

**Supplementary File 1: CONSORT checklist for cluster-randomised trials**

PAPER SECTION and topic	Item	Descriptor	Reported on Page No.
<b>TITLE &amp; ABSTRACT</b>			
	1a*	Identification as a randomised trial in the title	Title
	1b	How participants were allocated to interventions (e.g., “random allocation”, “randomised”, or “randomly assigned”), <i>specifying that allocation was based on clusters</i>	Abstract
<b>INTRODUCTION</b>			
Background & Objectives	2a	Scientific background and explanation of rationale, <i>including the rationale for using a cluster design.</i>	Introduction, Study design, Naikoba et al. [9]
	2b	Specific objectives or hypotheses, <i>whether objectives pertain to the cluster level, the individual participant level or both</i>	Introduction
<b>METHODS</b>			
Trial Design	3a	Description of trial design (such as parallel, factorial) including allocation ratio	Study design
	3b	Important changes to methods after trial commencement (such as eligibility criteria), with reasons	Not applicable
Participants	4a	Eligibility criteria for participants <i>and clusters</i> and the settings and locations where the data were collected.	Participants and eligibility, Miceli et al.[16], Naikoba et al.[9]
	4b	Settings and locations where the data were collected	Participants and eligibility, Naikoba et al.[9]
Interventions	5	Precise details of the interventions intended for each group, <i>whether they pertain to the individual level, the cluster level or both</i> , and how and when they were actually administered.	Interventions, Miceli et al.[16], Naikoba et al.[9]
Outcomes	6a	Report clearly defined primary and secondary outcome measures, <i>whether they pertain to the individual level, the cluster level or both</i> , and, when applicable, any methods used to enhance the quality of measurements (e.g., multiple observations, training of assessors).	Outcome definitions, Data collection
	6b	Any changes to trial outcomes after the trial commenced, with reasons	Outcome definitions
Sample size	7a	How <i>total</i> sample size was determined ( <i>including method of calculation, number of clusters, cluster size, a coefficient of intracluster correlation (ICC or k), and an indication of its uncertainty</i> ) and, when applicable, explanation of any interim analyses and stopping rules.	Sample size, Naikoba et al.[6]

PAPER SECTION and topic	Item	Descriptor	Reported on Page No.
	7b	When applicable, explanation of any interim analyses and stopping guidelines	Not applicable
<b>RANDOMIZATION</b>			
Sequence generation	8a	Method used to generate the random allocation sequence,	Randomization, Naikoba et al. [9], Weaver et. al.[12]
	8b	Type of randomisation; details of any restriction (such as blocking and block size) Details of stratification or matching if used	Randomization, Naikoba et al. [9], Weaver et. al. [12]
Allocation concealment	9*	Method used to implement the random allocation sequence, <i>specifying that allocation was based on clusters rather than individuals</i> and clarifying whether the sequence was concealed until interventions were assigned.	Randomization, Naikoba et al. [9]
Implementation	10a	Who generated the allocation sequence, who enrolled participants, and who assigned participants to their groups.	Randomization, Naikoba et al. [9]
	10b	Mechanism by which individual participants were included in clusters for the purposes of the trial (such as complete enumeration, random sampling)	Participants and eligibility
	10c	From whom consent was sought (representatives of the cluster, or individual cluster members, or both), and whether consent was sought before or after randomisation	Ethical considerations
Blinding	11a	Whether or not participants, those administering the interventions, and those assessing the outcomes were blinded to group assignment.	Randomization
	11b	If relevant, description of the similarity of interventions	Not applicable
Statistical methods	12a	Statistical methods used to compare groups for primary outcome(s) <i>indicating how clustering was taken into account</i> ; methods for additional analyses, such as subgroup analyses and adjusted analyses.	Data Management and Statistical Methods
	12b	Methods for additional analyses, such as subgroup analyses and adjusted analyses	Data Management and Statistical Methods
<b>RESULTS</b>			
Participant flow	13a	Flow of <i>clusters and</i> individual participants through each stage (a diagram is strongly recommended). Specifically, for each group report the numbers of <i>clusters and</i> participants randomly assigned, receiving intended treatment, completing the study protocol, and analyzed for the primary outcome. Describe protocol deviations from study as planned, together with reasons.	Recruitment and Enrollment, Figure 1

