Advanced HIV Disease (AHD) Standard Operating Procedures

Sept 2019

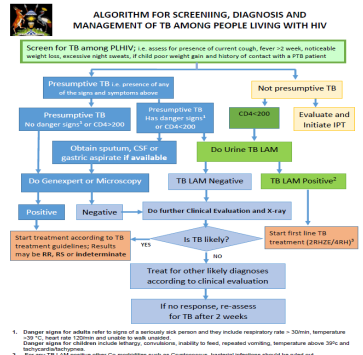
AHD management toolkit

- Symptom Screening Tool
- SOPs for Screening for Advanced HIV Disease
- SOP for prophylaxis of opportunistic infections
- SOP for referral of PLHIV with AHD
- SOP for TB LAM Test
- Algorithm for TB screening, diagnosis and management in PLHIV
- Algorithm for TB diagnosis in Children
- Algorithm for CCM screening, diagnosis and management in PLHIV
- Treatment Protocol for TB
- Treatment Protocol for CCM
- Management of PJP and severe bacterial infections
- Algorithm for nutrition assessment and care plan of acute malnutrition

Doses for adult new cases

Pre-treatment body weight(kg)	2 months initial phase	4 months continuation phase given daily
	RHZE (150+75+400+275) mg	RH (150+75) mg
33-39	2 tablets	2 tablets
40-54	3 tablets	3 tablets
55-70	4 tablets	4 tablets
>70	5 tablets	5 tablets

If an adult is < 33kgs, determine the dose based on patient's weight using dosage table in previous slide.



Screening for and Management of Advanced HIV Disease in Adults and Adolescents

1 **Screen for ALL red/purple/blue signs and symptoms AND Do CD4 if available**

Temperature >39˚C
Respiratory Rate >30 breaths/min
Heart Rate >120 beats/min
New Seizure
Unable to walk without assistance / Bed-ridden

Cough or shortness of breath
Fever, chills or excessive night sweats > 1week
Weight loss in the last month

Headache
Double or blurry vision
Decreased hearing
Acting unusual to family, friends or provider
Difficult or unstable walking
Weak legs or arms
White spots / thrush in mouth
Difficulty or painful swallowing
Diarrhea > 1week
Red, purple or dark spots on skin
Oral or anal ulcerations

	YES to any question in Red	**YES to any question in Purple**	**YES to ANY of the questions in Purple/Blue OR CD4 < 200**	**NO to ALL of the questions in Red/Purple/Blue**
	SERIOUSLY ILL PATIENT *Immediate Admission*	**CHECK FOR TB**	**CHECK FOR CRYPTOCOCCUS**	**NO CLINICAL EVIDENCE OF ADVANCED DISEASE**
2 Conduct these tests	TB LAM & GeneXpert (if not available → smear microscopy) CrAg screening	GeneXpert *If CD4<200* - add TB LAM. (If TB LAM negative, do CXR and evaluate for PCP and other conditions)	CrAg screening	Prepare and initiate ART immediately
3 Pre-emptive treatment	Follow TB and Cryptococcal Disease Algorithms	Refer to Algorithm for TB Diagnosis and Management	Refer to Algorithm for Cryptoccoccal Disease	
4 ART Initiation*	Prepare and initiate ART IMMEDIATELY in absence of confirmed OIs	Defer ART initiation for 2 weeks if initiating TB treatment	Initiate ART as per cryptococcal algorithm	
5 Prophylaxis	INH/B6 (if TB ruled out), CTX, Albendazole			

If on ART and failing current regimen, address advanced disease prior to ART regimen switch

SOP for Screening for Advanced HIV Disease in Adults & Adolescents

Target Users

Health workers at site level: lab personnel, clinicians, counselors, nurses, and expert clients

Regional and district mentors

Purpose

To guide site level health care providers on the **processes of identifying and managing** individuals with **advanced disease conditions**

Objectives

To assist **proper screening** for eligibility for diagnostic tests for advanced disease conditions e.g. TB LAM, CrAg tests

To ensure proper **management of patients** who have the advanced disease conditions as per the national treatment guidelines

SOP for Screening for Advanced HIV Disease: Scenario 1

When CD4 is available on site for newly initiating clients and patients returning to care
(90 days after last scheduled appointment)

Applicable scenario:
While assessing new patients or those returning to care, when CD4 test is available at the Health Facility and results can be received immediately; includes all sites where CD4+ POC machines are placed

Procedure:

Note: When results from CD4 and signs and symptoms screen are available immediately, **use CD4 test results, instead of symptom screening tool, to determine next steps** (further screening for AHD)

HCW should do the following (on the same day of ART initiation):

1. Perform a **signs and symptoms screen** before sending a patient for CD4 testing
2. **Request for a CD4 test** at the time of initiating ART or at the time of re-engagement in care
3. Indicate on the same CD4 test request form **instructions for the lab** to perform a **serum CrAg using the same sample** if CD4<200 cells/mm3

SOP for Screening for Advanced HIV Disease: Scenario 1

Procedure:

4. If the **CD4 test result is below 200 cells/mm3**,
   a) The laboratorian should request the patient to provide a **urine sample and perform TB LAM** test immediately (before the CD4 results are sent back to the clinician)
   b) Ensure to **get back the CD4, CrAg and TB LAM test results** and put them on file on the same day to make proper decisions to begin or defer ART
   c) Follow the **CrAg diagnosis and management algorithm** if CrAg test returns **positive** and the **TB diagnosis and management algorithm** if TB LAM returns positive
   d) If the **TB LAM** is **negative**, follow the TB diagnosis and management algorithm and **initiate TPT** *(TB Preventive Therapy)* immediately if client has no signs and symptoms of TB
   e) I**nitiate ART** immediately if **Urine LAM** is negative, and **CrAg** test is **negative** and client has **no signs and symptoms** of advanced disease

5. If the CD4 test result is **above 200 cells/mm3**,
   a) Ensure to **screen the client** for signs and symptoms of advanced disease. If client has signs and symptoms of TB, follow TB diagnosis and management algorithm
   b) I**nitiate ART and TPT immediately** if the client has no signs and symptoms at all

SOP for Screening for Advanced HIV Disease: Scenario 1

Procedure:

