WHO/CDS/IMAI/2004.1

Acute Care

INTEGRATED MANAGEMENT OF ADOLESCENT AND ADULT ILLNESS

INTERIM GUIDELINES FOR FIRST-LEVEL FACILITY HEALTH WORKERS

January 2004

World Health Organization

This is one of 4 IMAI modules relevant for HIV care:

- Acute Care
- Chronic HIV Care with ARV Therapy
- General Principles of Good Chronic Care
- Palliative Care: Symptom Management and End-of-Life Care

These are interim guidelines released for country adaptation and use to help with the emergency scale-up of antiretroviral therapy (ART) in resource-limited settings. These interim guidelines will be revised soon based on early implementation experience. Please send comments and suggestions to : imaimail@who.int.

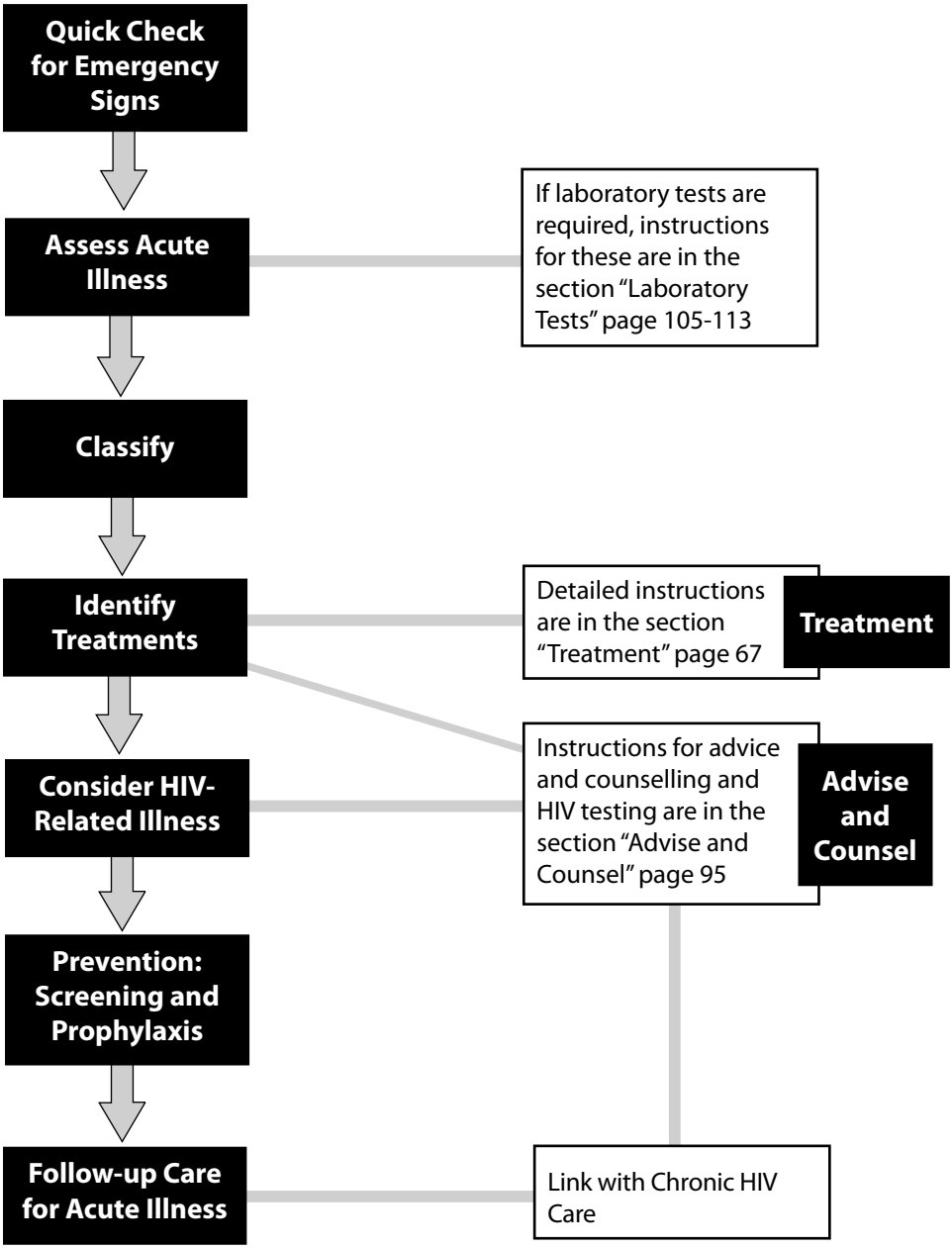
The IMAI guidelines are aimed at first-level facility health workers and lay providers in low-resource settings. These health workers and lay providers may be working in a health centre or as part of a clinical team at the district clinic. The clinical guidelines have been simplified and systematized so that they can be used by nurses, clinical aids, and other multi-purpose health workers, working in good communication with a supervising MD/MO at the district clinic. Acute Care presents a syndromic approach to the most common adult illnesses including most opportunistic infections. Instructions are provided so the health worker knows which patients can be managed at the first-level facility and which require referral to the district hospital or further assessment by a more senior clinician. Preparing first-level facility health workers to treat the common, less severe opportunistic infections will allow them to stabilize many clinical stage 3 and 4 patients prior to ARV therapy without referral to the district.

This module cross-references the IMAI ***Chronic HIV Care*** guidelines and ***Palliative Care: Symptom Management and End-of-Life Care***. If these are not available, national guidelines for HIV care of adults, ART and palliative care can be substituted.

Integrated Management of Adolescent and Adult Illness (IMAI) is a multi-departmental project in WHO producing guidelines and training materials for first-level facility health workers in low-resource settings.

WHO IMAI Project

Integrated Management: Acute Care



Index

Treatment 67

IV/IM drugs:

Metered dose inhaler:

See IMAI Quick Check and Emergency Treatment module for instructions on:

Manage airway
Insert IV, rapid fluids
Insert IV, slow fluids
Recovery position
Classify/treat wheezing
epinephrine

Oral drugs

Advise and Counsel 95

Use brief intervention guidelines for:
Tobacco use
Hazardous alcohol use
Physical inactivity
Poor diet

Laboratory Tests 105

(some may be available only at health centre level)

Insert instructions for lab tests which can be performed in clinic:
Haemoglobin
Urine dipstick for sugar or protein
Blood sugar by dipstick
Malaria dipstick or smear
Rapid test for HIV (with informed consent and counselling)

Recording Form/Desk Aid 114-117

Steps to Use the IMAI Acute Care Module

Quick Check for Emergency Signs

Do the Quick Check for Emergency Signs—if any positive sign, call for help and begin providing the emergency treatment.

Assess Acute Illness

Ask: what is your problem? Why did you come for this consultation? Prompt "any other problems?"

- Determine if patient has acute illness or is here for follow-up. Circle this on recording form (p. 114).
- How old are you?
- If woman of childbearing age, are you pregnant? (She will also need to be managed using the antenatal guidelines—circle this on the recording form).

In all patients:

- Ask: Cough or difficult breathing? (16-17)
- Check for undernutrition and anaemia. (18-19)
- Look in the mouth (and respond to volunteered mouth/throat problems). (20-22)
- Ask about pain.

If patient is in pain, grade the pain, determine location and consider cause. Manage pain using the Palliative Care guidelines.

- Ask: Are you taking any medications?

Respond to volunteered problems or observed signs.

Mark with an X on the recording form all the main symptoms the patient has.

