 29.9	1	0.5
30 +	1	1

Annex Education and support for all patients at each visit

A.1 Post-test support

- Provide immediate support after diagnosis.
- Provide emotional support.
- Provide time for the result to sink in.
- Empathize.
- Use good listening skills.
- Find out the immediate concerns of the patient and help:
 - Ask: what do you understand this result to mean (correct any misunderstandings of the disease)?
 - Provide support.
 - What is the most important thing for you right now? Try to help address this need.
 - Tell them their feelings/reactions are valid and normal.
 - Mobilize resources to help them cope.
 - Help the patient solve pressing needs.
 - Talk about the immediate future—what are your plans for the next few days?
 - Advise how to deal with disclosure in the family. Stress importance of disclosure (see Annex A.5).
 - Who do you think you can safely disclose the result to?
 - It is important to ensure that the people who know you are HIV infected can maintain confidentiality. Who needs to know? Who doesn't need to know?
- Offer to involve a peer who is HIV positive, has come to terms with his or her infection, and can provide help (this is the patient's choice).
- Advise how to involve the partner (see 8.5).
- Make sure the patient knows what psychological and practical social support services are available.
- Explain what treatment is available.
- Advise on how to prevent spreading the infection (see 11.1).
- Ask patient to come back depending on needs.

Good listening skills

- Elicit concerns.
- Listen to feelings.
- Use good body language.
- Pauses are good. Be able to be quiet.
- Do not speak before listening.
- Understanding is as important as advice.
- Use empathy.

EMPATHY is feeling with another—tuning in to the feelings of another and responding in a way that the person knows he or she has been heard. Empathy is not the same as sympathy (feeling for another).

- Tune in to the other person's feelings. Listen to all of the feelings. (Do not listen selectively)
- Respond with understanding. Do not try to minimize, change, or "solve" the feelings.
- When empathizing, do not:
 - Judge (evaluate other's feelings).
 - Try to fix it (solve the problem).
 - Advise (tell them what to do).
 - Question (keep seeking more information).

These may be appropriate at other times but not while empathizing.

A.2 Explain what is available for chronic HIV care

Explain what is involved in care and how the clinic works.

- Explain the clinic system for shared confidentiality.
- Explain who is on the clinical team and that the patient will see more than one health worker.
- Explain the support available in clinic, home visits, etc.
- Explain the follow-up schedule (see 10.3).
- Explain the basics of HIV infection, transmission and treatments available.
- Explain what prophylaxis and treatments are available, when they are used and requirements for treatment:
 - ARV therapy
 - Cotrimoxazole prophylaxis
 - INH prophylaxis

A.3 Initiate chronic HIV care (if this is the first visit for chronic care)

Assess	 Patient's goals for today's visit. Understanding of treatments available. Interest in receiving treatment. Readiness for prophylaxis and ART (if indicated). Determine the family circumstance:
	 Where does the patient live? With whom? Is this stable? Has patient disclosed to family? Who else is infected and on care or needs care? Health worker needs to assess patient, clinical stage and develop Treatment Plan.

Advise	 Explain and recommend treatment or prophylaxis (based on nurse or clinician review).
	 Encourage testing of other family members.
	 Explain family care options.
	 Explain family care options.

	♦ On Treatment Plan.
Δ ssist	 With adherence to Treatment Plan.

	 Plan home visit, if desired by patient
--	--

 Register patient—assign unique ART number, start HIV Care/ART Card (adapt locally).
Make next follow-up appointment (make sure patient knows when and where to go).
 Arrange home visit as appropriate and feasible (involve home-based care teams).

A.4 Provide ongoing support

Provide ongoing education and support appropriate to patient's circumstances. Record on the patient's HIV Care/ART card.

Types of support needed may change as the patient adjusts to his/her diagnosis and overcomes the first impact of test result. Be prepared to:

* Provide emotional support.