6. Immediately **update the ART card** with
   a) The correct code for the signs/symptoms that are identified
   b) The correct code for the advanced disease status assessed on this visit

7. Immediately **update the ART, TB and IPT/ TPT register**

8. Regardless of testing site for LAM and CrAg, HCW should ensure to **update the Daily Activity Register** (for CD4, VL, EID, CrAg and TB LAM)

SOP for Screening for Advanced HIV Disease

Scenario 1: Key Takeaways

1. When results from CD4 and signs and symptoms screen are available immediately, **use CD4 test results, instead of symptom screening tool**, to determine next steps (further screening for AHD)
2. Indicate on the CD4 test request form **instructions for the lab to perform a serum CrAg using the same sample** if CD4<200 cells/mm3
3. If the CD4 test result is below 200 cells/mm3, and the **TB LAM is negative**, follow the **TB diagnosis and management algorithm and initiate TPT** immediately if client has no signs and symptoms of TB
4. Immediately **update the ART card, ART, TB and IPT/ TPT register and the Daily Activity Register**

SOP for Screening for Advanced HIV Disease: Scenario 2

When CD4 test is NOT available at the site or CD4 results can NOT be received immediately for newly initiating clients' and patients returning to care

Applicable scenario:
While assessing new patients or those returning to care when CD4 test is NOT available at the Health Facility OR results can NOT be received immediately; includes all sites that access CD4+ through the hub system or those that have POC CD4+ machines but reagents are not available at the time of assessment

Procedure:

HCW should do the following (on the same day of ART initiation):

1. Use the **signs and symptoms screening tool** to identify eligible clients
2. **Assess** for all signs and symptoms in all three sections of the screening tool

SOP for Screening for Advanced HIV Disease: Scenario 2

Procedure:

3. If the client has **danger signs and symptoms or is critically ill**, immediately admit the client where possible or make referral for further management
   a) If the client is **admitted**,
      i. Perform **TB LAM** test and follow the TB diagnosis and management algorithm
      ii. Perform **CrAg** test and follow the CrAg screening algorithm
      iii. Prepare the clients for **ART/TPT/COTRIM** if CrAg test is negative and there is no evidence of confirmed TB infection
   b) If the client is **referred**,
      i. The referring clinician should **follow up** to ensure the referral was successful
4. In case client has only signs and symptoms of **TB**,
   a) Refer to the TB diagnosis and management algorithm
5. In case client has any of the signs and symptoms of **cryptococcal infection** or signs of severe immune-suppression,
   a) Perform CrAg test and follow the CrAg diagnosis and management algorithm
   b) Ensure to screen and diagnose for TB

SOP for Screening for Advanced HIV Disease: Scenario 2

Procedure:

6. If the client has **no signs and symptoms at all**,
   a) Immediately initiate ART/TPT/COTRIM
   b) Draw sample for CD4 and refer sample to nearby site/hub for CD4+ testing

7. Indicate on the same **CD4 test request form**
   a) Instructions for the lab to perform a serum CrAg using the same sample if CD4<200 cells/mm3
   b) The results of CrAg and TB LAM if tests have already been conducted

8. Immediately **update the ART card** with
   a) The correct code for the signs/symptoms that are identified
   b) The correct code for the advanced disease status assessed on this visit

9. Immediately **update the ART, TB and IPT/ TPT register**

10. Regardless of testing site for LAM and CrAg, HCW should ensure to **update the Daily Activity Register** (for CD4, VL, EID, CrAg and TB LAM)

SOP for Screening for Advanced HIV Disease: Scenario 2

At week 2 follow up visit:

1. **Check the CD4 result** for those whose sample was referred at the time of ART initiation
2. If the **CD4 test result is below 200 cells/mm3**,
   a) The clinician/nurse should request the patient to provide a **urine sample and perform TB LAM** test immediately (if not done before), and if positive, initiate TB treatment and continue ART/COTRIM
      i. Perform a **CrAg test** (in case it was not done at the hub) and if positive, follow the CrAg diagnosis and management algorithm and continue ART/COTRIM
   b) Continue **ART/TPT/COTRIM** if CrAg and TB LAM tests are negative and client still has no signs and symptoms of advanced disease
3. If the **CD4 test result is above 200 cells/mm3** and client has no signs and symptoms, continue ART and TPT

SOP for Screening for Advanced HIV Disease

Scenario 2: Key Takeaways

1. Indicate on the **CD4 test request form**
   a) Instructions for the lab to perform a serum CrAg using the same sample if CD4<200 cells/mm3
   b) The **results of CrAg and TB LAM if tests have already been conducted**
2. Immediately **update the ART card, ART, TB and IPT/ TPT register and the Daily Activity Register**

SOP for Screening for Advanced HIV Disease: Scenario 3

When CD4 is available on site for ART experienced clients with suspected or confirmed virological failure

Applicable scenario:
While assessing patients with suspected or confirmed virological failure, when CD4 test is available at the Health Facility and results can be received immediately; includes all sites where CD4+ POC machines are placed

Procedure:

Note: When results from CD4 and signs and symptoms screen are available immediately, **use CD4 test results, instead of symptom screening tool, to determine next steps** (further screening for AHD)

HCW should do the following:

1. Perform a **signs and symptoms screen at the first IAC visit** before sending the patient for CD4 testing
2. **Request for a CD4 test** at the first IAC visit
3. Indicate on the same CD4 test request form **instructions for the lab** to perform a **serum CrAg using the same sample** if CD4<200 cells/mm3

SOP for Screening for Advanced HIV Disease: Scenario 3

Procedure:

4. If the **CD4 test result is below 200 cells/mm3**,
   a) The laboratorian should request the patient to provide a **urine sample and perform TB LAM** test immediately (before the CD4 results are sent back to the clinician)
   b) Ensure to **get back the CD4, CrAg and TB LAM test results** and put them on file on the same day to make proper decisions to begin or defer ART
   c) Follow the **CrAg diagnosis and management algorithm** if CrAg test returns **positive** and the **TB diagnosis and management algorithm** if TB LAM returns positive
   d) If the **TB LAM** is **negative**, follow the TB diagnosis and management algorithm and **initiate TPT** *(TB Preventive Therapy)* immediately if client has no signs and symptoms of TB