PAPER SECTION and topic	Item	Descriptor	Reported on Page No.
	13b	For each group, losses and exclusions after randomisation, together with reasons. For each group, losses and exclusions for both clusters and individual cluster members	Recruitment and Enrollment, Figure 1
Recruitment	14a	Dates defining the periods of recruitment and follow-up.	Study Design
	14b	Why the trial ended or was stopped	Not applicable
Baseline data	15	Baseline information for each group <i>for the individual and cluster levels as applicable</i>	Results, Figure 2, Tables 2-3
Numbers analyzed	16	Number of <i>clusters and</i> participants (denominator) in each group included in each analysis and whether the analysis was by “intention-to-treat”. State the results in absolute numbers when feasible (e.g., 10/20, not 50%).	Outcomes, Figure 1
Outcomes and Estimation	17a	For each primary and secondary outcome, a summary of results for each group measures <i>for the individual or cluster level as applicable</i> , and the estimated effect size and its precision (e.g., 95% confidence interval)	Outcomes, Tables 2-3
	17b	For binary outcomes, presentation of both absolute and relative effect sizes is recommended	Outcomes, Tables 2-3
Ancillary analyses	18	Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory	Outcomes, Table 3
Adverse events	19	All important adverse events or side effects in each intervention group.	Not applicable
<b>DISCUSSION</b>			
Interpretation	20	Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence	Discussion
Limitations	21	Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses	Limitations
Generalizability	22	Generalizability (external validity) <i>to individuals and/or clusters (as relevant)</i> of the trial findings	Discussion
Overall evidence	23	General interpretation of the results in the context of current evidence.	Conclusion
<b>OTHER INFORMATION</b>			
Registration	24	Registration number and name of trial registry	Not applicable
Protocol	25	Where the full trial protocol can be accessed, if available	Study Design, Weaver et. al. [12]
Funding	26	Sources of funding and other support (such as supply of drugs), role of funders	Acknowledgements

# Supplementary File 2:

## IDCAP HIV Clinical Observation Form

A. Observation #: \_\_\_\_\_

B Site #:	C Trainee #:	D Date of visit (d/m/y):
E Observer #:		F Quality Control #:
G Triage status: <input type="checkbox"/> H. Emergency ( <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> O) <input type="checkbox"/> I. Priority (Specify _____) <input type="checkbox"/> Not Emergency		
If emergency, support trainee to manage patient. Emergency treatment is higher priority than clinical assessment.		

J. Language of patient during visit: \_\_\_\_\_ K. Translation? ☐ Yes ☐ No

L. Gender of patient: ☐ F ☐ M Age of patient: \_\_\_\_\_ M. months (LT 5 years) \_\_\_\_\_ N. years (GE 5 years)

I. Vital signs: <sup>1</sup> Reported by other health professional or volunteer before consultations? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> <input type="checkbox"/>
<sup>2</sup> Temperature _____ C <sup>3</sup> If no thermometer, febrile to touch <input type="checkbox"/> Y <input type="checkbox"/> N	
<sup>4</sup> Current weight _____ kg <sup>5</sup> Weight last visit _____ kg <sup>6</sup> Peak weight _____ kg <sup>7</sup> Height _____ cm	
<sup>8</sup> BP _____	

## II. History

<sup>1</sup> New enrollee at site? <input type="checkbox"/> Y <input type="checkbox"/> N <sup>2</sup> If yes, <input type="checkbox"/> new dx or <input type="checkbox"/> transfer?	<sup>3</sup> Date of HIV diagnosis (m/d/y) ____/____/____
<b>Medication:</b>	
<sup>4</sup> Current ART? <input type="checkbox"/> Yes <input type="checkbox"/> No <sup>5</sup> If Yes, regimen: <input type="checkbox"/> 3TC <input type="checkbox"/> AZT <input type="checkbox"/> d4T <input type="checkbox"/> TDF <input type="checkbox"/> FTC <input type="checkbox"/> NVP <input type="checkbox"/> EFV	<input type="checkbox"/>
<sup>6</sup> If yes, ART start date (d/m/y) ____/____/____	<input type="checkbox"/>
<sup>7</sup> Previous exposure to ARV? <input type="checkbox"/> Yes <input type="checkbox"/> No <sup>8</sup> If Yes, regimen: <input type="checkbox"/> 3TC <input type="checkbox"/> AZT <input type="checkbox"/> d4T <input type="checkbox"/> TDF <input type="checkbox"/> FTC <input type="checkbox"/> NVP <input type="checkbox"/> EFV	<input type="checkbox"/>
<sup>9</sup> If yes, indication: <input type="checkbox"/> Chronic care <input type="checkbox"/> PMTCT <input type="checkbox"/> Other _____ <sup>10</sup> If yes, ART stop date (d/m/y) ____/____/____	<input type="checkbox"/>
<sup>11</sup> TB? <input type="checkbox"/> Never <input type="checkbox"/> Suspect <input type="checkbox"/> Active ( <sup>12</sup> <input type="checkbox"/> intensive <input type="checkbox"/> continuation) <input type="checkbox"/> Previous; ( <sup>13</sup> d/m/y) last dose ____/____/____	<input type="checkbox"/>
<sup>14</sup> CTX preventive? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NR <sup>15</sup> Other medication? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NR (specify) _____	<input type="checkbox"/>
<sup>16</sup> Allergy to Medication: <input type="checkbox"/> None <input type="checkbox"/> CTX <input type="checkbox"/> SP <input type="checkbox"/> Other _____ <input type="checkbox"/> NR	<input type="checkbox"/>
<sup>17</sup> Additional history: <input type="checkbox"/> None <input type="checkbox"/> Previous OI (specify) _____ <input type="checkbox"/> NR	<input type="checkbox"/>
<sup>18</sup> If female, now pregnant: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NR <input type="checkbox"/> Suspected, not confirmed <sup>20</sup> LNMP: ____/____/____	<input type="checkbox"/>