- Empathize with concerns and fears. Provide a secure opportunity for the patient to discuss feelings and to experience feeling understood and accepted by a caregiver.
- Let them know that how they feel is a normal reaction. Learning that others have felt this way can reduce the sense of isolation.

* Assure confidentiality.

* Pay attention to the family setting.

- Offer counselling on reproductive choices and family planning.
- If a family planning method is desired, almost all methods can be used. See 11.1.
- If more children are desired, counsel that pregnancy is possible, although with some risk. See 11.1.
- Advise that people living with HIV can still have a healthy sexual life, and have children if they desire. See 11.1.

* Confirm and reinforce (or explain again) information

- Given during voluntary HIV testing and counselling on maternal to child transmission, possibility of ARV treatment, safer sex, infant feeding, and family planning advice.
- Help patient absorb the information and apply it in his/her own situation.

* Advise how to avoid stigma

- Discuss to whom to disclose result. See Annex A.5.
- Discuss how ways in which we behave can be interpreted by other people.
- Anticipate that the availability of treatment will help reduce stigma.

Other ways to provide psychosocial support:

* Promote use of peer support groups for:

- Patients who have tested HIV-positive.
- Patients on ART.
- Couples affected by HIV/AIDS.
- Older children whose parents are positive.
- Groups should be:
 - Led by a social worker and/or a man/woman who has come to terms with his/ her HIV positive status.
 - Held outside the clinic in order to not reveal the HIV status of the people involved.

Note: Groups are key to psychosocial support. However, they do not replace use of individual support and use of skilled counsellors, when needed.

* Connect patient with other existing support services and community resources.

- These may include support groups, income-generating activities, religious support groups, orphan care, home care.
- Exchange information for the coordination of interventions.
- Make a coordinated plan for each family involved.
- The health worker and the social worker/community-based worker should establish active linkages with each other and with other existing support organizations—for home-based care and psychosocial support.
- Help patient identify a senior person from the community who will help provide support and care.

* Facilitate spiritual counselling for those who want it.

• Church or other religious institutions may have specifically prepared counsellors in issues related to HIV/AIDS: death, stigma, illness, planning ahead for care of children, etc.

* Refer for individual or couples counselling by community counsellors or professional counsellors, where available.

A.5 Discuss disclosure

- Ask the patient if they have disclosed their result or are willing to disclose the result to anyone.
- Discuss concerns about disclosure to partner, children and other family, friends.
- Assess readiness to disclose HIV status and to whom.
- Assess social support and needs (refer to support groups). See Annex A.4.
- Provide skills for disclosure (role play and rehearsal can help).
- Help the patient make a plan for disclosure if now is not the time.
- Encourage attendance of the partner to consider testing and explore barriers.
 - Couples may have different HIV status. Partner testing is important.
- Reassure that you will keep the result confidential and that disclosure is voluntary.
- For disclosure to children, see Section 12.10

If the patient does not want to disclose the result:

- Reassure that the results will remain confidential.
- Explore the difficulties and barriers to disclosure. Address fears and lack of skills (help provide skills).
- Continue to motivate. Address the possibility of harm to others.
- Offer to assist in disclosure (for example, talk with spouse).
- Offer another appointment and more help as needed (such as peer counsellors or couples counselling).

For women, discuss benefits and possible disadvantages of disclosure of a positive result and involving and testing male partners.

Men are generally the decision makers in the family and communities. Involving them will:

- Have greater impact on increasing acceptance of condom use, practicing safer sex and making appropriate reproductive choices.
- Help to decrease the risk of suspicion and violence.
- Help to increase support to their partners.
- Motivate him to get tested.

Disadvantages of involving and testing the partner: danger of blame, possible violence, abandonment.

 Health worker should assess the risk of violence or suicide and discuss possible steps to ensure the physical safety of patients.

Health worker should try to counsel the couple together, when possible.
A.6 Prepare for/support adherence to care, prophylaxis, ART

Adherence to care:

- Help patient arrange to attend follow-up appointments.
- Follow up missed appointments if stage 2 or higher or on prophylaxis or treatment.

