HIV Care and Antiretroviral Treatment Recording and Reporting System



2006



Regional Office for South-East Asia New Delhi

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Answers to Exercises

HIV Care and ART Recording and Reporting System

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Refer to Participant Manual, module 2 & 3

Answers to case-study 1- PATIENT HIV CARE and ANTIRETROVIRAL TREATMENT (ART) RECORD

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With the state of the stat	Name of Treatment Unit:	AB	City:					(/v/)	stage	(kg)	(cm)	A/B/C*	count	children)
Rue of planet: A	District:		State/province:				At 1st visit in clinic	4/2/04	4	47		в		59
Re: 20 (pare dubit:	Name of patient: A	T					At ART medical eligibility	4/2/04	4	47	child	æ		59
Diddy: Diddy: <td>Age: 28 (c</td> <td>date of birth:</td> <td>Sex:</td> <td>🗙 Male</td> <td>Female</td> <td></td> <td>At start of ART</td> <td>1/3/04</td> <td>4</td> <td>46</td> <td>child</td> <td>В</td> <td></td> <td></td>	Age: 28 (c	date of birth:	Sex:	🗙 Male	Female		At start of ART	1/3/04	4	46	child	В		
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Chydrage: Ditt:	Address:						At 12 months ART				child			
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Training inclusion: Incl	Distance from residence to	o clinic in km							6. A	ntiretrovira	I Treatmen	t		
Teal means Substration Barts Substration Barts Bar	Ireatment supporter's nar	me (if applicable)					Treatment Started		SUBSTIT	UTION withir	1 1 st line, SW	/ITCH to 2 nd li	ne, STOP, RESTAF	άT
Der enfined Hift Het: 1/2/2003 Ref. Def out of the set	Ireatment supporter's add Treatment supporter's pho	dress: one number:					X D4T30+3TC+NVP	Date	Subst	titution, n or stop	Reason (code)	Date restart	New reg	imen
Grow point (service chering the griefent (month Microelli) I-VOLTIGEN(Microelli) <	Date confirmed HIV+ tes	st:	Place			1	D4T40+3TC+NVP	5/5/04	sqns	stitution	4	5/6/04	D4T30 3	IC EFV
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platient transferred in on Aff. from another HV care/Aff chird from the Mational Program Date transferred in	11-IDU outreach] 12- SW outreach 🛛 10	3-other											
Name previous clinic. Date transferred in : Date transferred in : <thdate :<="" th=""> Date transferred in :</thdate>	patient transferred in	on ART from another HI	V care/ART clinic from	the National progr	am									
2. Personal History Tick one choice) 3. Family His	Name previous clinic:		Date transferred in :											
Image: Second Flactory (ick one croited) 3. Family History (ic		· · ·					Reasons SUBSTITUTE/SWI	TCH: 1 tox diadr	icity side eff	ects, 2 pregn	ancy, 3 risk o Jahle 6 drug	out of stock	4 newly 7 other reason fsn	eriful
Rs. Streteroscual Marial status: Single Eteroscual Marial status: Single Marial status: Maris status: Marial status:	2. Personal Histor	 V (lick one choice) 	3. Fam	ily History (lick o	ine choice)		Peacons for SIMITCH only		ind treatme	nt foilure a i	mminologio	dat of stock, i	irologio foilure	
Farmeric Selection Arrent/Inference Arrent/Inferen	Risk X 1 Heterose factor 2 Men sex for HIV 3 Sex worl	x with men (MSM) k (SW) a drug use (IDUI)	Marital status:	Single vorce/separate ot applicable	Estimated household	monthly income:	Reasons STOP:	1 tox hosp 9 pla	ical treatme icity side eff talisation, 6 nned treatm	ects, 2 pregna drug out of s ent interrupti	ancy, 3 treatn stock, 7 patier ion, 10 others	ar and c, 10 v nent failure, 4 nt lack of fina s	norogic randre poor adherence, nce, 8 patient dec	5 illness ision,
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	5 Blood tr	ansfusion	Family members: partner/children	Age HIV sex +/-/unknown	ART Y/N	Regist. No if in care		7	. Tubercul	osis treatme	ent during h	HIV care		
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Alcoholism Habitual Social Date: 8/11/04 Alcoholism Indust Social Date: 8/11/04 Alcoholism Antinetrovial treatment history Antinetrovial treatment history End of Follow-up Was ART received If yes PMTCT Endiet ART Place: Private Gooth Date of follow-up Vas ART received If yes PMTCT Endiet ART Place: Private Death Date of follow-up Vas ART received If yes Drugs and duration: Date of follow-up (>3 months) Date last visit: DIC	Employed 🔲 Yes 🛛 I	No		4y			אונכי.	Date sta	rt TB Rx:		x failure 🛛	Died	befault 🔲 Trans	fer out
4. Antiretroviral treatment history 8. End of Follow-up Was ART received If yes	Alcoholism	Social						5/5/07	_	Date	: 8/11/04			
Was ART received If yes Pm/TCT Earlier ART Place: Private Govt Date of death: Dial <		4. Antiretrovir	al treatment histor	Y					w	3. End of Fc	dn-wollo			
Drugs and duration: Image: Control of for the set of follow-up (>3 months) Date last visit: Image: Control of the set of	Was ART received	If yes 🔲 PMTCT 🔲 Ear	lier ART Plac	e: 🔲 Private 🔲 G	ovt		Death		Date of de	ath:				
Image: Image of the second	Tes X No	Drugs and duration:					□ Lost to follow-up (>3 r	months) [ate last visi	 .::				
							X Transferred out		Date:	80	/12/04		New clinic:	XE