III. Symptoms	Patient	Code	Patient	Code
<sup>1</sup> Fever:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NR		ART adherence:	
<sup>2</sup> Duration _____ days			<sup>9</sup> How many taken? _____ pills <input type="checkbox"/> NR <input type="checkbox"/> NA	
<sup>3</sup> Coughing:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NR		<sup>10</sup> How many prescribed? _____ pills <input type="checkbox"/> NR <input type="checkbox"/> NA	
<sup>4</sup> Duration _____ days			<sup>11</sup> Prescription date? (m/d/y) ____/____/____ <input type="checkbox"/> NR <input type="checkbox"/> NA	
<sup>5</sup> Night sweats:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NR		<sup>13</sup> Side effects of ART	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NR <input type="checkbox"/> NA
<sup>6</sup> Weight loss:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NR		<sup>14</sup> Specify _____	
<sup>7</sup> Specify % _____			<sup>15</sup> Functional status	Able to work <input type="checkbox"/>
<sup>8</sup> Recent contact with someone who has TB:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NR		<sup>16</sup> If bedridden, % of time: _____	Ambulatory <input type="checkbox"/> Bedridden <input type="checkbox"/>

<sup>17</sup> Does patient have specific complaints or concerns? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NR (If yes, specify below with Y, N or V.)			
<sup>18</sup> Abdominal pain <input type="checkbox"/>	<sup>23</sup> Convulsions <input type="checkbox"/>	<sup>30</sup> Headache <input type="checkbox"/>	<sup>36</sup> Skin lesions <input type="checkbox"/>
<sup>19</sup> Anxiety <input type="checkbox"/>	<sup>24</sup> Depression <input type="checkbox"/>	<sup>31</sup> Loss of appetite <input type="checkbox"/>	<sup>37</sup> Skin Rash <input type="checkbox"/>
<sup>20</sup> Breathing – shortness of breath <input type="checkbox"/>	<sup>25</sup> Diarrhea <input type="checkbox"/>	<sup>32</sup> Mouth problems <input type="checkbox"/>	<sup>38</sup> Swallowing difficulty <input type="checkbox"/>
<sup>21</sup> Burning, tingling, loss or change in sensation <input type="checkbox"/>	<sup>26</sup> Duration _____ days	<sup>33</sup> Myalgias <input type="checkbox"/>	<sup>39</sup> Vomiting <input type="checkbox"/>
<sup>22</sup> Chest pain <input type="checkbox"/>	<sup>27</sup> Blood? <input type="checkbox"/> Y <input type="checkbox"/> N	<sup>34</sup> Nausea <input type="checkbox"/>	<sup>40</sup> Other (specify): <input type="checkbox"/>
	<sup>28</sup> Fatigue <input type="checkbox"/>	<sup>35</sup> Skin itching <input type="checkbox"/>	
	<sup>29</sup> Genital problem <input type="checkbox"/>		
	Specify _____		