Prophylaxis: prepare for, then support adherence—see section 7.

Prepare for ARV therapy, use section 8.7.

 If treatment is not available through clinic, indicate private and other treatment options. Educate on importance of treatment with 3 drugs and the dangers of taking only 1 or 2 drugs.

A.7 Support for special circumstances

For woman using replacement feeding for her infant:

- Discuss strategies to avoid breastfeeding, including issues relating to stigma and family pressure.
- Help with the practicalities and resources required.
- Demonstrate and discuss safe preparation and administration of feeds, including volume and frequency of feeds. If possible, conduct home visits to counsel and support women who are not breastfeeding (see *IMCI Chart Booklet for High HIV Settings*).

For woman exclusively breastfeeding her infant:

- Discuss strategies to facilitate exclusive breastfeeding, including issues relating to family pressure, milk supply and demand and coping with a crying infant.
- Examine breast for signs of poor attachment (sore/cracked nipples, engorgement etc.).
- Help with correct attachment of infant to the breast.
- Discuss safe transition to replacement milk (see IMCI Chart Booklet for High HIV Settings).

For child with HIV-infected parents and siblings

Caring for sick parents and siblings has a huge emotional impact on children. Witnessing illness and death of close family members, discrimination and stigma can result in severe depression. Children often are not able to talk about their fears and difficulties.

Adequate care, protection, guidance and support are often lacking. This can inhibit the children's healthy development.

The family often needs assistance to understand children's needs, how to communicate with and support them, and how to plan ahead for them.

Children whose parent(s) or other family members are PLHIV need to (appropriate to their age):

- Understand what is happening (they often know more than they are told).
- Know who is responsible for them.
- Understand that they are not expected to take over from their parents.
- Be supported for their fears and emotions (including a peer support group for older children if possible).
- To receive medical care for their own problems.
- Legal protection for inheritance rights.
- Protection from sexual abuse, forced early marriage or exploitation.
- Guidance in demanding and accessing social services.
- To be able to continue to attend school and play with friends.

For adolescents See Adolescent Job Aid

For grandparent caring for children or grandchildren:

Pay attention to their own health.

For patient who is terminal

- Assure good end-of-life care at home.
- Health worker should provide medical support for palliative care at home (see *Palliative Care* guideline module).
- Connect to religious support.
- Help to plan ahead for the children.

For patients' families with children:

Caregivers of children living in families where one or more members of the family are infected by HIV may find it difficult to provide essential care and attention to the children. Helping caregivers to strengthen their own coping skills and capacities will allow them to better support the children.

Support when an HIV infected parent or sibling is sick, or dies

Assess	*	Availability of adult support in the family or community able to provide provisional and/or long-term loving care for the child.
	*	Need to protect the child's inheritance rights.

Advise	 Tell the child that it is not her/his fault that the parent or sibling is sick, or has died. When parent or sibling is sick:
	 Gradual transition to a loving caregiver. Siblings are better off remaining together in their own environment than broken up into different families or other structure.
	 Talk to the child about the illness and answer possible questions about death according to the child's age (see section 12.10 on disclosure).
	Allow the child spend time with the sick parent or sibling.
	 Help the child to identify and perform small tasks to "help".
	 Encourage and assist the child to carry on with habitual everyday activities such as school, sports, recreational activities, and to keep up friendships and other relationships.
	 Encourage child to talk about his/her feelings. Listen and provide loving support.
	 Start a memory box contained happy memories and loved objects.
	• Write a will to protect the child's inheritance rights.

 Involve the child in plans for the future, including exploring by whom s/he would like to be cared for, depending on the child's age.