5. If the CD4 test result is **above 200 cells/mm3**,
   a) Ensure to **screen the client** for signs and symptoms of advanced disease. If client has signs and symptoms of TB, follow TB diagnosis and management algorithm

SOP for Screening for Advanced HIV Disease: Scenario 3

Procedure:

6. Immediately **update the ART card** with
   a) The correct code for the signs/symptoms that are identified
   b) The correct code for the advanced disease status assessed on this visit

7. Immediately **update the ART, TB and IPT/ TPT register**

8. Regardless of testing site for LAM and CrAg, HCW should ensure to **update the Daily Activity Register** (for CD4, VL, EID, CrAg and TB LAM)

9. The clinician should assess for all **signs and symptoms** in all three sections of the screening tool at the **subsequent IAC visits**

10. Ensure the client continues with the **management as per the MOH VL failure management protocol/algorithm**

SOP for Screening for Advanced HIV Disease

Scenario 3: Key Takeaways

1. The clinician should assess for all **signs and symptoms** in all three sections of the screening tool at the **subsequent IAC visits**
2. Ensure the client continues with the **management as per the MOH VL failure management protocol/algorithm**

SOP for Screening for Advanced HIV Disease: Scenario 4

When CD4 test is NOT available at the site or CD4 results can NOT be received immediately for ART experienced clients with suspected or confirmed virological failure

Applicable scenario:
While assessing ART experienced clients with suspected or confirmed virological failure when CD4 test is NOT available at the Health Facility OR results can NOT be received immediately; includes all sites that access CD4+ through the hub system or those that have POC CD4+ machines but reagents are not available at the time of assessment

Procedure:

HCW should do the following:

1. Use the **signs and symptoms screening tool** to identify eligible clients
2. **Assess** for all signs and symptoms in all three sections of the screening tool

SOP for Screening for Advanced HIV Disease: Scenario 4

Procedure:

3. If the client has **danger signs and symptoms or is critically ill**, immediately admit the client where possible or make referral for further management
   a) If the client is **admitted**,
      i. Perform **TB LAM** test and follow the TB diagnosis and management algorithm
      ii. Perform **CrAg** test and follow the CrAg screening algorithm
      iii. Ensure the client continues with the management as per the MOH **VL failure management protocol/algorithm**
   b) If the client is **referred**,
      i. The referring clinician should **follow up** to ensure the referral was successful
4. In case client has only signs and symptoms of **TB**,
   a) Refer to the TB diagnosis and management algorithm
5. In case client has any of the signs and symptoms of **cryptococcal infection** or signs of severe immune-suppression,
   a) Perform CrAg test and follow the CrAg diagnosis and management algorithm
   b) Ensure to screen and diagnose for TB

SOP for Screening for Advanced HIV Disease: Scenario 4

Procedure:

6. If the client has **no signs and symptoms at all**,
   a) Continue or immediately assess for eligibility and initiate TPT (see SOP 2.1)
   b) Continue or immediately initiate COTRIM (see SOP 2.1)
   c) Draw sample for CD4 and refer sample to nearby site/hub for CD4+ testing

7. Indicate on the same **CD4 test request form**
   a) Instructions for the lab to perform a serum CrAg using the same sample if CD4<200 cells/mm3
   b) The results of CrAg and TB LAM if tests have already been conducted

8. Immediately **update the ART card** with
   a) The correct code for the signs/symptoms that are identified
   b) The correct code for the advanced disease status assessed on this visit

9. Immediately **update the ART, TB and IPT/ TPT register**

10. Regardless of testing site for LAM and CrAg, HCW should ensure to **update the Daily Activity Register** (for CD4, VL, EID, CrAg and TB LAM)

SOP for Screening for Advanced HIV Disease: Scenario 4

11. The clinician should assess for all **signs and symptoms** in all three sections of the screening tool at the **subsequent IAC visits**
12. Ensure the client continues with the **management as per the MOH VL failure management protocol/algorithm**

At week 2 follow up visit:

1. **Check the CD4 result** for those whose sample was referred at the time of first IAC visit
2. If the **CD4 test result is below 200 cells/mm3**,
   a) The clinician/nurse should request the patient to provide a **urine sample and perform TB LAM** test immediately (if not done before), and if positive, initiate TB treatment and continue ART/COTRIM
      i. Perform a **CrAg test** (in case it was not done at the hub) and if positive, follow the CrAg diagnosis and management algorithm and continue ART/COTRIM
   b) Continue **ART/TPT/COTRIM** if CrAg test is negative and client still has no signs and symptoms of advanced disease
   c) Continue ART/TPT/COTRIM if TB LAM test is negative and client has no active TB disease
3. If the **CD4 test result is above 200 cells/mm3** and client has no signs and symptoms, continue ART and TPT

SOP for Screening for Advanced HIV Disease

Scenario 4: Key Takeaways

1. Indicate on the **CD4 test request form**
   a) Instructions for the lab to perform a serum CrAg using the same sample if CD4<200 cells/mm3
   b) The **results of CrAg and TB LAM if tests have already been conducted**
2. The clinician should assess for all **signs and symptoms** in all three sections of the screening tool at the **subsequent IAC visits**
3. Ensure the client continues with the **management as per the MOH VL failure management protocol/algorithm**

SOP for Screening for Advanced HIV Disease: Scenario 5

When CD4 test is NOT available at the site or CD4 results can NOT be received immediately AND TB LAM/ CrAg tests are NOT available at the site for newly initiating clients' and patients returning to care *(90 days after last scheduled appointment)*

Applicable scenario:
While assessing new patients or those returning to care when CD4 test is NOT available at the Health Facility OR results can NOT be received immediately AND TB LAM/ CrAg tests are NOT available at the Health Facility; includes all sites that access CD4+ through the hub system or those that have POC CD4+ machines but reagents are not available or TB LAM/ CrAg tests are not available at the time of assessment

Procedure:

HCW should do the following (on the same day of ART initiation):

1. Use the **signs and symptoms screening tool** to identify eligible clients
2. **Assess** for all signs and symptoms in all three sections of the screening tool

SOP for Screening for Advanced HIV Disease: Scenario 5

Procedure:

3. If client has **no signs and symptoms** at all,
   a) Assess for eligibility and initiate TPT
   b) Initiate COTRIM

4. If the client has **danger signs and symptoms or is critically ill**, **make referral** for CD4, CrAg and TB LAM to a facility that has available test kits

5. Once the client is **referred**,
   a) The referring clinician should **follow up** to ensure the referral was successful

In case the patient returns with results, manage according to guidelines

SOP for Screening for Advanced HIV Disease

Scenario 5: Key Takeaway

1. Once the client is **referred**,
   a) The referring clinician should **follow up** to ensure the referral was successful

SOP for Screening for Advanced HIV Disease: Scenario 6

When CD4 test is NOT available at the site or CD4 results can NOT be received immediately AND TB LAM/ CrAg tests are NOT available at the site for ART experienced clients with suspected or confirmed virological failure

Applicable scenario:
While assessing ART experienced clients with suspected or confirmed virological failure when CD4 test is NOT available at the Health Facility OR results can NOT be received immediately AND TB LAM/ CrAg tests are NOT available at the Health Facility; includes all sites that access CD4+ through the hub system or those that have POC CD4+ machines but reagents are not available or TB LAM/ CrAg tests are not available at the time of assessment

Procedure:

HCW should do the following:

1. Use the **signs and symptoms screening tool** to identify eligible clients
2. **Assess** for all signs and symptoms in all three sections of the screening tool

SOP for Screening for Advanced HIV Disease: Scenario 6

Procedure:

3. If client has **no signs and symptoms** at all,
   a) Continue or immediately assess for eligibility and initiate TPT
   b) Continue or immediately initiate COTRIM

4. If the client has **danger signs and symptoms or is critically ill, make referral** for CD4, CrAg and TB LAM to a facility that has available test kits

5. Once the client is **referred**,
   a) The referring clinician should **follow up** to ensure the referral was successful

In case the patient returns with results, manage according to guidelines

SOP for Screening for Advanced HIV Disease

Scenario 6: Key Takeaway

1. Once the client is **referred**,
   a) The referring clinician should **follow up** to ensure the referral was successful

SOP for Screening for Advanced HIV Disease in Children

Target Users

Health workers at site level: lab personnel, clinicians, and nurses

Regional and district mentors

Purpose

To guide site level health care providers on the processes of **assessing and managing children aged less than 10 years** with advanced disease conditions

Objectives

- To assist **proper screening for eligibility** for diagnostic tests for advanced disease conditions among **children less than 10 years**
- To ensure **proper management of children aged less than 10 years** who have advanced disease conditions as per the national treatment guidelines

SOP for Screening for Advanced HIV Disease in Children

Applicable scenario:

This SOP should be used while assessing children who are **less than 10 years of age**, at all ART sites

Note:

- For children below 10 years, **CCM screening is not necessary**; screen for TB and other OIs as below
- **Assess for nutritional status** at every visit, and manage according to HIV consolidated guidelines (refer to algorithm for nutrition assessment)

Procedure:

HCWs should do the following when reviewing children aged less than 10 years:

1. **Screen for danger signs**; *danger signs*: lethargy, convulsions, inability to feed, repeated vomiting, temperature > 39c, tachycardia/tachypnea (refer to IMCI for reference ranges)
2. Follow the **TB diagnosis and management algorithm** to screen for TB
3. Perform **TB LAM** for all children with presumptive TB and danger signs and GeneXpert (if sample is available)
4. Initiate **TB treatment** for children with a positive TB LAM or GeneXpert test

SOP for Screening for Advanced HIV Disease in Children

Procedure:

5. Use the algorithm for **TB diagnosis in children** for further guidance on children with a negative TB LAM or GeneXpert test
6. Initiate **TPT for all children who do not have active TB disease** (children aged < 1 year should be initiated on TB preventive therapy only if they have a history of TB contact) according to the national guidelines
7. If the child has **severe respiratory distress**, screen for **PJP**
8. Refer to the 'SOP for Referral of PLHIV with Advanced HIV Disease' for **children requiring referral**
9. Immediately **update the ART card** with
   a) The correct code for the signs/symptoms that are identified
   b) The correct code for the advanced disease status assessed on this visit
10. Immediately **update** the **ART and TB** register
11. Regardless of testing site for LAM, HCW should ensure to **update the Daily Activity Register** for TB LAM

SOP for Screening for Advanced HIV Disease in Children

Key Takeaways

1. For children below 10 years, **CCM screening is not necessary**; screen for TB and other OIs
2. **Assess for nutritional status** at every visit, and manage according to HIV consolidated guidelines (refer to algorithm for nutrition assessment)
3. If the child has **severe respiratory distress, screen for PJP**

SOP for Prophylaxis of Opportunistic Infections

Target Users

Health workers at site level: lab personnel, clinicians, counselors, nurses, and expert clients

Regional and district mentors

Purpose

To guide site level health care providers on **provision of prophylaxis and preemptive treatment** to all clients in care

Objectives

- To guide the provision of **patient education and counselling** on prophylaxis of OIs
- To assist proper **screening** for eligibility for prophylaxis and pre-emptive therapy for all PLHIV
- To ensure proper **provision of prophylaxis and pre-emptive therapy** as per the national treatment guidelines

SOP for Prophylaxis of Opportunistic Infections

Applicable scenario:
After assessing ART naïve and experienced clients to determine eligibility for prophylaxis or pre-emptive therapy

Procedure:

1. During assessment of ART naïve and experienced clients, if client has **no signs and symptoms** at all,
   a) Continue or immediately assess for eligibility and initiate **IPT**. Eligible populations include:
      i. HIV-positive children (≥one year of age), adolescents and adults with no signs and symptoms of TB

      Note: If **Q-TIB** is available at the facility, prescribe it to **patients with AHD** to reduce pill-burden

      ii. HIV-positive infants and children <5 years with a history of TB contact who have no signs and symptoms of active TB disease, irrespective of previous IPT dose

      iii. Note: children aged < 1 year should be initiated on TPT only if they have history of TB contact

SOP for Prophylaxis of Opportunistic Infections

Procedure:

1. b) Continue or immediately initiate **Cotrimoxazole** if patient is in the following categories:
    i. All PLHIV newly initiating on ART up to 1 year
    ii. Pregnant and breast-feeding women up to 6 weeks after delivery
    iii. Children aged 15 and below
    iv. Patients suspected to have treatment failure (unsuppressed VL)
    v. WHO stage 3 or 4 event
    vi. HIV-exposed infants
2. Initiate **Fluconazole pre-emptive therapy** if the patient has a positive Serum CrAg but Meningitis has been ruled out (asymptomatic with negative CSF CrAg)

3. If the client has **danger signs and symptoms** or is critically ill, make appropriate **referral** to higher level facility after providing emergency care and initiating Cotrimoxazole

Note: CPT should not be given to people with known allergy to sulpha-containing drugs or trimethoprim, severe anaemia, and/or severe neutropenia (<5000 cells/mm3). In patients with Cotrimoxazole hypersensitivity, Dapsone should be used

SOP for Prophylaxis of Opportunistic Infections

Key Takeaways

1. If **Q-TIB** is available at the facility, **prescribe it to patients with AHD** to reduce pill-burden
2. Remember to **re-initiate CPT** if the patient develops a **condition that makes them eligible for CPT**
3. Initiate **Fluconazole pre-emptive therapy** if the patient has a positive Serum CrAg but Meningitis has been ruled out (asymptomatic with negative CSF CrAg)

SOP for Referral of PLHIV with Advanced HIV Disease

Target Users

Health workers at site level: laboratory personnel, clinicians, and nurses

Regional and district mentors

Purpose

To guide site level health care providers on the processes of **referring individuals with advanced disease conditions for more specialized management**

Objectives

To assist proper referral of patients with advanced disease conditions e.g. TB and cryptococcosis

SOP for Referral of PLHIV with Advanced HIV Disease

Applicable scenario:
Situations where health facilities lack the capacity to manage PLHIV with AHD due to lack of skills, HR or diagnostic/treatment commodities

Procedure:
Situations in which HCW should refer a patient with Advanced HIV Disease:

1. **Symptomatic patients where diagnostic commodities/ services are not available** (TB LAM, CrAg)
   For example: To confirm diagnosis of meningitis (Lumbar Puncture) for symptomatic patients whose serum CrAg is positive. Note: Give 1200mg of fluconazole as a stat dose, prior to referral
2. Patients diagnosed with AHD conditions where **treatment commodities are not available at site**
   For example: For patients with MDR TB, or Cryptococcal Meningitis
3. Patients already being **treated for AHD with severe adverse effects/ deteriorating conditions**
   Note: Refer to ART and TB guidelines for guidance on management of toxicity (pay special attention to scenarios where treatment needs to be stopped immediately/ prior to referral)
4. Patients who have **danger signs and symptoms or are critically ill**, make appropriate referral to higher level facility after providing emergency care

Note: Once the client is referred, the referring clinician should follow up to ensure the referral was successful

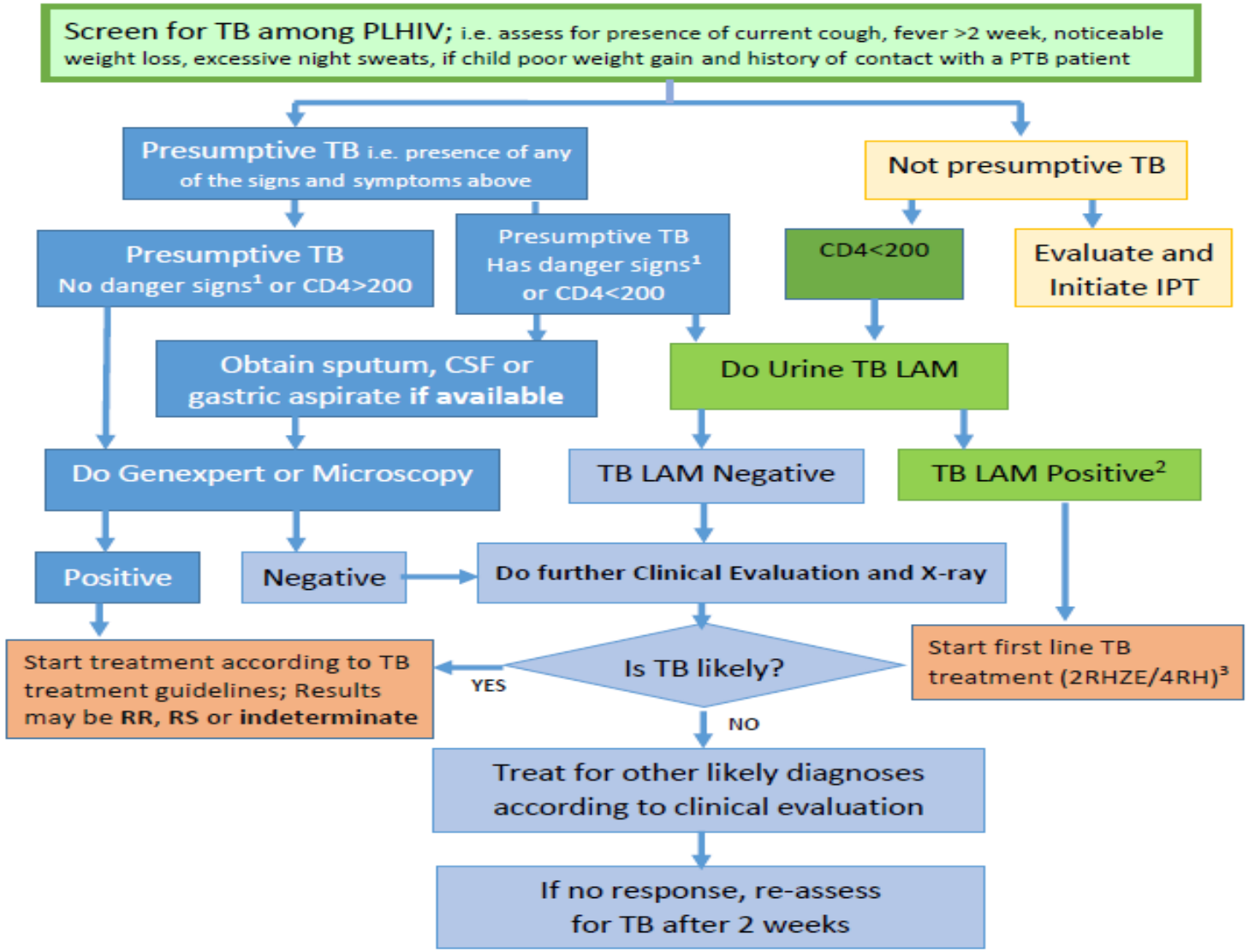
SOP for Referral of PLHIV with Advanced HIV Disease