IV. Physical Exam			
1. General	<input type="checkbox"/>	A. <input type="checkbox"/> normal B. <input type="checkbox"/> wasting C. <input type="checkbox"/> palor D. <input type="checkbox"/> jaundice E. <input type="checkbox"/> oedema F. <input type="checkbox"/> lymphadenopathy G. <input type="checkbox"/> agitation H. <input type="checkbox"/> fat change(lipodystrophy) I. <input type="checkbox"/> temperature _____ C J. <input type="checkbox"/> other _____	
2. Mouth	<input type="checkbox"/>	A. <input type="checkbox"/> normal B. <input type="checkbox"/> abscess C. <input type="checkbox"/> oral thrush D. <input type="checkbox"/> caries E. <input type="checkbox"/> gingivitis F. <input type="checkbox"/> Kaposi G. <input type="checkbox"/> ulcers H. <input type="checkbox"/> other _____	
3. Skin	<input type="checkbox"/>	A. <input type="checkbox"/> normal B. <input type="checkbox"/> abscess C. <input type="checkbox"/> ecchymosis D. <input type="checkbox"/> erythema E. <input type="checkbox"/> herpes zoster scar F. <input type="checkbox"/> Kaposi G. <input type="checkbox"/> nodules H. <input type="checkbox"/> papules I. <input type="checkbox"/> pus J. <input type="checkbox"/> pustules K. <input type="checkbox"/> scaling L. <input type="checkbox"/> vesicles M. <input type="checkbox"/> wound N. <input type="checkbox"/> other _____	
4. Lungs	1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/>	A. <input type="checkbox"/> normal B. <input type="checkbox"/> breathing difficulty C. <input type="checkbox"/> chest in-drawing D. <input type="checkbox"/> stridor If cough, E. <input type="checkbox"/> RR–trainee _____ bpm F. <input type="checkbox"/> RR–observer _____ bpm Listen to lung: G. <input type="checkbox"/> clear H. <input type="checkbox"/> abnormal sound on percussion I. <input type="checkbox"/> tenderness J. <input type="checkbox"/> crepitations K. <input type="checkbox"/> rhonchi L. <input type="checkbox"/> wheezing M. <input type="checkbox"/> decreased breath sounds N. <input type="checkbox"/> other _____	
5. Cardio-vascular	<input type="checkbox"/>	A. <input type="checkbox"/> pulse _____ B. <input type="checkbox"/> gallop C. <input type="checkbox"/> murmur D. <input type="checkbox"/> rub E. <input type="checkbox"/> other _____	
6. Abdo-men	<input type="checkbox"/>	A. <input type="checkbox"/> normal B. <input type="checkbox"/> distended C. <input type="checkbox"/> tenderness D. <input type="checkbox"/> abnormal sound on percussion E. <input type="checkbox"/> hepatomegaly F. <input type="checkbox"/> splenomegaly G. <input type="checkbox"/> abnormal mass H. <input type="checkbox"/> pregnancy I. <input type="checkbox"/> ascites J. <input type="checkbox"/> other _____ K. For findings, note where _____	
7. Genita-lia	<input type="checkbox"/>	A. <input type="checkbox"/> normal B. <input type="checkbox"/> discharge C. <input type="checkbox"/> tenderness D. <input type="checkbox"/> ulcers E. <input type="checkbox"/> other _____	
8. Muculo skeletal	<input type="checkbox"/>	A. <input type="checkbox"/> normal B. <input type="checkbox"/> other _____	
9. Neuro	<input type="checkbox"/>	A. <input type="checkbox"/> normal B. <input type="checkbox"/> coma C. <input type="checkbox"/> confusion, disorientation D. <input type="checkbox"/> focal deficit E. <input type="checkbox"/> meningismus F. <input type="checkbox"/> paresthesia G. <input type="checkbox"/> seizure H. <input type="checkbox"/> other _____	
10. Other-Specify: _____	<input type="checkbox"/>	Specify <sup>A</sup> exam and <sup>B</sup> findings _____	

11. Did equipment or resource gaps affect trainee's physical exam for this patient? <input type="checkbox"/> Yes <input type="checkbox"/> No 12. If yes, please explain _____
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IX1. Did trainee conduct a focused and thorough history that is relevant to evolution of current symptom/complaint? <input type="checkbox"/> Yes <input type="checkbox"/> No IX2. If no, summarize reason. <input type="checkbox"/> Omission (Specify if not obvious on checklist) <input type="checkbox"/> Misinterpretation (Must specify) <input type="checkbox"/> Unnecessary (Must specify)
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IX3. Did trainee conduct a complete physical exam? <input type="checkbox"/> Yes <input type="checkbox"/> No IX4. If no, summarize reason. <input type="checkbox"/> Omission (Specify if not obvious on checklist) <input type="checkbox"/> Misinterpretation (Must specify) <input type="checkbox"/> Unnecessary (Must specify)
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**V. Please tell me the relevant information from the patient's file.** <sup>1.</sup> ☐ Not available