You will need to do the assessment for any of these symptoms if volunteered or observed:

- Fever (24-26)
- Diarrhoea (28-30)
- Genito-urinary symptoms or lower abdominal pain in:
  - woman (32-35)
  - man (36-37)
- Genital or anal sore or ulcer (38-39)
- Skin problem or lump (40-45)
- Headache or neurological problem or painful feet (46-47)
- **Mental problem** (50-52)—use this page if patient complains of or appears depressed or anxious or sad or fatigued or has alcohol problem or recurrent multiple complaints. Remember to use this page. If you have a doubt, use it.

Assess and treat other problems. Use national and other existing guidelines for other problems that are not included in the Acute Care module.

If laboratory tests are required, instructions for these are in the section "**Laboratory Tests"** at the end of the module (p. 105).

Classify

Classify using the IMAI acute care algorithm, following the 3 rules:

1. **Use all classification tables where the patient fits** the description in the arrow.
2. **Start at the top** of the classification table. Decide if the patient's signs fit the signs in the first column. If not, go down to next row.

3. Once you find a row/classification—STOP! Use only **one row** in each classification table (once you find the row where the signs match, do not go down any further, even if the patient has signs that also fit into other, lower rows/classifications.

Then record **all** classifications on the recording form. Remember that there is often more than one.

Identify Treatments

Read the treatments for each classification you have chosen. List these.

The detailed treatment instructions are in the section called Treatment.

Treatment

Instructions for patient education, support and counselling are in Advise and Counsel, including how to suggest HIV testing and counselling.

Advise and Counsel

Consider HIV-Related Illness

If it advises you to "Consider HIV-related illness," circle this on the recording form and use this section.

- If the patient is HIV+, also use the ***Chronic HIV Care*** guidelines, for chronic care, prevention and support.

If the treatment list advises sputums for TB, note this on the recording form and send sputums.

Prevention: Routine Screening and Prophylaxis.

Prevention: Screening and Prophylaxis

Remember that for all patients you need to also consider what Prevention and Prophylaxis are required (circle on the recording form).

Follow-up Care for Acute Illness

Quick Check for Emergency Care

then

Assess Acute Illness/ Classify/Identify Treatments

Use this chart for rapid triage assessment for all patients. Then use the *Acute Care* guidelines.
If trauma or psychiatric emergency, see *Quick Check* module.

▶ Quick check for emergency signs (medical)
(Consider all signs)

FIRST ASSESS: AIRWAY AND BREATHING

- Appears obstructed or
- Central cyanosis (blue mucosa) or
- Severe respiratory distress

→ Check for obstruction, wheezing and pulmonary oedema

THEN ASSESS: CIRCULATION (SHOCK)

- Cold skin or
- Weak and fast pulse or
- Capillary refill longer than 2 seconds

→ Check BP and pulse. Look for bleeding. Ask: Have you had diarrhoea?

TREATMENT

- **If obstructed breathing, manage the airway.**
- Prop patient up or help to assume position for best breathing.
- If wheezing, treat urgently (p. 74).
- If pulmonary oedema, consider furosemide if known heart disease.
- Give appropriate IV/IM antibiotics pre-referral.
- **Refer urgently to hospital.**

If trauma—see ***Quick Check*** module.

This patient may be in shock:

- If systolic BP < 90 mmHg or pulse >110 per minute:
  - Insert IV and give fluids rapidly. If not able to insert peripheral IV, use alternative.
  - Position with legs higher than chest.
  - Keep warm (cover).
  - Consider sepsis—give appropriate IV/IM antibiotics.
  - Refer urgently to hospital.
- If diarrhoea: assess for dehydration and follow plan C (this patient may not need referral after rehydration). If severe undernutrition, see p. 18.
- If melena or vomiting blood, manage as on page Q12 and refer to hospital.
- If haemoptysis > 50 ml, insert IV and refer to hospital.

UNCONSCIOUS/CONVULSING

- Convulsing (now or recently), or
- Unconscious
  If unconscious, ask relative: has there been a recent convulsion?

→ Measure BP and temperature

PAIN

If chest pain
- What type of pain?

→ Check BP, pulse, temperature, age

If severe abdominal pain:
- Is abdomen hard?

→ Check BP, pulse, temperature

If neck pain or severe headache:
- Has there been any trauma?

→ Check BP
Ask patient to move neck—do not passively move

For all:

- Protect from fall or injury. Get help.
- Assist into recovery position (wait until convulsion ends).
- Insert IV and give fluids slowly.
- Give appropriate IM/IV antibiotics.
- Give IM antimalarial.
- Give glucose*.
- Refer urgently to hospital after giving pre-referral care. Do not leave alone.

If convulsing, also:

- Give diazepam IV or rectally.
- Continue diazepam en route as needed.

If unconscious:

- Manage the airway.
- Assess possibility of poisoning, alcohol or substance abuse.

If trauma, use the ***Quick Check*** guidelines.

If age > 50, no history of trauma, and history suggests cardiac ischaemia:

- Give aspirin (160 or 325 mg, chewed).
- **Refer urgently to hospital.**

If pleuritic pain with cough or difficult breathing, assess for pneumonia. Consider pneumothorax.

For other pain, use the ***Acute Care*** guidelines to determine cause.

See the ***Palliative Care*** guidelines for management of pain.

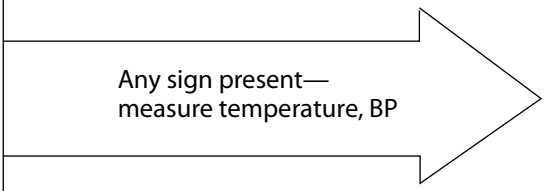
- Insert IV. If hard abdomen or shock, give fluids rapidly. If not, give fluids slowly (30 drops/minute).
- **Refer urgently to hospital*.**

- Consider meningitis and other causes of acute headache (see p. 46-48).
- If BP > systolic 180, refer urgently to hospital.
- If pain on neck movement by patient after trauma by history or exam, immobilize the neck and refer.

** If high glucose, see diabetes management guidelines.*

FEVER from LIFE-THREATENING CAUSE

- Any fever with:
  - stiff neck
  - very weak/not able to stand
  - lethargy
  - unconscious
  - convulsions
  - severe abdominal pain
  - respiratory distress



- Insert IV. Give fluids rapidly if shock or suspected sepsis. If not, give fluids slowly (30 drops/minute).
- Give appropriate IV/IM antibiotics.
- Give artemether IM. (If not available, give quinine IM).
- Give glucose.
- **Refer urgently to hospital.**

Also consider neglected trauma with infection—see ***Quick Check*** guidelines.

If no emergency signs, proceed immediately to

Assess Acute Illness/ Classify/Identify Treatments

Ask: what is your problem? Why did you come for this consultation? Prompt "any other problems?"

- Determine if patient has acute illness or is here for follow-up. Circle this on recording form (p. 114).
- How old are you?
- If woman of childbearing age, are you pregnant? (She will also need to be managed using the antenatal guidelines—circle this on the recording form).

▶ In all patients: Do you have cough or difficult breathing?

IF YES, ASK:	LOOK AND LISTEN	Classify in all with cough

• For how long?
• Are you having chest pain?
  - If yes, is it new? Severe? Describe it.
• Have you had night sweats?
• Do you smoke?
• Are you on treatment for a chronic lung or heart problem or TB? Determine if patient diagnosed as asthma, emphysema or chronic bronchitis (COPD), heart failure or TB (also look in Chronic Disease Register). If not,
• Have you had previous episodes of cough or difficult breathing?
  - **If recurrent:**
  -- Do these episodes of cough or difficult breathing wake you up at night or in the early morning?
  -- Do these episodes occur with exercise?
	• Is the patient lethargic?
	• Count the breaths in 1 minute—repeat if elevated.
	• Look and listen for wheezing.
	• Determine if the patient is uncomfortable lying down.
	• Measure temperature.
	