* Performance scale: A- Normal activity; B- bedridden <50% of the day during last month; C- bedridden > 50% of the day during last month

	Referred to specialist or or hospit.						TB clinic									meningitis (M); rpes zoster (Z);	:/blister packet. 80-95% = 3 to	thy;J=Jaundice; P=Pancreatitis;
	Condoms given y/n										≻	Y		Y		rtocococal I ssis (P); He	k the bottle of 30 days;	so days N=Neuropa pression;
	lab results when available	CD4: 59										CD4: 119				C); Diarrhea (D); Cryp sease (CMV); Penicilli	any doses. Also chec es missed in a period	missed in a period of . niting; D=Diarrhoea; I ersensitivity; Dep=De
dn-wo	ART Side effects - code*				Nau + Abd pain		>									l; Candidiasis (omegalovirus di specify	/she has missed $95^{0/0} = < 3 do$	%0 = >1∠ uoses -nausea; V=Voi ever; Hyp=Hyp er? Specify
cment foll	adherence to ART* - >95%, 80-95%, <80%				A	A	В			A	A	A	A	A	A	uberculosis (TB) onia (PCP); Cytc nosis (T); Other-	he patient if he adherence (e.g. >	ו
& Antiretroviral Treat	Antiretroviral drugs and dose prescribed			D4T 30 3TC NVP	D4T 30 3TC NVP	D4T 30 3TC NVP	D4T 30 3TC NVP		D4T 30 3TC EFV	tions: Enter one or more codes: T Pneumocystis Carinii Pneum Genital herpes (H); Toxoplasn	Check adherence by asking t Write the estimated level of a	I 2 doses missed in a period c Enter one or more codes: S= A=Anemia; F=Fatigue; H=H L=Lipodystrophy; Drows=Drov						
Patient HIV care	Drugs prescribed for prophylaxis of Ols	CPT Fluco 7 days	CPT	CPT	CPT	CPT	СРТ	CPT HRZE	CPT HRZE	CPT HR	CPT HR	CPT HR	CPT HR	CPT	CPT	Opportunistic infect	Adherence:	Side effects:
case-study 1- 9.	opportunistic infections -code*	C - D+wasting						PTB+								st visit for HIV care - ALL	: day during last month; h	ptive pills, 3 injectable/ p, 5 intrauterine device,
vers to c	pregnancy (y/n) or FP method*															19 from the 1	<50% of the ing last mont	rral contrace m/cervical ca ctomy
Ansı	Perfor- mance scale*	۵	в	в	۵	в	в	В	В	В	В	A	A	A	A	l visit starti	bedridden the day dur	ndoms, 2 (4 diaphrag tion/hystere
	WHO stage	4	4	4	4	4	4	4	4	4	4	4	4	4	4	te of actua IM/YY	ictivity; B- > 50% of	iing; 1 co hormones, /tubal liga
	Weight (kg) & height for child	47		46	45	45	44		45	46	48	51	52	53		Write the da DATES: DD/N	A- Normal a C- bedridden	family planr implantable 6 vasectomy,
	Date next visit	18/2/04	1/3/04	16/3/04	1/4/04	1/5/05	5/5/04	5/6/04	5/7/04	5/8/04	5/9/04	8/10/04	8/11/04	8/12/04	TR out XE	and codes:	scale:	_
	Date of visit*	4/2/04	18/2/04	1/3/04	16/3/04	'1/4/04	1/5/04	5/5/04	5/6/04	5/7/04	5/8/04	8/9/04	8/10/04	8/11/04	8/12/04	*Instructions Date:	Performance	÷
-		-		· · · · · · · · · · · · · · · · · · ·		-				-								