Assist and	Link with relevant services avait such as:	lable in the community,
Arrange	 home care community volunteer support part or full-time foster care legal services support groups for older children child counselling 	 schools day-care centers sports and other play activities services providing school fees meals for children provide ongoing suppport and follow up

Additional assistance when parent or sibling dies:

- * Be patient with a grieving child, encourage him/her to express his/her grief
- * Encourage the child to talk about the person who has died
- Listen to the child, provide loving care and empathy
- Allow the child to participate in the dying process and burial activities, and to share in adults' expression of grief, so as not to feel alone in his/her bereavement
- Make sure that the child's routine changes as little as possible. Ttell the child that normal everyday life will go on as before (school, day care, playing with friends, sports). Encourage him/her to go on continue participating in all activities and relationships
- Make sure that the child's inheritance rights are respected
- Assist caregiver to draw up a plan for the children, bearing in mind the points listed above

B: Prevention and care for health workers and lay providers

B.1 Use standard precautions

- Use for all patients.
- When drawing blood:
 - Use gloves.
 - No recapping of needles.
 - Dispose in sharps box (puncture resistant).

Unprotected sex remains the most common route of HIV transmission for health workers.

Safer sex practices are very important for health workers to protect themselves from HIV

- Safe disposal of waste contaminated with blood or body fluids.
- Proper handling of soiled linen.
- Proper disinfection of instruments and other contaminated equipment.
- Use protective barriers (gloves, aprons, masks, plastic bags) to avoid direct contact with blood or body fluids.

B.2 Post-exposure prophylaxis

- Immediately wash with soap and water any wound or skin site in contact with infected blood or fluid, then irrigate with sterile physiological saline or mild disinfectant.
- Rinse eyes or exposed mucous membrane thoroughly with clear water or saline.
- Report immediately to person in charge of PEP and follow local PEP protocol.
- If the source person is known to be HIV-positive, ask if there is a history of ART use with treatment failure. If the source has known ART treatment failure/drug resistance or if drug resistance prevalence is higher than 15%, consider adding a protease inhibitor to the two drugs.
- The HIV status of the source person is unknown, encourage testing using local HIV testing and counselling protocols (including informed consent and counselling). The source person can consent without receiving the results. If the source person's HIV test is negative, PEP of the exposed person should be stopped unless there is suspicion that the source person is in the "window period".
 - The earlier PEP is started, the more effective.
 - PEP should not be started more than 72 hours after exposure.
 - PEP should not be delayed while waiting for test results
 - Adherence to PEP treatment is very important for the full 28 days.
 - PEP can be taken while breastfeeding (breastmilk substitutes are an option if AFASS).
 - While taking PEP, it is especially important use condoms and not to donate blood.
 - After the initial HIV test at exposure, testing should be repeated at 3 and 6 months.

Post-exposure prophylaxis for (PEP-HIV) for occupational exposure for health workers

Use this page if the source patient is known to be HIV-positive, is suspected to be HIV-positive, or has unknown HIV status.*

ASK

When was the health worker injured? (If more than 72 hours ago, do not give PEP.)

How was the health worker injured:

- Where was the exposure?
 - Skin
 - Mucous membranes
- What kind of an exposure was it?
 - Puncture or cut with an instrument
 - Splash of blood or other bodily fluid
- What was the potentially infectious material?
 - Was it blood or bloody fluid?
 - Or was it some other body fluid other than blood: semen, vaginal secretions, cerebrospinal, synovial, pleural, peritoneal, pericardial, amniotic fluid, tissue? (lower risk)

LOOK

Look at the body part/skin area that was exposed and the instrument, if one was involved. **Classify:**

(If the injury happened more than 24 hours ago, you may need to ask the health worker to get the following information):

If the skin was punctured or broken by an instrument:

 How deep was the injury?

If the instrument was a needle:

- Was it a hollow or solid needle?
- Is there blood on the instrument?
- Was the needle used in the source patient's artery or vein?

If it was a splash, look to see if the skin is broken or damaged:

- Chapping
- Dermatitis
- Abrasion
- Open wound

* If source patient has unknown HIV status, offer HIV testing and counselling to the source patient (See *Acute Care*, p. 97).