Key Takeaways

Situations in which HCW should refer a patient with Advanced HIV Disease:

1. **Symptomatic patients where diagnostic commodities/ services are not available** (TB LAM, CrAg)
2. Patients diagnosed with AHD conditions where **treatment commodities are not available at site**
3. Patients already being **treated for AHD with severe adverse effects/ deteriorating conditions**
4. Patients who have **danger signs and symptoms or are critically ill**

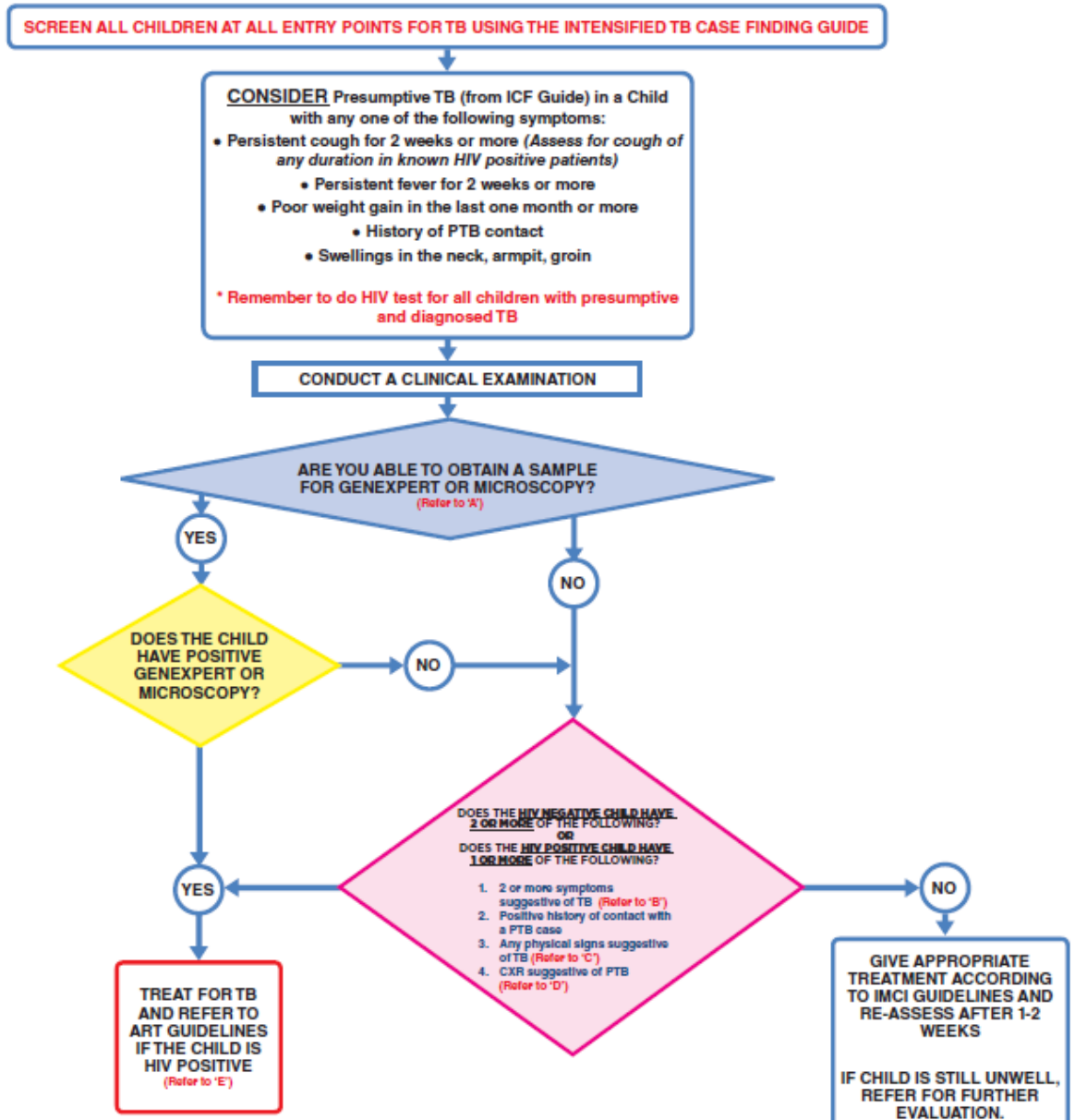
Algorithm for TB screening, diagnosis and management in PLHIV



1. **Danger signs for adults** refer to signs of a seriously sick person and they include respiratory rate > 30/min, temperature >39 °C, heart rate 120/min and unable to walk unaided.
   Danger signs for children include lethargy, convulsions, inability to feed, repeated vomiting, temperature above 39ºc and tachycardia/tachypnea.
2. For any TB LAM positive other Co-morbidities such as Cryptococcus, bacterial infections should be ruled out.
3. Do a Genexpert test, if you are able to obtain a specimen, so as to rule out resistance