		Answers to	o case-	study 2 -	PATIEN	t hiv care	and ANTIRETROVIRAL	TREATME	NT (ART)	RECORD				
. .	atient Identification	Data (Write com	olete in	formation)				5. C	linical an	id Laborat	tory Invest	tigations		
Registration Number: Name of Treatment Uni	AB 1508 t: AB	code cli City:	nic (2#)-	-code patie	nt (4#)			Date (dd/mm/yy)	WHO stage	Weight (kg)	Height (cm)	Perfor- mance A/B/C*	Total lymphocyte count	CD4 count (or % in children)
District:		State/province					At 1st visit in clinic	21/8/03	٢	58		A	1600	
Name of patient: Y Age: 25 (d	ate of hirth.	JI Sex	Ű	ale X	emale		At ART medical eligibility	2/5/04	3	51	child	в	190	
Patient⊡s phone numb]	-] 2	0		At start of ART	17/6/04	4	50	child	в		
Address:		ĺ					At 6 months ART	12/12/04	4	58	child	٩	245	
City/village:	District:	State/p	rovince				At 12 months ART				child			
Distance from residenc	e to clinic in km	-					At 24 months ART				child			
Treatment supporter	name (if applicable)								6. Ant	iretroviral	Treatmer	ıt		
Treatment supporter s	address:						Treatment Started	SU	BSTITUTIC	N within 1	st line, SWI	TCH to 2 nd I	line, STOP, RES	TART
Treatment supporter su	phone number:	i					☑ D4T30+3TC+NVP	Date	Subs switch	titution, I n or stop	Reason I (code)	Date restart	New re	gimen
Date confirmed HIV+	test: /01/03	Plac	e: W	ICH clinic			D4T40+3TC+NVP	2216/04	Subs	titution	•	2216/04	DAT20 3	LC EEV
Entry point (services r 4-Inpatient 5-Pae 11-IDU outreach	eferring the patient for HI idiatric ≅6-PMTCT ☐ 7 12- SW outreach ☐ 13	IV care): 1-VCT -STI 8-Private	□ 2-TB □ 9-NG	3 3-Out	patient elf referreo		D4T40+3TC+EFV							, i
patient transferred ir	on ART from another H	IV care/ART clinic	from the	e National p	rogram		ZDV+3TC+EFV							
Name previous clinic:		Date transferred	d in :											
2. Personal History	r (Tick one choice)	3. Family	/ Histo	ry (Tick o	ine choice	e)	Reasons SUBSTITUT diagnosed TB, 5 new d	TE/SWITCH .	1 toxicity s le, 6 drug c	side effects, ut of stock,	2 pregnanc 7 other reas	:y, 3 risk of p son (specify	oregnancy, 4 new)	Ý
Risk X 1 Heteros factor 2 Men se for HIV 3 Sex woi	exual x with men (MSM) -k (SW)	Marital status: X Married Di Widowed Ne	Single vorce/se ot applic	eparate cable	Estimated household	monthly income:	Reasons for SWITCH Reasons STOP: 1 toxi hospitalisation, 6 drug (l only: 8 clir icity side eff out of stock	ical treatm ects, 2 pre , 7 patient l	ent failure, 9 gnancy, 3 tro ack of finan	 immunolog eatment failu ce, 8 patien 	gical failure, ure, 4 poor a t decision, 9	10 virologic failu adherence, 5 illn 9 planned treatm	re ess ent
4 Injectin	g drug use (IDU)	Family members:	Age	≥H	ART	Regist. No	interruption, 10 others							
6 Mother	to child	partner/children	sex	+/-/unknown	۸/N	if in care		7. Tι	iberculos	is treatme	ent during	HIV care		
For IDUs Substitution If ves. type:	vn therapy □ Y □ N	husband daughter	31 6 m	Positive Negative	≻	AB0186 Mc0023	Disease class (tick) Pulmonary TB Smear-positive 	TB Reç Cate	jimen (tick) egory I egory II	TB re Distri Heall	egistration ict: th Centre:			
Literate X Yes	Vo						Smear-negative Extrapulmonary	□ Oth	er specify:	TB n	umber:			
Employed X Yes	No						site:	Date st	art TB Rx:		tment outco	Diad CU	re 📙 KX compl	eted fer out
Alcoholism Habitua	I Social									Date				20
	4. Antiretrovi	ral treatment his	story						8.	End of Fo	dn-wollo			
Was ART received	lf yes 🗵 PMTCT 🔲 Earl	ier ART Plac	ie: 🛛 Pr	rivate 🗵 Go	۲ţ		Death		Date of de	eath:				
X Yes No	Drugs and duration: Nev	virapine single do.	se, 15/2	2/2003			□ Lost to follow-up (>;	3 months)	Date last	visit:				
							Transferred out		Date:				New clinic:	
	high C with the lease of the second s	Port jo /up		11	1		· · · · · · · · · · · · · · · · · · ·	4						