SIGNS:	CLASSIFY AS:	TREATMENTS:
 Puncture or cut with: Large bore hollow needle, Needle used in source patient's artery or vein, Deep puncture wound or Visible blood on instrument 	HIGH RISK EXPOSURE	 Recommend PEP regimen (for country adaptation): 28 days of AZT-3TC or d4T-3TC** Before starting PEP, strongly recommend HIV testing and counselling to the health worker (see Acute Care, p. 97).* Stop PEP if health worker is HIV-positive and refer for chronic HIV care.
 Puncture or cut with small bore or solid needle, Superficial scratch, or Splash onto broken skin or mucous membranes 	MEDIUM RISK EXPOSURE	 Offer PEP regimen: 28 days of AZT-3TC or d4T-3TC If health worker desires PEP, strongly recommend HIV testing before starting.* Stop PEP if health worker is HIV-positive and refer for chronic HIV care.
 Splash onto intact skin 	VERY LOW RISK	PEP not recommended

* An HIV test before starting or in the first few days of starting PEP is strongly recommended to prevent creating drug resistance in an HIV-positive individual.

** For national adaptation—consider adding third drug.

B.3 HIV testing and counselling and TB screening for all health workers

- Encourage HIV testing and counselling for all staff with full confidentiality (on- or off-site).
- Provide information on special HIV care resources for health workers.
- Screen health workers for symptoms of TB.
- ✤ All staff should follow the TB infection control plan.

B.4 Care for HIV-infected staff

- Establish system to protect confidentiality of staff medical records and needs.
- HIV-positive staff should be supported and protected against discrimination.
- Health workers should receive priority ART and care.
- Encourage voluntary participation in staff support services.

B.5 Help staff cope with stigma of caring for patients with HIV/AIDS

- Ensure all health workers are involved in providing care for HIV patients.
- * Recognize that staff caring for patients with HIV can also be stigmatized.

B.6 Recognize and prevent burnout

- Ensure all health workers are involved in providing care to HIV-positive patients.
- Recognize that staff caring for patients with HIV can also be stigmatized.

Recognize burnout:

- Irritability, anger.
- Poor sleep.
- Poor concentration.
- Avoidance of patients and problems—withdrawal from others.
- Fatigue.
- Emotional numbing—lack of pleasure.
- Resorting to alcohol or drugs.
- In survivors of multiple loss—afraid to grieve.

How to prevent and respond to burnout:

- Be confident that you have the skills and resources to care for the patient and family.
- Define for yourself what is meaningful and valued in care giving.
- Discuss problems with someone else.
- Be aware of what causes stress and avoid it.
- Use strategies that focus on problems, rather than emotions.
- Change approach to care giving:
 - Divide tasks into manageable parts (small acts of care).
 - Learn how to adjust the pace of caregiving.
 - Ask others to help.
 - Encourage self-care by the patient.
- Use relaxation techniques.
- Take care of your life outside of the caregiving (other interests, support, family, friends).

- Develop your own psychosocial support network (such as caregiver support groups).
- Take care of your own health.
- Take time off on a regular basis.
- Be aware that you can't do everything and need help.
- Include in your week a time to discuss patients together.
- Share problems with your colleagues.
- ✤ Organize social events.