Code		Results	Code		Results
	<sup>2.</sup> <input type="checkbox"/> Ab (HIV antibody)			<sup>3.</sup> <input type="checkbox"/> Ag/PCR (child < 18mo)	
	<sup>4.</sup> <input type="checkbox"/> CBC (hemogram)			<sup>5.</sup> <input type="checkbox"/> HB (haemoglobin)	
	<sup>6.</sup> <input type="checkbox"/> CXR			<sup>7.</sup> <input type="checkbox"/> Creatinine	
	<sup>8.</sup> <input type="checkbox"/> Glucose			<sup>9.</sup> <input type="checkbox"/> HepB	
	<sup>10.</sup> <input type="checkbox"/> LFT transaminases			<sup>11.</sup> <input type="checkbox"/> Malaria BS	
	<sup>12.</sup> <input type="checkbox"/> Malaria RDT			<sup>13.</sup> <input type="checkbox"/> Pregnancy (HCG)	
	<sup>14.</sup> <input type="checkbox"/> RPR			<sup>15.</sup> <input type="checkbox"/> TB Sputum	
	<sup>16.</sup> <input type="checkbox"/> Viral Load				
	<sup>17.</sup> <input type="checkbox"/> Other1- Specify			<sup>18.</sup> <input type="checkbox"/> Other2- Specify	
	<sup>19.</sup> <input type="checkbox"/> CD4 cells/mm <sup>3</sup>	1.		<sup>20.</sup> Date (m/d/y) of CD4	1.
	<sup>21.</sup> <input type="checkbox"/> CD4 cells/mm <sup>3</sup>	2.		<sup>22.</sup> Date (m/d/y) of CD4	2.
	<sup>23.</sup> <input type="checkbox"/> CD4 cells/mm <sup>3</sup>	3.		<sup>24.</sup> Date (m/d/y) of CD4	3.

<sup>25.</sup> What is the highest confirmed WHO clinical disease stage for this patient: ☐ I ☐ II ☐ III ☐ IV<sup>26.</sup> What is the basis for this staging decision? (specify) \_\_\_\_\_<sup>27.</sup> Date (d/m/y) of staging diagnosis \_\_\_\_/\_\_\_\_/\_\_\_\_<sup>IX5.</sup> Did the trainee demonstrate accurate interpretation of laboratory values and schedule for routine laboratory surveillance of HIV/AIDS? ☐ Yes ☐ No <sup>IX6.</sup> If no, summarize reason.☐ Omission (Specify if not obvious on checklist)☐ Misinterpretation (Must specify)☐ Unnecessary (Must specify)**VI. Differential Diagnosis**<sup>1.</sup> Does this patient have any clinical staging conditions today? ☐ Yes ☐ No If yes, what were they?<sup>A.</sup> Trainee 1 \_\_\_\_\_ <sup>B.</sup> Observer Agree? ☐ Yes ☐ No <sup>C.</sup> Observer 1 \_\_\_\_\_<sup>D.</sup> Trainee 2 \_\_\_\_\_ <sup>E.</sup> Observer Agree? ☐ Yes ☐ No <sup>F.</sup> Observer 2 \_\_\_\_\_<sup>G.</sup> Trainee 3 \_\_\_\_\_ <sup>H.</sup> Observer Agree? ☐ Yes ☐ No <sup>I.</sup> Observer 3 \_\_\_\_\_<sup>IX5.</sup> Did the trainee accurately diagnose clinical staging conditions? ☐ Yes ☐ No <sup>IX6.</sup> If no, summarize reason.☐ Omission (Specify if not obvious on checklist)☐ Misinterpretation (Must specify)☐ Unnecessary (Must specify)<sup>2.</sup> Does this patient have other diagnoses today? ☐ Yes ☐ No ☐ NA If yes, what were they?<sup>A.</sup> Trainee 1 \_\_\_\_\_ <sup>B.</sup> Observer Agree? ☐ Yes ☐ No <sup>C.</sup> Observer 1 \_\_\_\_\_<sup>D.</sup> Trainee 2 \_\_\_\_\_ <sup>E.</sup> Observer Agree? ☐ Yes ☐ No <sup>F.</sup> Observer 2 \_\_\_\_\_<sup>G.</sup> Trainee 3 \_\_\_\_\_ <sup>H.</sup> Observer Agree? ☐ Yes ☐ No <sup>I.</sup> Observer 3 \_\_\_\_\_<sup>J.</sup> Trainee 4 \_\_\_\_\_ <sup>K.</sup> Observer Agree? ☐ Yes ☐ No <sup>L.</sup> Observer 4 \_\_\_\_\_<sup>IX7.</sup> Did the trainee accurately diagnose other problems? ☐ Yes ☐ No <sup>IX8.</sup> If no, summarize reason.☐ Omission (Specify if not obvious on checklist)☐ Misinterpretation (Must specify)☐ Unnecessary (Must specify)

3. **What is the patient's clinical stage today?** ☐ I ☐ II ☐ III ☐ IV ☐ I-T ☐ II-T ☐ III-T ☐ IV-T

What was the supporting evidence?