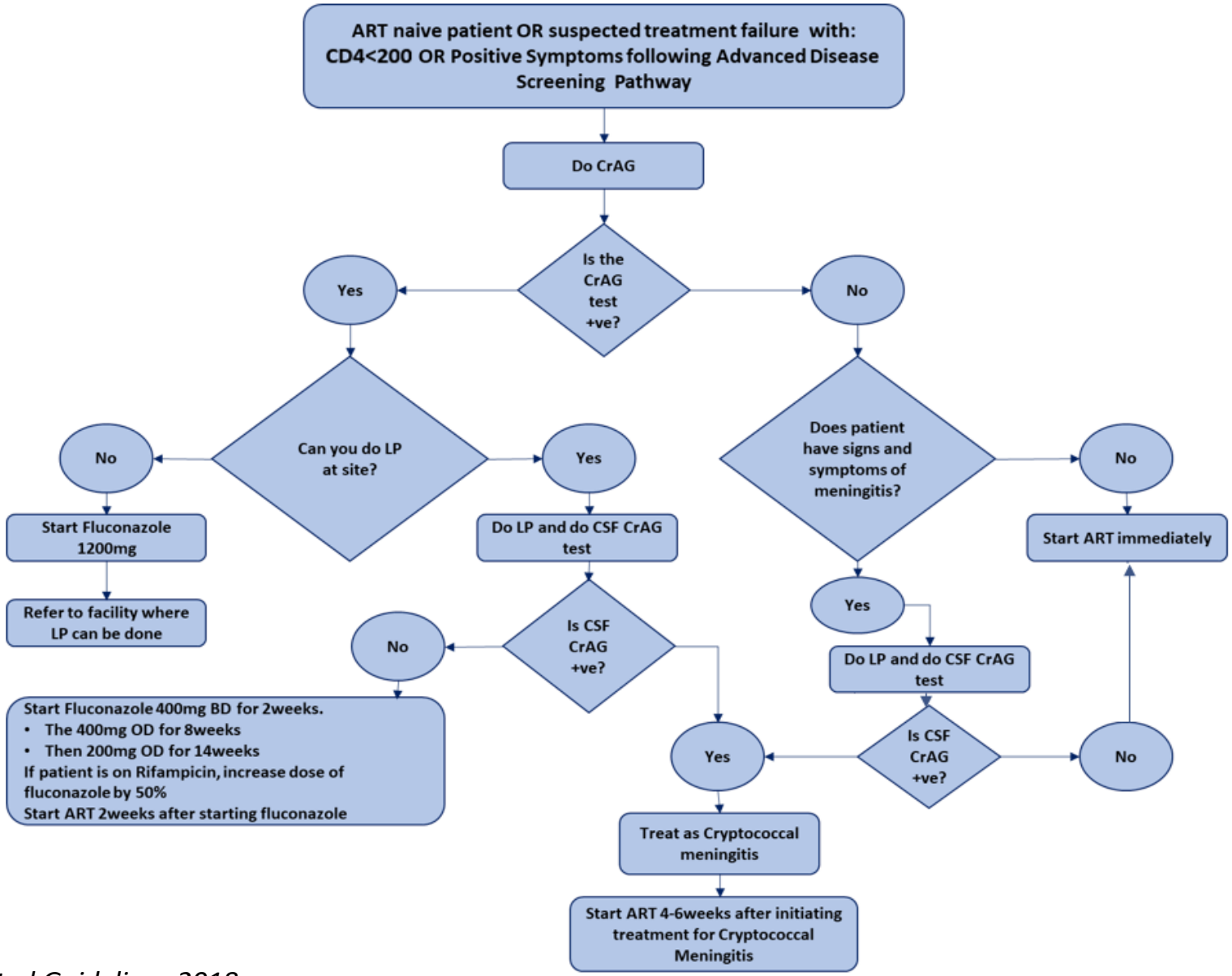
Source: Uganda HIV Consolidated Guidelines 2018

Algorithm for TB diagnosis in Children



Source: Uganda HIV Consolidated Guidelines 2018

Algorithm for CCM screening, diagnosis and management in PLHIV



Source: Uganda HIV Consolidated Guidelines 2018

Treatment Protocol for TB

Doses for adult new cases

Pre-treatment body weight(kg)	2 months initial phase	4 months continuation phase given daily
	RHZE (150+75+400+275) mg	**RH (150+75) mg**
33-39	2 tablets	**2 tablets**
40-54	3 tablets	**3 tablets**
55-70	4 tablets	**4 tablets**
>70	5 tablets	**5 tablets**
If an adult is < 33kgs, determine the dose based on patient's weight using dosage table in previous slide.		

Dosage of pediatric TB anti-TB medicines by weight band

	Intensive phase (number of tablets per day)		Continuation phase (number of tablets per day)
Weight bands	RHZ (75/ 50/150mg)	E (100mg)	RH(75/50mg)
4-7 kg	1	1	1
8-11 kg	2	2	2
12-15 kg	3	3	3
16-24 kg	4	4	4
25kg and above	Use adult dosages and formulations		

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Source: Desktop Job Aid 2018

Treatment Protocol for CCM

Phase	Drug	Comments
Newly Diagnosed Patient		
Induction Phase (2 weeks)	Recommended: Amphotericin B 1mg/kg/day + Flucytosine (100mg/kg/day in four divided doses) or Amphotericin B 1mg/kg/day + high-dose Fluconazole 1200mg/day	Preventing Amphotericin toxicity: To prevent nephrotoxicity and hypokalaemia, do the following: • Pre-hydration with 1L normal saline before starting the daily Amphotericin dose • Monitor serum potassium and creatinine levels at initiation and at least twice weekly to detect changes in renal function • Routine administration of 40 mEq/day of potassium chloride can decrease the incidence of Amphotericin-related hypokalemia • Consider alternate day Amphotericin if creatinine is >3mg/dl
	or Amphotericin B short course (1mg/kg/day) for 5-7 days + high-dose Fluconazole (1200mg/day)	
	Alternative: Fluconazole 1200mg/day (or 6-12mg/kg/day in children)	
Consolidation phase (8 weeks)	If Amphotericin B is used in induction phase: Fluconazole 400-800mg/day (or 6-12mg/kg/day in children and adolescent <19yr) If high short dose Amphotericin or high dose Fluconazole used in induction phase: Fluconazole 400-800mg/day (or 12 mg/kg/day in children and adolescent <19yr)	Initiate ART 4–6 weeks after starting CM treatment and there is clinical response to antifungal therapy
Maintenance Phase (1 year)	Fluconazole 200mg/day (or 6 mg/kg/day up to 200mg in children and adolescent <19yr)	Criteria to stop after a minimum of 1 year of maintenance phase Adults VL<1,000 copies/mm^3& CD4 ≥ 100 for 6 months or CD4 ≥200 if viral load not available Children: If CD4>25% or viral suppressed