How to record on HIV Care/ART Card



Annex								
C :								
Unique #				HIV CAR	E/ART	CARD		
District	I	Heal	th unit		Distr	ict clinicia	n/team	
Name					P	t clinic #		
Sex: M O	FOA	.ge_		DOB		_ Marital	status_	
Address								
Telephone (whose):							
Prior ART: OTransfer in with records OEarlier ARV but not a tr OPMTCT only ONone			Care o OPMTO OMedio OUnde OTB OSTI	cal)	OPrivate/Co OInpatient OIDU OAdol OSex	0	Self-refer CBO Other:	
Treatment support	er/med p	bick-i	up if ill	:				
Address								
Telephone:								
Home-based care	provideo	l by:_						
Names of family	Age		HIV	Unique no.	ART trea	tment inte	erruptio	ns
members and partners		+/-	care Y/N		Stop Lost (circle)	Date	Why	Date if Restart:
					Stop Lost			
					Stop Lost			
					Stop Lost			
					Stop Lost			
Drug allergies	;				Stop Lost			
					Stop Lost			

Date			
	Confirmed HIV+ test	Where	HIV 1 2 Ab / PC
	Enrolled in HIV care		,
	ARV therapy Medically eligible	Clinical stage	COHORT:
	Why eligible: OClinical	l only OCD4/%	•••TLC
		ready for ART	
		AR	T started
	Start ART 1st-line in	nitial regimen:	
	At start ART: Weigh	nt Function	Clinical stage
	Substitute within	n 1st-line:	
	New regimen		Why
	New regimen		Why
	Switch to 2nd-lin	ne (or substitute	e within 2nd-line):
	New regimen		Why
	New regimen		Why
	New regimen		Why
	Dead		
	 Transferred out		
		TO where	
1 To 2 Pr 3 Tr 4 Po 5 Illi 6 Di 7 Pa 8 O	STOP codes: poxicity/side effects regnancy reatment failure por adherence ness, hospitalization rugs out of stock atient lacks finances ther patient decision anned Rx interruption ther	Why SUBSTITUTE 1 Toxicity/side effet 2 Pregnancy 3 Risk of pregnand 4 Due to new TB 5 New drug availa 6 Drug out of stocl 7 Other reason (sp Reasons for SWITC 8 6 Clinical treatmer 9 Immunologic fail 10 Virologic failure	ects cy ble k pecify) CH to 2nd-line regimen only: nt failure

Unique

HIV CARE/ART CARD

Date Check if scheduled. Write in alternate pick-up if ill	Follow-up date	Duration in months since first starting ART/ since starting current regimen	Wt	If Pregnant EDD?PMTCT? FP/no FP If FP write method(s) If child write height	Function Work Amb Bed	WHO clinical stage	TB status	Potential SIDE EFFECTS
0								
0								
0								
0								
0								
0								
0								
0								
0								
0								
0								
0								
0								
0								
0								

	Nan	1e						
New OI, Other PROBLEMS	Cotrim	oxazole	Other meds dispensed	A	RV drugs	CD4	Hgb, RPR, TLC, other Iab	Refer or consult or link/ provide
	Adhere [Dose		Adhe Why dispe	re/ Regimen/ Dose nsed			If hospitalized, # of days

0				
0				
0				
0				
0				
0				
0				
0				

Pregnancy/family planning status if woman is of childbearing age:

P = Pregnant

- If pregnant, give estimated due date (EDD) and write PMTCT if referred to PMTCT
- FP= Not pregnant and on family planning If using FP, note methods (note: more than 1 method may be recorded)
- No FP = Not pregnant and not using FP

Codes for TB status (check on each visit):

No signs = no signs or symptoms of TB TB refer = TB suspected and referred for evaluation INH = currently on INH prophylaxis (IPT) TB Rx = currently on TB treatment. Record TB card # Sputums = TB suspected and sputum sample sent or record results

- Codes for potential side effects or other problems: . Nausea Diarrhoea Fatique Headache BN burning/numb/tingling Rash Anaemia ABdominal pain Jaundice FAT changes CNS: dizzy, anxiety, nightmare, depression
- Codes for new OI or other problems: Zoster Pneumonia DEmentia/Enceph Thrush oral/vaginal FEVER COUGH DB difficult breathing **IRIS** Immune reconstitution inflammatory syndrome Weight loss UD urethral discharge PID pelvic inflammatory disease GUD genital ulcer disease Ulcers mouth or other