	If not able to walk unaided or appears ill, also:
	• Count the pulse.
	• Measure BP.	

AGE	FAST BREATHING IS:	VERY FAST BREATHING IS:
5-12 years	30 breaths per minute or more	40 breaths per minute
13 years or more	20 breaths per minute or more	30 breaths per minute or more

Use this classification table in all with **cough or difficult breathing:**

SIGNS:	CLASSIFY AS:	TREATMENTS:
One or more of the following signs: • Very fast breathing or • High fever (38°C or above) or • Pulse 120 or more or • Lethargy or • Not able to walk unaided or • Uncomfortable lying down or • Severe chest pain	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	• **Position** • **Give oxygen** • **Give first dose IM antibiotics** • **If wheezing present, treat (p. 74)** • **If severe chest pain in patient 50 years or older, use Quick Check** • **If known heart disease and uncomfortable lying down, give furosemide** • **Refer urgently to hospital** • **Consider HIV-related illness (p. 54)** • **If on ARV therapy, this could be serious drug reaction. See *Chronic HIV Care* guidelines**
Two of the following signs: • Fast breathing • Night sweats • Chest pain	**PNEUMONIA**	Give appropriate oral antibiotic **Exception: if second/third trimester pregnancy, HIV clinical stage 4, or low CD4 count, give first dose IM antibiotics and refer urgently to hospital** • If wheezing present, treat **(p. 74)** • If smoking, counsel to stop smoking • Consider HIV-related illness (p. 54) • If on ARV treatment, this could be a serious drug reaction; consult/refer • If cough > 2 weeks, send sputums for TB • Advise when to return immediately • Follow up in 2 days
• Cough or difficult breathing for more than 2 weeks, or • Recurrent episodes of cough or difficult breathing which: - Wake patient at night or in the early morning or, - Occur with exercise	**POSSIBLE CHRONIC LUNG OR HEART PROBLEM**	• If cough > 2 weeks, send 3 sputums for TB or send the patient to district hospital for sputum testing (record in register) • If sputums sent recently previously, check register for result. If negative, refer to district hospital for assessment if a chronic lung problem has not been diagnosed • If smoking, counsel to stop • If wheezing, treat **(p. 74)** • Advise when to return immediately
• Insufficient signs for the above classifications	**NO PNEUMONIA COUGH/COLD, OR BRONCHITIS**	• Advise on symptom control • If smoking, counsel to stop • If wheezing, treat **(p. 74)** • Advise when to return immediately

▶ Check all patients for undernutrition and anaemia

IF YES, ASK:	LOOK AND FEEL
• Have you lost weight? • What medications are you taking? **If wasted or reported weight loss,** how much has your weight changed? • Ask about diet. • Ask about alcohol use. % Weight loss = Old–New / Old weight **If pallor:** • Black stools? • Blood in stools? • Blood in urine? • In menstruating adolescents and women: heavy menstrual periods?	• Look for visible wasting. • Look for loose clothing. **If present,** did it fit before? **If wasted or reported weight loss:** • Weigh and calculate % weight loss. • Measure mid-upper arm circumference (MUAC). • Look for sunken eyes. • Look for oedema of the legs. **If present:** • Does it go up to the knees? • Is it pitting? • Assess for infection using the full ***Acute Care*** algorithm. • Look at the palms and conjunctiva for pallor. Severe? Some? **If pallor:** * • Count breaths in one minute. • Breathless? • Bleeding gums? • Petechiae?

If visible wasting or weight loss

If pallor

* If haemoglobin result available, classify as SEVERE ANAEMIA if haemoglobin less than 7 grams; SOME ANAEMIA if less than 10 grams.

Use this table if **visible wasting or weight loss**

SIGNS:	CLASSIFY AS:	TREATMENTS:
• MUAC < 160 mm or • MUAC 161-185 mm plus one of the following: - Pitting edema to knees on both sides - Cannot stand - Sunken eyes	**SEVERE UNDER-NUTRITION**	• **Refer for therapeutic feeding if nearby or begin community-based feeding** • Consider TB (send sputums if possible) • Consider HIV-related illness (p. 54) • Counsel on HIV testing
• Weight loss > 5% or • Reported weight loss or • Loose clothing which used to fit	**SIGNIFICANT WEIGHT LOSS**	• Treat any apparent infection • If diarrhoea, manage as p. 26-28 • Increase intake of energy and nutrient-rich food—counsel on nutrition • Consider TB (send sputums if possible); diabetes mellitus (dipstick urine for glucose); excess alcohol; substance abuse • Consider diabetes mellitus if weight loss accompanied by polyuria or increased thirst (dipstick urine for glucose) • Consider HIV-related Illness (p. 54) • Counsel on HIV testing • Follow up in 2 weeks
* Weight loss < 5%	**NO SIGNIFICANT WEIGHT LOSS**	• Advise on nutrition

Use this table if **pallor**

• Severe palmar and conjunctival pallor or • Any pallor with: - 30 or more breaths per minute or - Breathless at rest or • Bleeding gums or petechiae or • Black stools or blood in stools	**SEVERE ANAEMIA OR OTHER SEVERE PROBLEM**	• **Refer to hospital** • If not able to refer, treat as below and follow up in 1 week • Consider HIV-related illness (p. 55) • Consider ARV side effect (especially ZDV) or cotrimoxaxole side effects (see ***Chronic HIV Care)*** • Consider malaria if low immunity or increased exposure (see p. 24)
• Palmar or conjunctival pallor	**SOME ANAEMIA**	• Consider HIV-related illness (p. 54) • ARV drugs, especially ZDV, can cause anaemia (see ***Chronic HIV Care***) • Consider malaria if low immunity or increased exposure (see p. 24) • Give twice daily iron/folate • Counsel on adherence • Advise to eat locally available foods rich in iron • Give albendazole if none in last 6 months • If heavy menstrual periods—see p. 35 • Follow up in 1 month

▶ Look in the mouth of all patients and respond to any complaint of mouth or throat problem

If you see any abnormality or patient complains of a mouth or throat problem, **ASK:**	**LOOK**

• Do you have pain?
  - **If yes,** where ? When does this occur? (When swallowing? When hot or cold food?)
• Do you have problems swallowing?
• Do you have problems chewing?
• Are you able to eat?
• What medications are you taking?
	Look in mouth for:
	• White patches
	  - **If yes**, can they be removed?
	• Ulcer
	  - **If yes,** are they deep or extensive?
	• Tooth cavities
	• Loss of tooth substance
	• Bleeding from gums
	• Swelling of gums
	• Gum bubble
	• Pus
	• Dark lumps
	Look at throat for:
	• White exudate
	• Abscess
	• Look for swelling over jaw
	• Feel for enlarged lymph nodes in neck
	
	If patient complains of tooth pain, does tapping or moving the tooth cause pain?