Source: Uganda HIV Consolidated Guidelines 2018

Management of PJP

Signs and symptoms	**Symptoms:** Progressive exertional dyspnea (95%), fever and chills (>80%), non-productive cough (95%), chest discomfort, difficult breathing, fast breathing and weight loss. **Signs:** Pulmonary symptoms: tachypnea, pulmonary examination may reveal mild crackles and rhonchi but may yield normal findings in up to half of the patients. Children may have cyanosis, nasal flaring, and intercostal retractions.
Diagnosis	Chest X-Ray is the main diagnostic tool • Diffuse interstitial infiltrates extending from the peri-hilar region • Pneumatoceles and pneumothorax are possible but not common. • Pleural effusions and intrathoracic adenopathy are rare. *However, the chest X-Ray may also be normal*
Management and treatment	Admit Give oxygen if needed (S02<90mmHg) Preferred therapy: Cotrimoxazole (10-20mg/kg/day IV) for 21 days If IV CTX is not available, give Tab CTX 1920mg every 8 hours for 21 days (for adults) Adjunctive therapy: Use corticosteroids only in patients with severe PJP
Prevention	Initiate all HIV-infected people on Cotrimoxazole preventive therapy

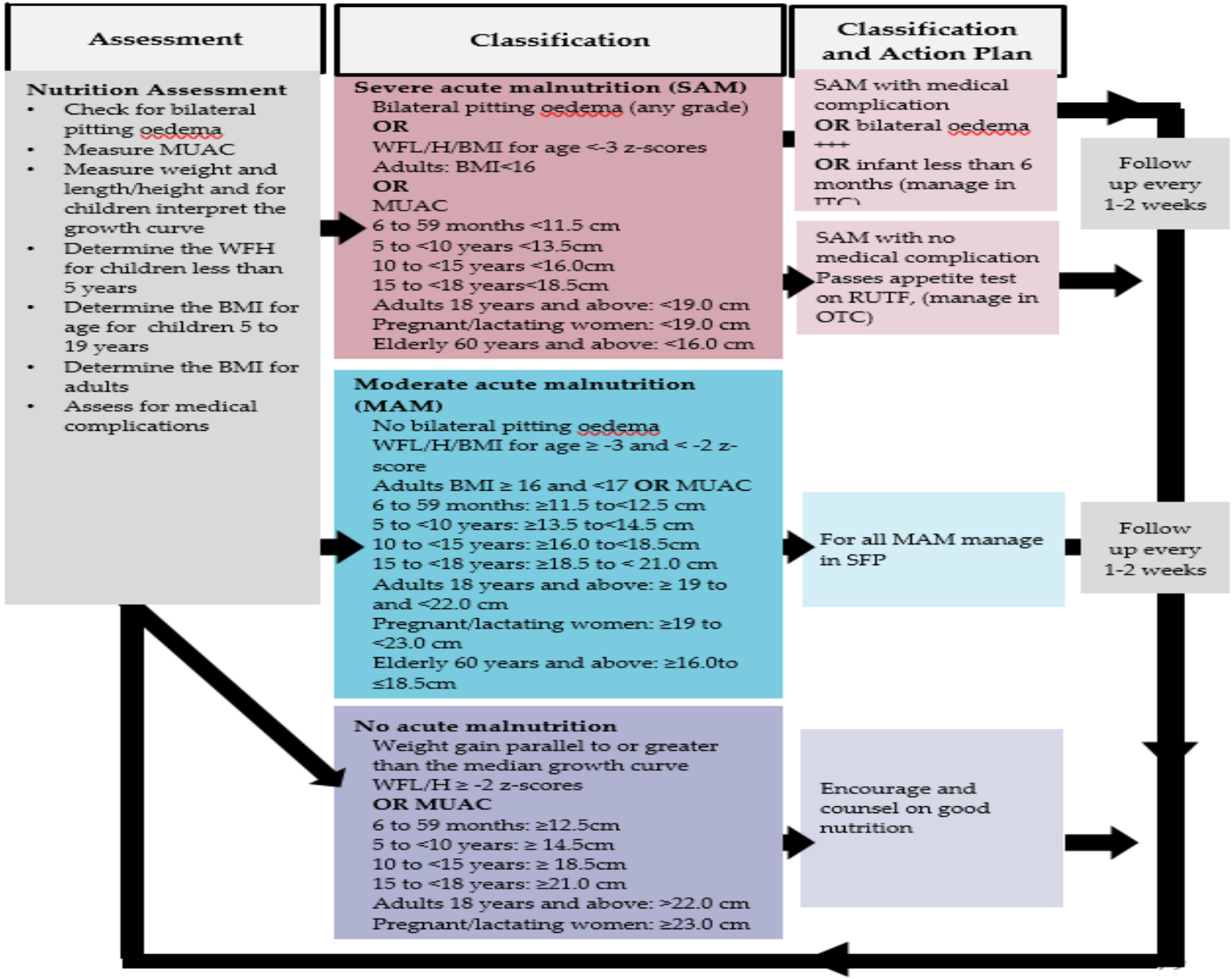
Source: Uganda HIV Consolidated Guidelines 2018

Management of Septicaemia

Signs and symptoms	Fever, prostration (extreme tiredness), Hypotension, anaemia, Toxic shock is a complication, Signs and symptoms of the primary site of infection (e.g. pneumonia)
Diagnosis	• Look for possible primary source of infection • Blood: WBC count, culture and sensitivity
Management and treatment	General measures • IV fluids • Control of temperature • Nutrition support (NGT if necessary) • Monitoring of vitals and urinary output If known focus of infection, treat immediately with IV antibiotics as per guidelines. If unknown focus, give: Adult • Gentamicin 7 mg/kg IV every 24 hours or 1.5-2 mg/kg IV or IM every 8 hours • Plus either cloxacillin 2 g IV every 4-6 hours • Or chloramphenicol 750 mg IV every 6 hours Child • Gentamicin 3.5-4 mg/kg IV every 8 hours (neonate: every 8-12 hours) • Plus either: Ceftriaxone 50 mg/kg every 8 hours (< 7 days old: every 12 hours) • Or cloxacillin 50 mg/kg IV every 4-6 hours • Or benzylpenicillin 50,000 IU/kg IV every 4-6 hours
Prevention	• Protect groups at risk, for example immunosuppressed and post-surgical patients • Follow strictly aseptic surgical procedures

Source: Uganda Clinical Guidelines 2016

Algorithm for nutrition assessment and care plan of acute malnutrition



Source: Uganda HIV Consolidated Guidelines 2018