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Answers to case-study 2 -9. Patient HIV care & Antifictoviral Treatment follow-up Def by the base of th		Referred to specialist or or hospit.														eningitis (M); ses zoster (Z);	blister packet. 0-95% = 3 to	ıy;J=Jaundice; =Pancreatitis;
A matrix to case-study 2 - S. Patient HIV care & Antirectorial Teatment follow-ID Due difference Descriptional Monto		Condoms given y/n														tocococal m sis (P); Herp	the bottle/ f 30 days; 8	0 days J=Neuropath oression; P
The field of		lab results when available		TLC: 1600	CD4: 190									CD4: 245		C); Diarrhea (D); Cryp sease (CMV); Penicillio	any doses. Also check es missed in a period c	missed in a period of 3 niting; D=Diarrhoea; N ersensitivity; Dep=Dep
Anticipation of the parameter is conserved by 2 - 9. Patient HIV care & Antification I Teatment for anticipation of the parameter is conserved by and the parameter is conserve	low-up	ART Side effects - code*						S)); Candidiasis (omegalovirus di specify	/she has missec >95% = < 3 dos	% = >12 doses -nausea; V=Voi ever; Hyp=Hyp er? Specify
Antimication in the propertication of the properticat	Itment fol	adherence to ART* - >95%, 80–95%, <80%							A	A	J	а	A	A		Tuberculosis (TE onia (PCP); Cytt nosis (T); Other-	he patient if he adherence (e.g. :	of 30 days; < 80 =Skin rash; Nau eadache; Fev=F wsiness; 0=Othe
Anisymptical and the parameter of the pagement of thepagement of the pagement of the pagement of the pageme	e & Antiretroviral Trea	Antiretroviral drugs and dose prescribed					D4T 3TC NVP	D4T 3TC EFV		tions: Enter one or more codes: Pneumocystis Carinii Pneumo Genital herpes (H); Toxoplasn	Check adherence by asking t Write the estimated level of a	12 doses missed in a period c Enter one or more codes: S- A=Anemia; F=Fatigue; H=H L=Lipodystrophy; Drows=Dro						
Answers to ease-study 2 - 9. Determent with from wit	Patient HIV car	Drugs prescribed for prophylaxis of Ols			CPT fluco	CPT	СРТ				CPT	СРТ	СРТ	СРТ		Opportunistic infe	Adherence:	Side effects:
Answers to component with the part (sq) with the part	ase-study 2 – 9.	opportunistic infections -code*			C	D + wasting			D							Ist visit for HIV care - ALL	e day during last month; th	eptive pills, 3 injectable/ ap, 5 intrauterine device,
Ansview Ansview <t< td=""><td>vers to c</td><td>pregnancy (y/n) or FP method*</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td></td><td>ing from the</td><td><50% of th ring last mon</td><td>oral contrace gm/cervical c ectomy</td></t<>	vers to c	pregnancy (y/n) or FP method*	2	2	2	2	2	2	2	2	2	2	2	2		ing from the	<50% of th ring last mon	oral contrace gm/cervical c ectomy
Date of visit Date mext visit Weight (kg) for child WHO 21/8/03 21/3/04 58 1 21/8/03 21/3/04 55 2 21/3/04 21/5/04 55 2 21/3/04 21/5/04 55 2 21/3/04 21/5/04 57 4 21/5/04 21/5/04 57 4 21/5/04 21/7/04 57 4 21/5/04 29/5/04 50 4 21/5/04 29/5/04 50 4 29/5/04 29/5/04 50 4 29/5/04 12/11/04 52 4 12/11/04 12/11/04 56 4 12/11/04 12/11/04 56 4 12/11/04 12/11/04 56 4 12/11/04 12/11/04 56 4 12/11/04 12/11/04 56 4 12/11/04 12/11/04 56 4 12/11/04 12/11	Ansv	Perfor- mance scale*	A	A	В	В	В	В	В	В	В	A	A	A		al visit start	 bedridden f the day du 	ondoms, 2 , 4 diaphra, ation/hyster
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Date of visit Date next visit bate of visit bate next visit 21/3/04 21/3/04 21/3/04 21/6/04 2/5/04 2/6/04 2/6/04 17/6/04 2/6/04 29/6/04 29/6/04 29/6/04 17/6/04 29/6/04 29/7/04 29/6/04 12/10/04 12/11/04 12/11/04 12/11/04 12/11/04 12/11/04 12/11/04 12/11/04 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 12/11/04 12/11/05 1		Weight (kg) & height for child	58	55	53	51	50		50	52	52	54	56	58		Write the dá DATES: DD/I	A- Normal C- bedridde	family plan implantable 6 vasectom)
Date of visit Date of visit 21/8/03 21/3/04 21/3/04 22/6/04 29/6/04 29/6/04 17/6/04 12/10/04 12/11/04 12/11/04 12/11/04 Date of number of numbe		Date next visit	21/3/04	21/6/04	2/6/04	17/6/04	2/7/04	29/6/04	29/7/04	29/8/04	12/10/04	12/11/04	12/12/04	12/01/05		s and codes:	e scale:	
		Date of visit*	21/8/03	21/3/04	2/5/04	2/6/04	17/6/04	22/6/04	29/6/04	29/7/04	12/9/04	12/10/04	12/11/04	12/12/04		*Instruction Date:	Performance	Ë

	p before ₍ RT	Date transfer. out			
	follow-ul tarting A	Date lost to FU (last visit)			
	End of s	Date of death			
	DATE ART	started	1/3/04		17/6/04
	Why medical elligible?		WHO stage:4 CD4 #/%: 59 TLC#	WHO \$ age CD4 #/% TLC#	WHO stage: 3 CD4 #/%:190 TLC#
	DATE medical	elligible for ART	4/2/04		2/5/04
ter	TB treatment Class/Regimen	Date of start			
-ART regis	CPT Date of	Start	4/2/04		2/5/04
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nswers t	firmed /+ test	Place			MCH clinic
A	Cont	Date	March 03		Jan 03
	Sex M/ F		Σ		ш
	Age		28		25
	Name/address		Mr A		Mrs Y
	Registration number		AB 2356		AB 1508
	DATE 1st visit at the	clinic	case 1		21/8/03

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	Name		144			Mrs	≻
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	DATE F	of ART	1/3/	2004		17/6/	2004
				4			0

Exercise 1 - Patient record & Pre-ART & ART Registers

Exercise 2 – Drug Dispensing and Stock registers

Refer to Participant Manual, module 4

Question 2: The updated Drug Stock Register for July 2005 will look like this.