Classify

If patient has white or red patches

If sore throat without mouth problem

If mouth ulcer or gum problem, page 22

If tooth problem or jaw pain or swelling, page 22

If patient has white or red patches

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Not able to swallow	**SEVERE OESOPHAGEAL THRUSH**	• **Refer to hospital** • If not able to refer, give fluconazole
• Pain or difficulty swallowing	**OESOPHAGEAL THRUSH**	• Give fluconazole • Give oral care • Follow up in 2 days • Consider HIV-related illness (p. 54)
• White patches in mouth and • Can be scraped off • Painless	**ORAL THRUSH**	• Give nystatin or miconazole gum patch • Give oral care • Consider HIV-related illness (p. 54)
• White patches on side of tongue and • Cannot be scraped off	**ORAL (HAIRY) LEUKOPLAKIA**	• No treatment needed • Consider HIV-related illness (p. 54) • Instruct in oral care

Use this table if sore throat without mouth problem

• Not able to swallow or • Abscess	**TONSILLITIS**	• Refer urgently to hospital • Give benzathine penicillin
• Enlarged lymph node on neck and • White exudate on throat	**STREPTOCOCCAL SORE THROAT**	• Give benzathine penicillin • Soothe throat with a safe remedy • Give paracetamol for pain • Return if not better
• Only 1 or no signs in the above row present	**NON-STREP SORE THROAT**	• Soothe throat with a safe remedy • Give paracetamol for pain

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Use this table if **mouth ulcer or gum problem:**

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Deep or extensive ulcers of mouth or gums or • Not able to eat	**SEVERE GUM/ MOUTH INFECTION**	• **Refer urgently to hospital unless only palliative care planned** • **Trial aciclovir** • **Start metronidazole if referral not possible or distant** • **Consider HIV-related illness (p. 54)** • **If on ARV therapy, this may be drug reaction (see *Chronic HIV Care*)**
• Ulcers of mouth or gums	**GUM/MOUTH ULCERS**	• Show patient/family how to clean with saline or peroxide or sodium bicarbonate • If lips or anterior gums, give aciclovir • Instruct in oral care • Consider HIV-related illness (p. 54) • If on ARV, or started cotrimoxazole or INH prophylaxis within last month, this may be drug reaction, especially if patient also has new skin rash (see ***Chronic HIV Care;*** refer, stop drugs) • See ***Palliative Care*** for pain relief • Follow up in 7 days
• Bleeding from gums (in absence of other bleeding or other symptoms) • Swollen gums	**GUM DISEASE**	• Instruct in oral care

Use this table if **tooth problem or jaw pain or swelling:**

• Constant pain with: - Swollen face or gum near tooth or - Gum bubble or • Tooth pain when tapped or moved	**DENTAL ABSCESS**	• If fever, give antibiotics • Lance abscess or pull tooth • **Refer urgently to dental assistant if not able to do so** • Consider sinusitis (do not pull teeth if this is cause)
• Pain when eating hot or cold food or • Visible tooth cavities or • Loss of tooth substance	**TOOTH DECAY**	• Place gauze with oil of clove • Refer to dentist for care or pull tooth

In all patients, ask: Are you in pain?

- If patient is in pain, grade the pain, determine location and consider cause.
- Manage pain using the ***Palliative Care*** guidelines.

In all patients, ask: Are you taking any medications?

It is particularly important to consider toxicity from ARV drugs and immune reconstruction syndrome (in first 2-3 months of antiretroviral therapy (ART) when evaluating new signs and symptoms.

Now respond to:

Volunteered Problems or Observed Signs

▶ Does the patient have fever—by history of recent fever (within 48 hours) or feels hot or temperature 37.5°C or above?

IF YES, ASK:	LOOK AND FEEL
• How long have you had a fever? • Any other problem? • What medications have you taken? Determine if antimalarial and for how long. ***Decide malaria risk:*** ***High Low No*** • *Where do you usually live?* • *Have you recently travelled to a malaria area?* • *If woman of childbearing age:* - *Are you pregnant?* • *Is an epidemic of malaria occurring?* • *HIV clinical stage 3 or 4.*	• Look at the patient's neurological condition. Is the patient: - Lethargic? - Confused? - Agitated? • Count the breaths in one minute. Use table on p.16 to determine if fast breathing. - **If fast breathing** , is it deep? • Check if able to drink. • Feel for stiff neck. • Check if able to walk unaided. • Skin rash? • Look for apparent cause of fever (assess all symptoms in this ***Acute Care*** algorithm and consider whether this could be related to ARV treatment—see ***Chronic HIV Care***). • Do malaria dipstick or smear if available.

Patient has high malaria risk

Classify

HIGH MALARIA RISK

If low immunity (with malaria transmission):
- Pregnant.
- Child less than 10 years if there is intense or moderate malaria.
- Stage 3 or 4 HIV infection (see ***Chronic HIV Care*** module).

Or increased exposure:
- Epidemic of malaria is occurring.
- Moved to or visited area with intense or moderate malaria.

Patient has low malaria risk

LOW MALARIA RISK

If high immunity:
- Adolescent or adult who has lived since childhood in area with intense or moderate malaria.

Or low exposure:
- Low malaria transmission and no travel to higher transmission area.

NO MALARIA RISK

- If no malaria transmission and
- No travel to area with malaria transmission.

Patient has no malaria risk, p. 26

Use this table if **fever with high malaria risk:**

SIGNS:	CLASSIFY:	TREATMENTS:
One or more of the following signs: • Confusion, agitation, lethargy or • Fast and deep breathing or • Not able to walk unaided or • Not able to drink or • Stiff neck	**VERY SEVERE FEBRILE DISEASE**	• Give IM quinine or artemether • Give first dose IM antibiotics • Give glucose • Refer urgently to hospital
• Fever or history of fever	**MALARIA**	• Give appropriate oral antimalarial • Determine whether adequate treatment already given with the first-line antimalarial within 1 week—if yes, an effective second-line antimalarial is required • Look for other apparent cause • Consider HIV-related illness (p. 54) • If fever for 7 days or more, consider TB (send sputums/refer) • Follow up in 3 days if still febrile

Use this table if **fever with low malaria risk:**

• Confusion, agitation, lethargy or • Not able to drink or • Not able to walk unaided or • Stiff neck or • Severe respiratory distress	**VERY SEVERE FEBRILE DISEASE**	• Give IM quinine or artemether • Give first dose IM antibiotics • Give glucose • Refer urgently to hospital
• Fever or history of fever and • No new rash and • No other apparent cause of fever or • Dipstick or smear positive for malaria	**MALARIA**	• Give appropriate oral antimalarial • Determine whether adequate treatment already given with the first-line antimalarial within 1 week—if yes, an effective second-line antimalarial is required • Consider fever related to ARV use (see ***Chronic HIV Care***) • Follow up in 3 days if still febrile
• Other apparent cause of fever or • New rash or • Dipstick or smear negative for malaria	**FEVER MALARIA UNLIKELY**	• Treat according to the apparent cause (Exception: Also give IM antimalarial if patient is classified as SEVERE PNEUMONIA) • Consider HIV related illness if unexplained fever for > 30 days (p. 54) • Consider fever related to ARV use (see ***Chronic HIV Care***) • If no apparent cause and fever for 7 days or more, send sputums for TB and refer to hospital for assessment

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Use this table if fever with no malaria risk:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Confusion, agitation, lethargy or • Not able to drink or • Not able to walk unaided or • Stiff neck	**VERY SEVERE FEBRILE DISEASE**	• Give first dose IM antibiotics • Give glucose • Refer urgently to hospital • Use this table if fever with no malaria risk:
• Fever for 7 days or more	**PERSISTENT FEVER**	• Treat according to apparent cause • Consider TB (send sputums/refer) • If no apparent cause, refer to hospital for assessment • Consider HIV related illness if unexplained fever for > 7 days (p. 54) • Consider fever related to ARV use (see ***Chronic HIV Care***)
• None of the above	**SIMPLE FEVER**	• Follow up in 2-3 days if fever persists • Treat according to apparent cause

NOTES:

▶ If the patient has diarrhoea

IF YES, ASK:	LOOK AND FEEL
• For how long? - **If more than 14 days,** have you been treated before for persistent diarrhoea? - **If yes,** with what? When? • Is there blood in the stool?	• Is the patient lethargic or unconscious? • Look for sunken eyes. • Is the patient: - Not able to drink or drinking poorly? - Drinking eagerly, thirsty? • Pinch the skin of the inside of the forearm. Does it go back: - Very slowly (longer than 2 seconds)? - Slowly?