A. Trainee 1 \_\_\_\_\_ B. Observer Agree? ☐ Yes ☐ No C. Observer 1 \_\_\_\_\_  
D. Trainee 2 \_\_\_\_\_ E. Observer Agree? ☐ Yes ☐ No F. Observer 2 \_\_\_\_\_  
G. Trainee 3 \_\_\_\_\_ H. Observer Agree? ☐ Yes ☐ No I. Observer 3 \_\_\_\_\_

<sup>IX9</sup> Did the trainee accurately assess WHO clinical stage? ☐ Yes ☐ No <sup>IX10</sup> If no, summarize reason.

- ☐ Omission (Specify if not obvious on checklist)  
☐ Misinterpretation (Must specify)  
☐ Unnecessary (Must specify)

4. **Is the patient eligible for ART?** ☐ Yes ☐ No ☐ NA If yes, what was the supporting evidence?

A. Trainee 1 \_\_\_\_\_ B. Observer Agree? ☐ Yes ☐ No C. Observer 1 \_\_\_\_\_  
D. Trainee 2 \_\_\_\_\_ E. Observer Agree? ☐ Yes ☐ No F. Observer 2 \_\_\_\_\_

<sup>IX11</sup> Did the trainee accurately identify eligibility for ART? ☐ Yes ☐ No ☐ NA <sup>IX12</sup> If no, summarize reason.

- ☐ Omission (Specify if not obvious on checklist)  
☐ Misinterpretation (Must specify)  
☐ Unnecessary (Must specify)

5. **If on ART, what % of drugs were taken?** ☐ ≥95% ☐ 85-94% ☐ <85% ☐ NR ☐ NA

% = No. of drugs taken x 100/Total no. of pills expected to be taken

<sup>IX13</sup> Did the trainee address ART adherence? ☐ Yes ☐ No ☐ NA <sup>IX14</sup> If no, summarize reason.

- ☐ Omission (Specify if not obvious on checklist)  
☐ Misinterpretation (Must specify)  
☐ Unnecessary (Must specify)

6. **If on ART, do you suspect side effects?** ☐ Yes ☐ No ☐ NA If yes, what were they?

A. Trainee 1 \_\_\_\_\_ B. Observer Agree? ☐ Yes ☐ No C. Observer 1 \_\_\_\_\_  
D. Trainee 2 \_\_\_\_\_ E. Observer Agree? ☐ Yes ☐ No F. Observer 2 \_\_\_\_\_

<sup>IX15</sup> Did the trainee accurately diagnose side effects? ☐ Yes ☐ No ☐ NA <sup>IX16</sup> If no, summarize reason.

- ☐ Omission (Specify if not obvious on checklist)  
☐ Misinterpretation (Must specify)  
☐ Unnecessary (Must specify)

7. **If on ART, does the patient have signs of treatment failure?** ☐ Yes ☐ No ☐ NA If yes, what were they?

A. Trainee 1 \_\_\_\_\_ B. Observer Agree? ☐ Yes ☐ No C. Observer 1 \_\_\_\_\_  
D. Trainee 2 \_\_\_\_\_ E. Observer Agree? ☐ Yes ☐ No F. Observer 2 \_\_\_\_\_

<sup>IX17</sup> Did the trainee accurately assess for treatment failure? ☐ Yes ☐ No ☐ NA <sup>IX18</sup> If no, summarize reason.

- ☐ Omission (Specify if not obvious on checklist)  
☐ Misinterpretation (Must specify)  
☐ Unnecessary (Must specify)

**VII. What laboratory investigations would you order today?** <sup>1.</sup> ☐ None

Code		Results	Code		Results
	<sup>2.</sup> <input type="checkbox"/> Ab (HIV antibody)			<sup>3.</sup> <input type="checkbox"/> Ag/PCR (child < 18mo)	
	<sup>4.</sup> <input type="checkbox"/> CBC (hemogram)			<sup>5.</sup> <input type="checkbox"/> HB (haemoglobin)	
	<sup>6.</sup> <input type="checkbox"/> CD 4			<sup>7.</sup> <input type="checkbox"/> Creatinine	
	<sup>8.</sup> <input type="checkbox"/> Glucose			<sup>9.</sup> <input type="checkbox"/> Hep B	
	<sup>10.</sup> <input type="checkbox"/> LFT Transaminases			<sup>11.</sup> <input type="checkbox"/> Malaria BS	
	<sup>12.</sup> <input type="checkbox"/> Malaria RDT			<sup>13.</sup> <input type="checkbox"/> Pregnancy	
	<sup>14.</sup> <input type="checkbox"/> RPR			<sup>15.</sup> <input type="checkbox"/> TB Sputum	
	<sup>16.</sup> <input type="checkbox"/> Viral Load				
	<sup>17.</sup> <input type="checkbox"/> Other1- Specify			<sup>18.</sup> <input type="checkbox"/> Other2- Specify	