	Α	В	С	D	E	F	
Date	Opening stock	Stock received	Stock dispensed during month	Stock expired / discarded	Balance stock	Stock returned from patients* (death / non adher.)	Remarks
4-July-2005	5800		240	0	5560		
6-July-2005	5560		300	0	5260		
11-July-2005	5260		240	0	5020		
13-July-2005	5020		120	0	4900		
18-July-2005	4900		180	0	4720		
20-July-2005	4720	5000	120	0	9600		
25-July-2005	9600		120	0	9480		
27-July-2005	9480		120	0	9360		
			(1440)				

Name of the drug d4T30 / 3TC / NVP

Monthly summary:

Stock at the start of the month / Opening stock (A): Stock received during the month (B): Stock at the end of month (E) = (A+B) - (C+D):

5800	Stock dispensed during the month (C):	1440
5000	Stock expired/discarded during the month (D):	0
9360		

Name of the drug d4T40 / 3TC / NVP

	А	В	С	D	E	F	
Date	Opening stock	Stock received	Stock dispensed during month	Stock expired / discarded	Balance stock	Stock returned from patients* (death / non adher.)	Remarks
4-July-2005	2500		60		2440		
6-July-2005	2440		60		2380		
11-July-2005	2380		0		2380		
13-July-2005	2380		60		2320		
18-July-2005	2320		60		2260		
20-July-2005	2260	2000	60		4200		
25-July-2005	4200		60		4140		
27-July-2005	4140		0		4140		
			(360)				

Monthly summary:

Stock at the start of the month / Opening stock (A):	2500	Stock dispensed during the month (C):	360
Stock received during the month (B):	2000	Stock expired/discarded during the month (D):	0
Stock at the end of month (E) = $(A+B) - (C+D)$:	4140		

	А	В	С	D	Е	F	
Date	Opening stock	Stock received	Stock dispensed during month	Stock expired / discarded	Balance stock	Stock returned from patients* (death / non adher.)	Remarks
4-July-2005	500		30		470		
6-July-2005	470		60		410		
11-July-2005	410		60		350		
13-July-2005	350		60		290		
18-July-2005	290		60		230		
20-July-2005	230		30		200		
25-July-2005	200		60		140		
27-July-2005	140		0		140		
			(360)				
Monthly summ	ary:						
Stock at the start of the month / Opening stock (A): 500 Stock dispensed during the month (C): 360 Stock received during the month (B): 0 Stock expired/discarded during the month (D): 0							

140

Name of the drug d4T30 / 3TC

Stock received during the month (B): Stock at the end of month (E) = (A+B) - (C+D):

Stock dispensed during the month (C):	360
Stock expired/discarded during the month (D):	0

Name of the drug

d4T40 / 3TC

	А	В	С	D	Е	F	
Date	Opening stock	Stock received	Stock dispensed during month	Stock expired / discarded	Balance stock	Stock returned from patients* (death / non adher.)	Remarks
4-July-2005	100		0		100		
6-July-2005	100		0		100		
11-July-2005	100		0		100		
13-July-2005	100		0		100		
18-July-2005	100		0		100		
20-July-2005	100		0	100	0		
25-July-2005	0		0		0		
27-July-2005	0		0		0		

Monthly summary:

Stock at the start of the month / Opening stock (A):	100	Stock dispensed during the month (C):	0
Stock received during the month (B):	0	Stock expired/discarded during the month (D):	100
Stock at the end of month (E) = $(A+B)-C+D$:	0		

ZDV / 3TC Name of the drug

	А	В	С	D	E	F	
Date	Opening stock	Stock received	Stock dispensed during month	Stock expired / discarded	Balance stock	Stock returned from patients* (death / non adher.)	Remarks
4-July-2005	2000		60		1940		
6-July-2005	1940		60		1880		
11-July-2005	1880		0		1880		
13-July-2005	1880		0		1880		
18-July-2005	1880		0		1880		
20-July-2005	1880		60		1820		
25-July-2005	1820		60		1760		
27-July-2005	1760		30		1730		
			(270)				

0

Monthly summary:

Stock at the start of the month / Opening stock (A): Stock received during the month (B): Stock at the end of month (E) = (A+B) - (C+D):

270 Stock dispensed during the month (C): 2000 Stock expired/discarded during the month (D): 0 1730

Name of the drug

NVP

	А	В	С	D	E	F	
Date	Opening stock	Stock received	Stock dispensed during month	Stock expired / discarded	Balance stock	Stock returned from patients* (death / non adher.)	Remarks
4-July-2005	600		75		525		
6-July-2005	525		60		465		
11-July-2005	465		60		405		
13-July-2005	405		0		405		
18-July-2005	405		0		405		
20-July-2005	405		75		330		
25-July-2005	330		60		270		
27-July-2005	270		15		255		
			(345)				

Monthly summary:

Stock at the start of the month/Opening stock (A):	600	Stock dispensed during the month (C):	345
Stock received during the month (B):	0	Stock expired/discarded during the month (D):	0
Stock at the end of month (E) = (A+B)-(C+D):	255		

Name of the d	rug	EFV					
	А	В	С	D	E	F	
Date	Opening stock	Stock received	Stock dispensed during month	Stock expired / discarded	Balance stock	Stock returned from patients* (death / non adher.)	Remarks
4-July-2005	500		0		500		
6-July-2005	500		30		470		
11-July-2005	470		0		470		
13-July-2005	470		30		440		
18-July-2005	470		30		410		
20-July-2005	440		0		410		
25-July-2005	440		30		380		
27-July-2005	410		0		380		
			(120)				
Monthly summ	ary:						
Stock at the start of the month / Opening stock (A):			ening stock (A):	500 Stock dispe	nsed during	the month (C):	120
Stock received during the month (B):				0 Stock expire	ed/discarded	l during the month (D)	: 0
Stock at the end of month (E) = (A+B) - (C+D):				380			

Question 3: From the completed Drug Dispensing Register and updated Drug Stock Register, sections 11 and 12 in the monthly ART Report can be completed as follows.

11. REGIMENS AT THE END OF THE MONTH						
Regimen	No. of patients on ART					
d4T30/3TC/NVP	26*					
d4T40/3TC/NVP	6					
ZDV/3TC+NVP	5					
ZDV/3TC+EFV	0					
d4T30/3TC+EFV	4					
d4T40/3TC+EFV	0					
Second line	0					
Other regimens	0					
Total number of patients	41					

*26 = 24 (FDC) + 3 (dual combination) - 1 (NEW 1 who came twice)

As per the Drug Dispensing Register, a total of 42 visits to the ART center and the pharmacy took place. However, of the 42 visit, one patient ("NEW 1") came twice, therefore 41 patients came to pick up their drugs.

12. DRUG STOCKS							
Name of the drug	Stock at the start of the month (A)	Stock received during the month (B)	Stock dispensed during the month (C)	Stock expired during the month (D)	Stock at the end of the month (A+B)-(C+D)	Amount requested	
d4T30/3TC/NVP	5800	5000	1440	0	9360	0	
d4T40/3TC/NVP	2500	2000	360	0	4140	0	
d4T30/3TC	500	0	360	0	140	130	
d4T40/3TC	100	0	0	100	0	100	
ZDV/3TC	2000	0	270	0	1730	0	
NVP	600	0	345	0	255	0	
EFV	500	0	120	0	380	70	
d4T30/3TC/NVP	24*30*2*3 = 4	680 e	xisting stock: 9	360			
d4T40/3TC/NVP:	6*30*2*3 = 1080		existing stock: 4140				
d4T30/3TC:	3*15*2*3 = 270		existing stock: 140				
d4T40/3TC:	0	e	xisting stock: C)			
ZDV/3TC:	5*30*2*3 = 90	0 е	xisting stock: 1	730			

Discuss the issue of d4T40/3TC as there is no anticipated need for the drug and it had already expired during the current month. A basic stock should be kept in case patients require this combination. What would be an appropriate strategy?

existing stock: 255

existing stock: 380

- NVP (200mg): Estimate the number of new clients expected per month.
- ◆ EFV (600mg): Estimate the number of TB-HIV patients plus the number of patient with NVP intolerance = plan for around 12% of patients (note: cross resistance between all non nucleosides drugs).

Question 4: At least 3 drugs would need to be reordered.

~3*15*1*3 = 135

 $\sim 5^* 30^* 1^* 3 = 450$

Question 5: The ART Manager can point out the following issues: low number of new patients (only 3 patients during the month), stock expired during the month should have been returned. The ART Manager should also reorder the requested drugs.

NVP (200mg)

EFV (600 mg)

Exercise 3 – Monthly report									
Refer to Participant Manual, module 5									
1. Name of the Treatment Unit <u>CL</u>									
2. Name of the District									
3. Name of the State/province									
4. Name of the Treatment Unit incharge									
5. Report for the period 1 2005 month year									
6. Enrollment in HIV care (PLWHA seeking care at the treatment center)	adult male	adult female	child.<14 yo	total					
6.1 Cumulative no. of patients ever enrolled in HIV care at beginning of this month	37	23	4	64					
6.2 New patients enrolled in HIV care during this month	13	8	2	23					
6.3 Cumulative no. of patients ever enrolled in HIV care at the end of this month	50	31	6	87					
7. Medical eligibility for ART*	adult male	adult female	child.<14 yo	total					
7.1 No. of patients medically eligible for ART but have not been started on ART at the end of this month	5	3	1	9					
8. Enrollment on ART	adult male	adult female	child.<14 yo	total					
8.1 Cumulative no. of patients ever started on ART at the beginning of this month	13	7	1	21					
8.2 New patients started on ART during this month	4	4	0	8					
8.3 No. of patients on ART transferred in this month	1	0	0	1					
8.4 Cumulative no. of patients ever started on ART at the end of this month	18	11	1	30					
9. outcomes on ART	adult male	adult female	child.<14 yo	total					
9.1 Cumulative no. of death reported at the end of this month				2					
9.2 Cumulative no. of patients transferred out under ARV at the end of this month				0					
9.3 No. of patients missing/lost to follow-up at the end of this month				2					
9.4 No. of patients stopping ART at the end of this month				1					
9.5 No. of patients on ART at the end of this month				25					
◆ 9.5.1 Among them, no. on original 1st line regimen				23					
◆ 9.5.2 No. on substituted 1st line regimen				2					
♦ 9.5.3 No. switched on 2nd line regimen				0					