Classify all patients with diarrhoea for DEHYDRATION

Classify DIARRHOEA

If diarrhoea for 14 days or more and no blood, page 29

And if blood in stool, page 29

Use this table in all patients with diarrhoea:

SIGNS:	CLASSIFY AS:	TREATMENTS:
Two of the following signs: • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly	**SEVERE DEHYDRATION**	• If no other severe classification, give fluid for severe dehydration (Plan C on p. 90) then reassess (this patient may not require referral) or **If another severe classification:** • **Refer URGENTLY to hospital after initial IV hydration or, if not possible, with frequent sips of ORS on the way** **If there is cholera in your area, give appropriate antibiotic for cholera (according to sensitivity data)**
Two of the following signs: • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly	**SOME DEHYDRATION**	• Give fluid and food for some dehydration (Plan B on p. 89) • Advise when to return immediately • Follow up in 5 days if not improving
Not enough signs to classify as some or severe dehydration	**NO DEHYDRATION**	• Give fluid and food to treat diarrhoea at home (Plan A on p. 88) • Advise when to return immediately • Follow up in 5 days if not improving

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Also use this table if diarrhoea for 14 days or more and no blood

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Some or severe dehydration present	**SEVERE PERSISTENT DIARRHOEA**	• Give fluids for dehydration (Plan B or C on p. 89-90) before referral, then reassess (this patient may not require referral) • If signs of dehydration persist or another severe classification, refer urgently to hospital
• No dehydration	**PERSISTENT DIARRHOEA**	• Give appropriate empirical treatment, depending on recent treatment and HIV status • Consider HIV-related illness (p. 56) • If on ARV treatment, this could be drug side effect (see ***Chronic HIV Care***) • Give supportive care for persistent diarrhoea (see ***Palliative Care***) • Give nutritional advice and support • Follow up in 5 days (explain when to refer)

Also use this table if blood in stool:

• Blood in the stool	**DYSENTERY**	• **Treat for 5 days with an oral antibiotic recommended for Shigella in your area** • Advise when to return immediately • Follow up in 2 days

NOTES:

▶ If female patient complains of genito-urinary symptoms or lower abdominal pain

- **For adult non-pregnant woman or adolescent,** use this page.
- **For pregnant woman,** use antenatal guidelines.
- **For a man,** use page 36.

IF YES, ASK:	LOOK AND FEEL
• What is the problem? • What medications are you taking? Do you have: • Burning or pain on urination? • Increased frequency of urination? • Sore in your genital area? • An abnormal vaginal discharge? - If yes, does it itch? • Any bleeding on sexual contact? • Has your partner had any problem? - **If partner is present,** ask him about urethral discharge or sores. • When was your last menstrual period? - **If missed period:** Do you think you might be pregnant? • Are you using contraception? **If yes**, which one? • Are you interested in contraception? **If yes**, use Family Planning guidelines. • Do you have very painful menstrual cramps? • Have you had very heavy or irregular periods? - ***If yes:*** --Is the problem new? --How many days does your bleeding last? --How often do you change pads or tampons?	• Feel for abdominal tenderness. **If tenderness:** - Is there rebound? - Is there guarding? - Can you feel a mass? - Are bowel sounds present? - Measure temperature. - Measure pulse. • Perform external exam, look for large amount of vaginal discharge (if only small amount white discharge in adolescent, this is usually normal). • Look for anal or genital ulcer. **If present**, also use p. 38. • Feel for enlarged inguinal lymph mode **If present**, also use p. 38. • **If you are able to do bimanual exam,** feel for cervical motion tenderness • **If burning or pain on urination or complaining for back or flank pain:** - Percuss flank for tenderness.

Classify

If lower abdominal pain (other than menstrual cramps)

If abnormal vaginal discharge, page 34

Burning or pain on urination or flank pain, page 34

If menstrual pain or missed period or bleeding irregular or very heavy periods, page 35

If suspect gonorrhoea/ chlamydia infection based on any of these factors

** If not able to refer, give ampicillin and metronidazole for possible appendicitis.*

Use this table in all women with lower abdominal pain (other than menstrual cramps)

SIGNS:	CLASSIFY AS	TREATMENTS:
Abdominal tenderness with: • Fever > 38° C or • Rebound or • Guarding or • Mass or • Absent bowel sounds or • Not able to drink or • Pulse > 110 or • Recent missed period or abnormal bleeding	**SEVERE OR SURGICAL ABDOMINAL PROBLEM**	• Give appropriate IV/IM antibiotics • Give patient nothing by mouth (NPO) • Insert IV • Refer URGENTLY to hospital* • If bleeding, follow other guidelines for bleeding in early pregnancy; consider ectopic pregnancy
• Lower abdominal tenderness or • Cervical motion tenderness	**PID** (pelvic inflammatory disease)	• Give ciprofloxacin plus doxycycline plus metronidazole • Follow up in 2 days if not improved; follow up all at 7 days • Promote/provide condoms • Offer HIV/STI counselling and HIV and RPR testing • Treat partner for GC/ chlamydia • Abstain from sex during treatment
• Abdomen soft and none of the above signs	**GASTRO-ENTERITIS OR OTHER GI OR GYN PROBLEM**	• If diarrhoea, see page 28 • If constipation, advise remedies (see ***Palliative Care***) • Return if not improved

Use this table if suspect gonorrhoea/chlamydia based on any of these factors

• Sex worker or • Bleeding on sexual contact or • Partner with urethral discharge or burning on urination or • Any woman who thinks she may have STI	**POSSIBLE GONORRHOEA/ CHLAMYDIA INFECTION**	• Treat woman and partner with antibiotics for possible GC/chlamydia infection • Promote/provide condoms • Consider HIV-related illness; offer HIV/STI counselling and HIV and RPR testing • Advise to use condoms • Follow up in 7 days if symptoms persist

go to next page

Use this table in all women with abnormal vaginal discharge

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Itching or • Curd-like vaginal discharge	**CANDIDA VAGINITIS**	• Treat with nystatin • Return if not resolved • Consider HIV-related illness if recurrent (p. 54)
• None of the above	**BACTERIAL VAGINOSIS (BV) OR TRICHOMONIASIS**	• Give metronidazole 2 grams at once • Return if not resolved

Use this table in all women with burning or pain on urination or flank pain

• Flank pain or • Fever	**KIDNEY INFECTION**	• If systemically ill: • Give appropriate IM antibiotics • Refer URGENTLY to hospital Also refer if on indinavir (an ARV drug) If not: • Give appropriate oral antibiotics • Follow up next day
• Burning or pain on urination and • Frequency and • No abnormal vaginal discharge	**BLADDER INFECTION**	• Give appropriate oral antibiotics • Increase fluids • Follow up in 2 days if not improved
• None of the above	**BLADDER INFECTION UNLIKELY**	• Treat for vaginitis if abnormal discharge • Dipstick urine if possible

Use this table in all women with menstrual pain or missed period or bleeding irregular or very heavy period