<sup>19.</sup> Did equipment or resource gaps affect trainee's investigations for this patient? ☐ Yes ☐ No<sup>20.</sup> If yes, please explain \_\_\_\_\_<sup>21.</sup> **Would you order other investigations or procedures today?** ☐ Yes ☐ No If yes, specify below.

Code		Results	Code		Results
	<sup>22.</sup> <input type="checkbox"/> Chest x-ray			<sup>23.</sup> <input type="checkbox"/> Ultrasound scan Specify _____	
	<sup>24.</sup> <input type="checkbox"/> Other x-ray - Specify _____			<sup>25.</sup> <input type="checkbox"/> Other3-Specify _____	

<sup>19</sup> Did the trainee recommend appropriate investigations? ☐ Yes ☐ No ☐ NA <sup>20</sup> If no, summarize reason.

- ☐ Omission (Specify if not obvious on checklist)  
☐ Misinterpretation (Must specify)  
☐ Unnecessary (Must specify)

**Please use this space to document additional relevant information about this case.**



VIII. What treatment would you recommend?		
<b>1. Prevention?</b> <b>CTX:</b> <input type="checkbox"/> Start <input type="checkbox"/> Stop <input type="checkbox"/> Continue	<b>2. Observer agree w/ CTXI?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No, Specify <b>3. CTX:</b> <input type="checkbox"/> Start <input type="checkbox"/> Stop <input type="checkbox"/> Continue	
<b>4. Tx for OI?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, specify <b>6. Treatment 1?</b> _____ <b>8. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____ <b>10. Treatment 2</b> _____ <b>12. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____	<b>5. Observer agree w/Tx for OI</b> <input type="checkbox"/> Yes <input type="checkbox"/> No Specify <b>7. Treatment 1?</b> _____ <b>9. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____ <b>11. Treatment 2</b> _____ <b>13. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____	
<b>14. Tx for other dx?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, specify <b>16. Treatment 1?</b> _____ <b>18. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____ <b>20. Treatment 2</b> _____ <b>22. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____	<b>15. Observer agree w/Tx for other dx?OI</b> <input type="checkbox"/> Yes <input type="checkbox"/> No Specify <b>17. Treatment 1?</b> _____ <b>19. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____ <b>21. Treatment 2</b> _____ <b>23. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____	
<b>24. ART:</b> <input type="checkbox"/> Continue <input type="checkbox"/> Start <input type="checkbox"/> Stop <input type="checkbox"/> Modify <b>26. If change, new regimen:</b> <input type="checkbox"/> 3TC <input type="checkbox"/> AZT <input type="checkbox"/> d4T <input type="checkbox"/> TDF <input type="checkbox"/> FTC <input type="checkbox"/> NVP <input type="checkbox"/> EFV <input type="checkbox"/> Other _____ <b>28. Reason:</b> _____	<b>25. Observer agree w/ART:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No, Specify <b>27. <input type="checkbox"/> Continue <input type="checkbox"/> Start <input type="checkbox"/> Stop <input type="checkbox"/> Modify</b> <b>29. If change, new regimen:</b> <input type="checkbox"/> 3TC <input type="checkbox"/> AZT <input type="checkbox"/> d4T <input type="checkbox"/> TDF <input type="checkbox"/> FTC <input type="checkbox"/> NVP <input type="checkbox"/> EFV <input type="checkbox"/> Other _____ <b>30. Reason:</b> _____	
<b>31. Tx for side effects?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, specify <b>33. Treatment 1?</b> _____ <b>35. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____ <b>37. Treatment 2</b> _____ <b>39. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____	<b>32. Observer agree w/Tx for side effects?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No, Specify <b>34. Treatment 1?</b> _____ <b>36. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____ <b>38. Treatment 2</b> _____ <b>40. Route:</b> <input type="checkbox"/> oral <input type="checkbox"/> parenteral <input type="checkbox"/> Specify _____	
<b>41. Internal referral or consult?:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>43. Who?</b> _____ <b>45. Reason?</b> _____ <b>47. External referral or consult?:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>49. Where?</b> _____ <b>51. Reason?</b> _____ <b>53. Admitted this site:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>55. Date of next visit:</b> ____/____/____	<b>42. Observer agree w/ internal referral or consult:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No, Specify. <b>44. Who?</b> _____ <b>46. Reason?</b> _____ <b>48. Observer agree w/ external referral or consult:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No, Specify. <b>50. Who?</b> _____ <b>52. Reason?</b> _____ <b>54. Observer agree w/admission?:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>56. Observer agree w/Date of next visit?:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Prevention provided?</b> <b>57. Positive prevention message:</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<b>58. Recommend mosquito net:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>59. If female, recommend family planning</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
<b>60. Did equipment or resource gaps affect trainee's treatment plan for this patient?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>61. If yes, please explain</b> _____		