* refers to the medical elligibility on clinical and/or laboratory criteriae, whether or not the patient is ready for ART

10. TREATMENT ADHERENCE	Total
10.1. No. of patients assessed for adherence during this month	20
10.2. Of those assessed for adherence, level of adherence in the last month	
10.2.1. < 3 doses missed in a period of 30 days	19
10.2.2 =3 to 12 doses missed in a period of 30 days 80-95%	0
10.2.3. >12 doses missed in a period of 30 days <80%	1

Exercise 4 – Cohort report

Refer to Participant Manual, module 6

Answers to question 1: Outcomes at 6 months

	For cohort starting ART by month/year: at baseline then results at 6 months on ART, 12 months on ART, 24 months on ART	Cohort Dec04	6 mo- Jun05	12 mo- Dec05	24 mo- Dec06
G	Started on ART in this clinic- original cohort	10	10		
ΤI	Transfers In Add +	x	0		
то	Transfers Out Subtract -	x	0		
N	Net current cohort	10	10		
Н	On Original 1st Line Regimen		7		
I	On Alternate 1st Line Regimen (Substituted)		1		
J	On 2nd Line Regimen (Switched)		0		
S	Stopped		0		
D	Died		1		
F	Missed/Lost to Follow-up		1		
Α	Number alive and on ART [N - (S+D+F)]		8		
	Percent of cohort alive and on ART (A/N*100)		80%		
	CD4 median or proportion <u>></u> 200/ among patients controlled for CD4	0/10	4/8		
	Performance scale/ out of "A"				
	A Proportion normal activity	1/10	5/8		
	B Proportion bedridden <50%	6/10	3/8		
	C Proportion bedridden >50%	3/10	0/8		

7/8

Number of persons who **picked up ARVs each** month for 6/6, 12/12 or 24/24 months/ out of "A"

Answers to question 2: Outcomes at 6 and 12 months

	For cohort starting ART by month/year: at baseline then results at 6 months on ART, 12 months on ART, 24 months on ART	Cohort Jun04	6 mo- Dec04	12 mo- Jun05	24 mo- Jun06
G	Started on ART in this clinic- original cohort	18	18	18	
ΤI	Transfers In Add +	х	0	1	
то	Transfers Out Subtract -	х	0	0	
N	Net current cohort	18	18	19	
н	On Original 1st Line Regimen		16	14	
I	On Alternate 1st Line Regimen (Substituted)		2	1	
J	On 2nd Line Regimen (Switched)		0	0	
S	Stopped		0	1	
D	Died		0	1	
F	Missed/Lost to Follow-up		1	2	
Α	Number alive and on ART [N - (S+D+F)]		18	15	
	Percent of cohort alive and on ART (A/N*100)		100%	79%	
	CD4 median or proportion >200/ among patients controlled for CD4	0/18	8/18	16/16	
	Performance scale/ out of "A"		·		
	A Proportion normal activity	0/18	6/18	10/15	
	B Proportion bedridden <50%	10/18	11/18	5/15	
	C Proportion bedridden >50%	8/18	1/17	0/15	
	Number of persons who picked up ARVs each month for 6/6, 12/12 or 24/24 months/ out of "A"		13/17	9/15	

Exercise 5 – Cohort interpretation

Refer to Participant Manual, module 6

Answers to question 1: Cohort report from clinic CLA in District A

Table: Evolution of the proportion of patients on ART at 6 months according to the quarter they started. Clinic CLA, District A. Period from April 2004 to March 2005.

Quarterly cohort	20-04	30-04	40-04	1Q-05	TOTAL
Number started on ART in this clinic	120	280	146	222	768
Number transferred In	0	0	0	0	0
Number transferred Out	0	0	0	4	4
Total Number in Cohort started on ART	120	280	146	218	764
Number alive and on treatment at 6 month	84	237	123	202	646
Number on 1st line regimen	84	237	123	202	646
Number on alternate 1st line regiment	0	0	0	0	0
Number on 2nd line regimen (switched)	0	0	0	0	0
Died	30	31	6	7	74
Stopped on medical advice	0	0	0	0	0
Lost to Follow-up	6	12	17	9	44
Percent of cohort alive and on ART at 6 months	70%	85%	84%	93%	85%

Figure: Evolution of the proportion of patients on ART at 6 months according to the quarter they started. Clinic CLA, District A. Period from April 2004 to March 2005.