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Irregular bleeding and • Sexually active or • Any bleeding in known pregnancy	**PREGNANCY-RELATED BLEEDING OR ABORTION**	• **Follow guidelines for vaginal bleeding in pregnancy (e.g. IMPAC *)**
• Missed period and • Sexually active and • No contraceptive implant	**POSSIBLE PREGNANCY**	• Discuss plans for pregnancy • If she wishes to continue pregnancy, use guidelines for antenatal care (e.g. IMPAC*)
Not pregnant with: • New irregular menstrual bleeding or • Soaks more than 6 pads each of 3 days (with or without pain)	**IRREGULAR MENSES OR VERY HEAVY PERIODS (MENORRHAGIA)**	• Consider contraceptive use and need (see Family Planning guidelines): - If contraception desired, suggest oral contraceptive pill - IUD in the first 6 months and long acting injectable contraceptive can cause heavy bleeding; combined contraceptive pills or the mini-pill can cause spotting or bleeding between periods • If on ART, consider withdrawal bleeding from drug interaction (see ***Chronic HIV Care*** module) • Refer for gynaecological assessment if unusual or suspicious in older women • If painful menstrual cramps or to reduce bleeding, give ibuprofen (not aspirin) • Follow up in 2 weeks
• Only painful menstrual cramps	**DYSMENORRHOEA**	• If she also wants contraception, suggest oral contraceptive pill • Give ibuprofen (aspirin or paracetamol may be substituted but are less effective)

* *WHO Integrated Management of Pregnancy and Childbirth (IMPAC)*

▶ If male patient complains of genito-urinary symptoms or lower abdominal pain

(Use this page for men)

IF YES, ASK:	LOOK AND FEEL
• What is your problem? • Do you have discharge from your urethra? - If yes, for how long? If this is a persistent or recurrent problem, see follow-up box. • Do you have burning or pain on urination? - Do you have pain in your scrotum? - If yes, have you had any trauma there? • Do you have sore(s)?	• Perform genital exam. • Look for scrotal swelling. • Feel for tenderness. • Look for ulcer: - If present, also use p. 38. • Look for urethral discharge. • Feel for rotated or elevated testis. - If abdominal pain, feel for tenderness. - If tenderness: -- Is there rebound? -- Is there guarding? -- Can you feel a mass? -- Are bowel sounds present? -- Measure temperature. -- Measure pulse.

If lower abdominal pain

If urethral discharge or urination problems

If scrotal swelling or tenderness

** If fever with right lower abdominal pain and referral is delayed, give ampicillin and metronidazole for possible appendicitis.*

Use this table in men with **lower abdominal pain**

SIGNS:	CLASSIFY AS:	TREATMENTS:
Abdominal tenderness with: • Fever > 38°C or • Rebound or • Guarding or • Mass or • Absent bowel sounds or • Not able to drink or • Pulse > 110	**SEVERE OR SURGICAL ABDOMINAL PROBLEM**	• **Give patient nothing by mouth (NPO)** • **Insert IV** • **Give appropriate IV/IM antibiotics** • **Refer URGENTLY to hospital***
• Abdomen soft and none of the above signs	**GASTROENTERITIS OR OTHER GI PROBLEM**	• If diarrhoea, see p. 29 • If constipation, advise remedies • Return if not improved

Use this table in men with **urethral discharge or urination problem**

• Not able to urinate and • Bladder distended	**PROSTATIC OBSTRUCTION**	• **Pass urinary catheter if trained** • **Refer to hospital**
• Urethral discharge or • Burning on urination	**POSSIBLE GONORRHOEA/ CHLAMYDIA INFECTION**	• Treat patient and partner with antibiotics for possible GC/chlamydia infection • Promote/provide condoms • Return if worse or not improved within 1 week • Offer HIV/STI counselling and HIV and RPR testing • Consider HIV-related illness (p. 54) • Partner management

Use this table in all men with **scrotal swelling or tenderness**

• Testis rotated or elevated or • History of trauma	**POSSIBLE TORSION**	• **Refer URGENTLY to hospital for surgical evaluation**
• Swelling or tenderness (without the above signs)	**POSSIBLE GONORRHOEA/ CHLAMYDIA INFECTION**	• Treat patient and partner with antibiotics for possible GC/chlamydia infection • Promote/provide condoms • Follow up in 7 days; return earlier if worse • Offer HIV counselling and testing • Consider HIV-related illness (p. 54)

▶ If the patient complains of a **genital or anal sore, ulcer or warts**

IF YES, ASK:	LOOK AND FEEL
• Are these new? If not, how often have you had them? • Have there been vesicles before?	• Look for anogenital sores. If present, are there vesicles? • Look for warts. • Look/feel for enlarged lymph node in inguinal area. If present: Is it painful?

** For haemorrhoids/anal fissure management (see **Palliative Care**)*

If anogenital ulcer

If painful inguinal node

If warts

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Only vesicles present	**GENITAL HERPES**	• Keep clean and dry • Give aciclovir, if available • Promote/provide condoms • Educate on STI, HIV and risk reduction, offer HIV testing and counselling and RPR testing • Consider HIV-related illness if ulcerations present > 1 month (p. 54) • Follow up in 7 days if sores not fully healed, earlier if worse
• Sore or ulcer	**GENITAL ULCER**	• Give benzathine penicillin for syphilis • Give aciclovir if history of recurrent vesicles • Give ciprofloxacin for chancroid • Promote and provide condoms • Consider HIV-related illness (p. 54); offer HIV testing and counselling • Educate on STI, HIV and risk reduction • Treat all partners within last 3 months • Follow up in 7 days
• Enlarged and painful inguinal node	**INGUINAL BUBO**	• Give ciprofloxacin for 3 days and—if no ulcer— doxycycline for 14 days; also treat partner • If fluctuant, aspirate through healthy skin; do not incise • Provide/promote condoms • Partner management • Consider HIV-related illness; offer HIV testing and counselling, and RPR testing • Educate on STI, HIV and risk reduction • Follow up in 7 days
• Warts	**GENITAL WARTS**	• Apply podophyllin • Consider HIV-related illness • Offer HIV testing and counselling • Educate on STI, HIV and risk reduction

▶ If patient has a **skin problem or lump**

IF YES, ASK:	LOOK AND FEEL
• Do you have a sore or skin problem or lump? If yes, where is it? • Does it itch? • Does it hurt? • Duration? • Discharge? • Do other members of the family have the same problem? • Are you taking any medication?	• Are there lesions? Where? How many? Are they infected (red, tender, warm, pus or crusts)? • Feel for fluctuance. Are they tender? • Feel for lymph nodes. Are they tender?  • Look/feel for lumps.
If on ARV therapy, skin rash could be a serious side effect. See ***Chronic HIV Care***.	**If painful inguinal node or ano-genital ulcer or vesicles**, see p. 39 **If dark lumps**, consider HIV-related illness, see p. 54

If enlarged lymph nodes or mass

Is it infected? Consider this in all skin lesions.

If red, tender, warm, pus or crusts (infected skin lesion)

If itching skin problem, use p. 42

If skin sores, blisters or pustules, use p. 43

If skin patch with no symptoms or loss of feeling, use p. 44

Use this table if enlarged lymph nodes or mass

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Size > 4 cm or • Fluctuant or • Hard or • Fever	**SUSPICIOUS LYMPH NODE OR MASS**	• Refer for diagnostic work at district hospital • Consider TB
• Nearby infection which could explain lymph node or • Red streaks	**REACTIVE LYMPHADENOPATHY**	• Give oral antibiotic • Follow up in 1 week
• > 3 lymph node groups with: - > 1 node - > 1 cm - > 1 month duration - No local infection to explain	**PERSISTENT GENERALIZED LYMPHADENOPATHY**	• Do RPR test for syphilis if none recently • Consider HIV-related illness (p. 54)

Is it infected? Ask this in all skin lesions. If yes, also use the infection classification table below.