<b>IX21. Did the trainee recommend appropriate drug treatment?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA <b>IX22. If no, summarize reason.</b>  <input type="checkbox"/> Omission (Specify if not obvious on checklist) <input type="checkbox"/> Misinterpretation (Must specify) <input type="checkbox"/> Unnecessary (Must specify)
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## Brief Tool Marking & Scoring Protocol

### During Observation:

1. Mark all questions asked by the trainee and patient findings in blue or black ink.
2. Mark all questions asked by the clinical faculty and patient findings in red ink.

### Scoring Observation:

1. If the trainee asks the appropriate questions or performs task correctly, as determined by the clinical faculty, the score of the item is 1.
2. If the trainee did not ask the appropriate questions or performs task incorrectly including errors of omission and commission, as determined by clinical faculty, the score of the item is 0.

Outcome (Total Score Possible)	Scored Items (Item number on HIV/ART Clinical Observation – Patient Form)
History Taking (7-11)	<p>Required for all patients</p> <ol style="list-style-type: none"> <li>1. Current weight (I.4)</li> <li>2. Current ART Status (II.4)</li> <li>3. Cotrimoxazole history (II.14)</li> <li>4. Fever (III.1)</li> <li>5. Cough (III.3)</li> <li>6. Functional status (III.15 and III.16)</li> <li>7. Asked for any other symptoms (III.17)</li> </ol> <p>Only appropriate if indicated by patient status or symptoms</p> <ol style="list-style-type: none"> <li>8. (if female 13-49) Pregnancy status (II.18)</li> <li>9. (if fever) fever duration (III.2)</li> <li>10. (if cough) cough duration (III.4)</li> <li>11. (if on ART) ART status (III.13)</li> </ol>
Physical Examination (5-6)	<p>Required for all patients</p> <ol style="list-style-type: none"> <li>1. General (IV.1)</li> <li>2. Skin (IV.2)</li> <li>3. Mouth (IV.3)</li> <li>4. Lungs (IV.4)</li> <li>5. Abdomen (IV.6)</li> </ol> <p>Only appropriate if indicated by patient history or initial findings of physical examination</p> <ol style="list-style-type: none"> <li>6. Any other examination based on signs/symptoms (IV.10)</li> </ol>
Laboratory Test (1)	Summary score that all appropriate laboratory and other investigations were ordered correctly based on differential diagnosis. (VII1-VII18, VII22-VII25)
Diagnoses (2)	<p>Required for all patients</p> <ol style="list-style-type: none"> <li>1. Summary score for Clinical staging conditions (IV.1 B/E/H) Other diagnoses (IV.2 B/E/H), and Treatment side effects (IV.6 B/E/H)</li> </ol> <p>Required only for patients not on ART</p> <ol style="list-style-type: none"> <li>2. ART eligibility (IV.4 B/E)</li> </ol> <p>Required only for patients on ART</p> <ol style="list-style-type: none"> <li>2. Treatment failure (IV.7B/E)</li> </ol>
Treatment (2-3)	<p>Required for all patients</p> <ol style="list-style-type: none"> <li>1. Prescribes cotrimoxazole correctly (VIII.1 and VIII2)</li> <li>2. All other treatments are correct (VIII4 and VIII5, VIII14 and VIII15, VIII31 and VIII32)</li> </ol> <p>Required only for patients on ART</p> <ol style="list-style-type: none"> <li>3. Prescribes ART correctly (VIII.24 and VIII.25)</li> </ol>
Patient/caregiver Education (2)	<p>Required for all patients</p> <ol style="list-style-type: none"> <li>1. Positive prevention (VIII.57)</li> <li>2. Recommend Mosquito Net (VIII.58)</li> </ol>