Interpretation:

- The proportion of patients alive and on treatment at 6 months consistently increased across the 4 quarters of the first year of the programme.
- ◆ The low rate of patients alive and on treatment at 6 months for those started in the first quarter was mostly related to a high fatality rate. Among patients started during the first 3 months of the programme, 25% had died within the first 6 months of treatment. The fatality rate at 6 months was reduced to 11% in the following quarter and to <5% during the 2 recent quarters.</p>
- ◆ The rate of lost to follow up remained <5% except during the 3r \d quarter of the programme when 12% of patients who started ART during this quarter were lost to follow up before 6 months treatment.</p>
- No 1st line substitution occurred and all patients alive and on treatment at 6 months are continuing the initial regimen prescribed (major side effects requiring change in treatment are known to be more frequent during the first months of treatment).

Query list for additional information:

- Reduction in fatality rate: was it related to an improvement in programme effectiveness or to the inclusion of patients in less advanced stages of disease? Before concluding to a better programme effectiveness, it might be necessary to analyse baseline clinical and immunological characteristics of the patients starting. Were the patients included in the 2 first quarters of the programme in more advanced stage than those included after? Information regarding this analysis of the proportion of patients included in stage 4, the functional status of the patients starting ART during each quarter or the median CD4-count at baseline is not available in the report.
- Defaulter rate: how can the high defaulter rate in the 3rd quarter of the programme be explained? This
 might require qualitative programme information or to go back to patients characteristics.
- 1st line substitution: how to explain the absence of any 1st line substitution during the 6 first months of treatment? Recognition of side-effects is questionable because of the absence of 1st-line substitution within the first 6 months of ART, when side-effects are more frequent. If side-effects go unnoticed it may be fatal for the patient and affect the mortality rate (e.g. anemia and AZT).

Answers to question 2: Cohort report from clinic ZY in District A

Table: Outcomes at 6 months and 12 months for patients starting ART in clinic ZY, District B, from April 04 to April 05

	Baseline	%	6 months	%	12 months	%	denominator
Number started on ART in this clinic	1125		1125		438		
Number transferred In	0		0		0		
Number transferred Out	0		0		0		
Total Number in Cohort started on ART (A)	1125		1125		438		
Number alive and on treatment (B)			949	84.4	356	81.3	А
Number on 1st line regimen			888	93.6	313	87.9	В
Number on alternate 1st line regimen			61	6.4	43	12.1	В
Number on 2nd line regimen (switched)			0	0.0	0	0.0	В
Died			86	7.6	35	8.0	А
Stopped on medical advice			65	5.8	38	8.7	А
Lost to Follow-up			25	2.2	9	2.1	А
Median CD4	96		330		369		
Functional status among cohort							
Working	715	63.4	860	90.7	325	91.3	В
Ambulatory	260	23.1	61	6.4	18	5.1	В
Bedridden	152	13.5	27	2.8	13	3.7	В

Figure: Outcomes at 6 months and 12 months for patients starting ART in clinic ZY from April 04 to April 05



Figure: Evolution of the functional status at baseline, 6 and 12 months on ART for patients starting ART in clinic ZY from April 04 to April 05



Interpretation:

- More than 80% of patients are still on treatment at 12 months. This result should be interpreted in view of the baseline characteristics of the patients as the mortality will be greatly related to advanced stage of disease at baseline. The only information in this report is that 13.5% patients were bedridden at baseline.
- Most of deaths occurred during the first 6 months (7.6%) and the fatality rate was reduced from 6 to 12 months, attesting the effectiveness of the programme. Most of deaths are expected to occur within the first months of treatment, while fatality rate will be dramatically reduced thereafter. However, it is not the same group of patients analysed at 6 months and 12 months. For a direct comparison of the fatality rate at 6 and 12 months, only those who started 12 months ago should be included in the analysis and their outcomes at 6 and 12 months compared. Among the 438 patients started on ART 12 months ago, you can verify that 33 deaths were recorded before 6 months and 2 deaths from 6 to 12 months.
- ◆ The rate of lost to follow is extremely low (2%) and patients were lost to follow-up during the first 6 months; this rate was maintained from 6 to 12 months.
- ✤ In total, nearly 9% of patients stopped ART on medical advice within 12 months, and this rate increased by one-third from 6 to 12 months.
- At 12 months, more than 85% of patients on ART are still continuing the initial regimen, which can be considered as a reasonable objective for an ART programme. However none of the patients were switched to 2nd line regimen despite treatment failure being expected at 12 months.
- The restoration of the functional status showed that the most benefit occurred within the first six months of ART.

In conclusion, these data showed an early mortality remaining associated with ART, probably due to patients being at advance stage of the disease at start of ART. For patients who survived, the physical recovery occurred rapidly during the first 6 months of treatment. More over these data suggested that once patients have achieved the first months of treatment, they might adhere more to the continuation of treatment as suggested by the rate of lost to follow-up rate which decreased after 6 months on ART.

Query list for additional information:

The main questions should be related to the high rate of stop on medical advice, together with the absence of switching to 2nd-line regimen.

- What are the reasons for stopping on medical advice?
- ✤ Is it related to poor adherence?
- ✤ Is it related to defaulters? If so, this will increase the rate of lost to follow-up.
- ✦ Is it related to treatment failure in the absence of availability of 2nd-line drugs? if so, 2nd-line regimen will need to be available to saving lives and increase programme effectiveness.



Regional Office for South-East Asia New Delhi