Use this table if lesion red, tender, warm, pus or crusts (infected skin lesion)

• Fever or • Systemically unwell or • Infection extends to muscle	**SEVERE SOFT TISSUE OR MUSCLE INFECTION**	• Refer to hospital • Start IV/IM antibiotics (If not available, give oral cloxacillin) • Consider HIV-related illness
• Size > 4 cm or • Red streaks or • Tender nodes or • Multiple abscesses	**SOFT TISSUE INFECTION OR FOLLICULITIS**	• Start cloxacillin • Drain pus if fluctuance • Elevate the limb • Follow up next day
• Only red, tender, warm, pus or crusts—none of the signs in the pink or yellow row	**IMPETIGO OR MINOR ABSCESS**	• Clean sores with antiseptic • Drain pus if fluctuance • Follow up in 2 days

go to next page

Use this table if **itching skin problems**

Scabies	Papular itching rash (prurigo)	Eczema	Ringworm (tinea)	Dry itchy skin (xerosis)
Rash and excoriations on torso; burrows in webspace and wrist; face spared. 	Itching rash with small papules and scratch marks. Dark spots with pale centers.	Wet, oozing sores or excoriated, thick patches. 	Pale, round, bald scaling patches on scalp or round patches with thick edge on body or web of feet. 	Dry and rough skin, sometimes with fine cracks.
• Manage with anti-scabies medication. • Treat itching. • If persistent, consider HIV-related illness (p. 86).	• Treat itching. • Oral anti-histamines. • Consider HIV-related illness (p. 54).	• Soak sores with clean water to remove crusts (no soap). • Dry the skin gently. • Short term: use topical steroid cream (not on face). • Treat itching.	• Whitfield's ointment (or other antifungal cream) if few patches. • If extensive, give ketoconazole or griseofulvin. • If in hairline, shave hair. • Treat itching. • Consider HIV-related illness (p. 54).	• Emollient lotion or calamine lotion, continue if effective. • Locally effective remedies. • Give antihistamine. • Consider HIV-related illness (p. 54).

***Is it infected?** Ask this in all skin lesions. If **yes,** also use the infection classification table on page 41.*

Illustrations courtesy of the Hesperian Foundation, *Where There Is No Doctor* and *Where Women Have No Doctor*.

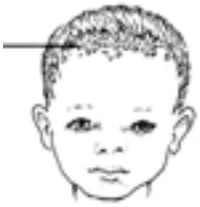
Use this table if **blister, sore or pustules**

Contact dermatitis	Herpes zoster	Herpes simplex	Drug reaction	Impetigo or folliculitis
Limited to area in contact with problem substance Early: blistering and red. Later: thick, dry, scaly. 	Vesicles in one area on one side of body plus intense pain; or scars plus shooting pain. 	Vesicular lesion or sores, also involving lips and/or mouth—see page 22.	Generalized red, widespread with small bumps or blisters; or one or more dark skin areas (fixed drug reaction).	Red, tender, warm crusts or small lesions. 
• Hydrocortisone 1% ointment or cream. • If severe reaction with blisters, exudate or oedema, give prednisone. • Find and remove cause.	• Keep clean and dry; use local antiseptic. • If eye involved or any suspicion encephalitis, give aciclovir 800 mg 5 times daily x 7 days. • Pain relief—analgesics and low dose amitriptiline. • Offer HIV counselling and testing. Consider HIV-related illness. Discuss the possible HIV illness. (p. 54). • Follow up in 7 days if sores not fully healed, earlier if worse.	• If ulceration for > 30 days, consider HIV related illness. • If first or severe ulceration, give aciclovir.	• Stop medications. • Give oral antihistamine. • If peeling rash with involvement of eyes and/or mouth—refer urgently to hospital. • Give prednisone if severe reaction or any difficulty breathing.	See infection table on p. 41.

***Is it infected?** Ask this in all skin lesions. If **yes,** also use the infection classification table on page 41.*

Illustrations courtesy of the Hesperian Foundation, *Where There Is No Doctor* and *Where Women Have No Doctor*.

Use this table if skin rash with **no or few symptoms**

No or few symptoms		
Leprosy Skin patch(es) with: • No sensation to light touch, heat or pain. • Any location. • Pale or reddish or copper-colored. • Flat or raised or nodular. • Chronic (> 6 months). • Not red or itchy or scaling.	**Seborrhoea** Greasy scales and redness, on central face, scalp, body folds, and chest. 	**Psoriasis** Red, thickened and scaling patches (may itch in some). Often on knees and elbows, scalp and hairline, lower back. 
• Treat with leprosy MDT (multidrug therapy) if no MDT in past (see ***Chronic Care*** module or other leprosy guidelines).	• Ketoconazole shampoo (alternative: keratolytic shampoo with salicylic acid or selenium sulfide or coal tar). Repeated treatment may be needed. • If severe, topical steroids or trial ketoconazole. • Consider HIV-related illness (p. 54).	• Coal tar ointment 5% in salicylic acid 2%. • Expose to sunlight 30-60 minutes/day.

***Is it infected?** Ask this in all skin lesions. If **yes,** also use the infection classification table on page 41.*

Illustrations courtesy of the Hesperian Foundation, *Where There Is No Doctor* and *Where Women Have No Doctor*.

See ***Adolescent Job Aid*** for acne.

If on ARV therapy, see ***Chronic HIV Care*** module and consult. Skin reactions are potentially serious.

See other guidelines for:

- Tropical ulcer.
- Other skin problems not included here.

List it as "other skin problem" if you don't know what it is. Consult.

▶ If patient has a **headache or neurological problem**

IF YES, ASK:	LOOK AND FEEL
• Do you have weakness in any part of your body? • Have you had an accident or injury involving your head recently? • Have you had a convulsion? • Assess alcohol/drug use. • Are you taking any medications? • Ask family: - Has the patient's behaviour changed? - Is there a memory problem? - Is patient confused? **If confused**: - When did it start? - Determine if patient is oriented to place and time. • **If headache:** - For how long? - Visual defects? - Vomiting? - On one side? - Prior diagnosis of migraine? - In HIV patient, new or unusual headache?	Assess for focal neurological problems: • Look at face-flaccid on one side? • Problem walking? • Problem talking? • Problem moving eyes? • Flaccid arms or legs? - **If yes**, loss of strength? • Feel for stiff neck. • Measure BP. • Is patient confused? **If patient reports weakness,** test strength. **If headache,** feel for sinus tenderness. **If confused or disoriented**, look for physical cause or alcohol or drug medication toxicity or withdrawal. **If delusions or bizarre thoughts**, see page 50.