Codes for why poor/ fair adherence:

- 1 Toxicity/side effects
- 2 Share with others
- 3 Forgot
- 4 Felt better
- 5 Too ill
- 6 Stigma, disclosure or privacy issues
- 7 Drug stock out—dispensary
- 8 Patient lost/ran out of pills
- 9 Delivery/travel problems
- 10 Inability to pay
- 11 Alcohol
- 12 Depression
- 13 Other___

Codes for ART adherence. Estimate adherence for twice daily ART using the table below:

Adherence	%	Missed doses per month
G(good)	≥ 95%	≤ 3 doses
F(fair)	85-94%	4-8 doses
P(poor)	< 85%	≥ 9 doses

Equation of results of results of results of results				
		Date/comments	Date/comments	Date/comments
	Basic HIV education, transmission			
	Prevention: abstinence, safer sex, condoms			
	Prevention: household precautions, what is safe			
	Post-test counselling: implications of results			
	Positive living			
	Testing partners			
, Disclosure	sure			
	To whom disclosed (list)			
	Family/living situation			
_	Shared confidentiality			
Reproc	Reproductive choices, prevention MTCT			
Child's	Child's blood test			
	Progression of disease			
_	Available treatment/prophylaxis			
 Follow-up ap Clinical team 	Follow-up appointments, clinical team			
	CTX, INH prophylaxis			

/			
ART p	ART – educate on essentials (locally adapted)		
repa	Why complete adherence needed		
ration.	Adherence preparation, indicate visits		
in	Indicate when READY for ART: DATE/result Clinical team discussion		
itiati	Explain dose, when to take		
ion	What can occur, how to manage side effects		
su	What to do if one forgets dose		
рроі	What to do when travelling		
rt, m	Adherence plan (schedule, aids, explain diary)		
onit	Treatment supporter preparation		
or	Which doses, why missed		
•	ARV support group		
Ho	How to contact clinic		
ome-ba	Symptom management/palliative care at home		
sed	Caregiver booklet		
care,	Home-based care specify		
sup	Support groups		
port	Community support		

Chronic HIV Care Acronyms

ABC..... abacavir

AIDS Acquired Immunodeficiency Syndrome

ALT..... Alanine Aminotransferase (a liver function test)

AMB Ambulatory

ARV Antiretroviral

ART..... Antiretroviral Therapy

AZT......azidothymidine—chemical name for the generic zidovudine (also called ZDV)

BED..... Bedridden

CBOs Community-Based Organizations

CD4...... Count of the lymphocytes with a CD4 surface marker per cubic millimetre of blood (mm³)

cm Centimetre

d4T stavudine

ddl didanosine

EFV efavirenz

FBOs...... Faith-Based Organizations

GI..... Gastrointestinal

H isoniazid (INH)

Hgb...... Hæmoglobin

HIV..... Human Immunodeficiency Virus

IMAI...... Integrated Management of Adolescent and Adult Illness

IMCI...... Integrated Management of Childhood Illness

IMPAC..... Integrated Management of Pregnancy and Childbirth

INH..... isoniazid

kg Kilogram

MD Medical Doctor

mg...... Milligram

MO..... Medical Officer

NGOs Non-Governmental Organizations

NVP nevirapine

OI..... Opportunistic Infection

ORS..... Oral Rehydration Solution

OVC Orphans and Vulnerable Children

PCPNC.... Pregnancy, Childbirth, Postpartum and Newborn Care

PLHA...... People Living with HIV/AIDS now refered to as PLHIV

PLHIV People Living with HIV

PMTCT.... Prevention of Mother to Child Transmission (of HIV)

PEP Post-Exposure Prophylaxis

Rx Treatment

STI Sexually Transmitted Infection

TB..... Tuberculosis

TDF..... tenofovir

TLC..... Total Lymphocyte Count

ZDV zidovudine, AZT

3TC lamivudine



ISBN 978 92 4 159551 3