If acute headache or loss of body function

If painful feet or legs

If cognitive problems, page 50

Use this table if **headache or neurological problem**

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Loss of body functions or • Focal neurological signs or • Stiff neck or • Acute confusion or • Recent head trauma or • Recent convulsion or • Behavioural changes or • Diastolic BP > 120 or • Prolonged headache (> 2 weeks) or • In known HIV patient: - Any new unusual headache or - Persistent headache more than 1 week	**SERIOUS NEURO-LOGICAL PROBLEM**	• Refer urgently to hospital • If stiff neck or fever, give IM antibiotics and IM antimalarial • If flaccid paralysis in adolescent less than 15 years, report urgently to EPI programme • If recent convulsion, have diazepam available during referral • Consider HIV-related illness (p. 54)
• Tenderness over sinuses	**SINUSITIS**	• Give appropriate oral antibiotics • Give ibuprofen • If recurrent, consider HIV-related illness (p. 54)
• Repeated headaches with - Visual defects or - Vomiting or - One-sided or - Migraine diagnosis	**MIGRAINE**	• Give ibuprofen and observe response • If more pain control is needed, see ***Palliative Care*** guidelines on acute pain
• None of the above	**TENSION HEADACHE**	• Give paracetamol • Check vision—try glasses if... • Suggest neck massage • Reduce: stress, alcohol and drug use • Refer if headache more than 2 weeks • If on ARV drugs, this may be a side effect (see ***Chronic HIV Care***)

Use this table if **painful leg neuropathy**

• Painful burning or numb or cold feeling in feet or lower legs	**PAINFUL LEG NEUROPATHY**	• If on INH, give pyridoxine. If chronic diarrhoea, try ORS. • Consider HIV-related illness (p. 54), syphilis (do RPR, p.112); diabetes (check sugar); ARV side effect—see ***Chronic HIV Care.*** • Refer for further assessment if cause unclear. • Treat with low dose amitriptyline (p. 82). • Follow up in 3 weeks.

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Use if cognitive problems—problems thinking or remembering or disorientation

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Recent onset of confusion or • Difficulty speaking or • Loss of orientation or • Restless and agitated or • Reduced level of consciousness	**DELIRIUM**	• **Refer to hospital** • Give antimalarial pre-referral if malaria risk (p. 70) • Give glucose and thiamine (check blood glucose) • Treat physical cause (systemic illness) or alcohol or drug/ medication toxicity or withdrawal • Consider HIV-related illness (p. 54). If HIV-related, may improve on ARV therapy • If not able to refer, also give fluids • If **very** agitated and not alcohol or drug intoxicated, give low dose sedation with haloperidol (p. 85)
No reduced level of consciousness with: • Serious memory problems or • Misplaces important objects or • Loss of orientation	**DEMENTIA**	• Refer for assessment if cause uncertain. Every patient with dementia needs a full assessment once to exclude a reversible cause • Consider HIV-related illness (p. 54) If HIV-related, may improve on ARV therapy • Advise family • In elderly, make sure adequately hydrated • If known diagnosis, arrange for home care support to provide a safe, protective environment. Supportive contact with familiar people can reduce confusion
• Occasional decreased concentration or • Minor short term memory loss	**NORMAL AGING**	• Reassure patient and relatives

NOTES:

▶ If patient has a **mental problem,** looks depressed or anxious, sad, fatigued or alcohol problem or recurrent multiple problems

IF YES, ASK:	LOOK AND FEEL
How are you feeling? (Listen without interrupting). **Ask:** - Do you feel sad or depressed? - Have lost interest/pleasure in things you usually enjoy? - Do you have less energy than usual? **If yes to any of the above three questions**, ask for these depression symptoms: - Disturbed sleep. - Appetite loss (or increase). - Poor concentration. - Moves slowly. - Decreased libido. - Loss of self-confidence or esteem. - Thoughts of suicide or death. - Guilty feelings. **Have you had bad news for yourself or your family?** **If suicidal thoughts, assess the risk:** - Do you have a plan? - Determine if patient has the means. - Find out if there is a fixed time frame. - Is the family aware? - Has there been an attempt? How? Potentially lethal? **Do you drink alcohol? If yes:** - Calculate drinks per week over last 3 months. - Have you been drunk more than 2 times in past year?	• Does patient appear: - Agitated? - Depressed? • Is patient oriented to time and place? • Is patient confused? • Does the patient express bizarre thoughts? **If yes,** - Does the patient express incredible beliefs (delusions) or see or hear things others cannot (hallucinations)? - Is the patient intoxicated with alcohol or on drugs which might cause these problems? • Does patient have a tremor? **If fatigue or loss of energy**, consider treatable causes of fatigue such as anaemia (p. 18), infection, medications, lack of exercise, sleep problems, fear of illness, HIV disease progression. **If confusion or cognitive problems**, see page 46.

If sad or loss of interest or decreased energy

If tense, anxious, or excess worrying, page 52

If more than 21 drinks/week for men, 14 for women or drunk more than twice in last year, page 52

If bizarre thoughts

Use this table if sad or loss of interest or decreased energy

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Suicidal thoughts If patient also has a plan and the means, or attempts it with lethal means, consider high risk	**SUICIDE RISK**	• **If high risk, refer for hospitalization (if available) or arrange to stay with family or friends (do not leave alone)** • **Manage the suicidal person** • **Remove any harmful objects** • **Mobilize family support** • **Follow up**
• 5 or more depression symptoms and • Duration more than 2 weeks	**MAJOR DEPRESSION**	• If suspect bipolar disorder (manic at other times), refer for lithium • If patient is taking efavirenz (EFV), see *Chronic HIV Care*, p. H41. • Otherwise, start amitryptiline (p. 82) • Educate patient and family about medication • Refer for counselling if available or provide basic counselling to counter depression • Follow up
• Less than 5 depression symptoms or • More than 2 months of bereavement with functional impairment	**MINOR DEPRESSION/ COMPLICATED BEREAVEMENT**	• Counsel to counter depression • Give amitryptiline if serious problem with functioning • If problems with sleep, suggest solutions • Follow up in 1 week
• Bereaved but functioning	**DIFFICULT LIFE EVENTS/LOSS**	• Counsel, assure psychosocial support • If acute uncomplicated bereavement with high distress and not able to sleep, give _____

Use this table in all with bizarre thoughts

• Delusions or • Hallucinations	**POSSIBLE PSYCHOSIS**	• Exclude alcohol intoxication or drug toxicity or ARV side effect (especially EFV) • Consider infection—see Delirium, p. 48 • Refer for psychiatric care • If acutely agitated or dangerous to self or others, give haloperidol (p. 83)

Use this if tense, anxious or excess worrying

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Sudden episodes of extreme anxiety or • Anxiety in specific situations or • Exaggerated worry or • Inability to relax	**ANXIETY DISORDER**	• If severe anxiety, consider short-term use of antianxiety medication • Counsel on managing anxiety according to specific situation • Teach patients slow breathing and progressive relaxation • Follow up in 2 weeks

Use this if more than 21 drinks/week for men, 14 for women or drunk more than twice in last year

Two or more of: • Severe tremors or • Anxiety or • Hallucinations	**SEVERE WITHDRAWAL SIGNS**	• Refer to a treatment center or hospital • Give diazepam for withdrawal if not able to refer; monitor daily • Give thiamine and glucose if poor nutrition
• Possible excessive alcohol use	**HAZARDOUS ALCOHOL USE**	• Assess further using WHO AUDIT and counsel (use brief intervention guidelines for hazardous alcohol use)

Assess and treat other problems

If:
- Pain from chronic illness
- Constipation
- Hiccups
- Trouble sleeping

see ***Palliative Care*** module.

If chronic illness, see chronic care modules.

Consider HIV-related Illness

Clinical Signs of Possible HIV Infection

- Repeated infections
- Herpes zoster
- Skin conditions including prurigo, seborrhoea
- Lymphadenopathy (PGL)—painless swelling in neck and armpit

- **Kaposi lesions (painless purple lumps on skin or palate)**
- **Severe bacterial infection—pneumonia or muscle infection**
- **Tuberculosis—pulmonary or extrapulmonary**
- **Oral thrush or oral hairy leukoplakia**
- **Oesophageal thrush**
- **Weight loss more than 10% without other explanation**
- **More than 1 month:**
  - **Diarrhoea (unexplained)**
  - **Vaginal candidiasis**
  - **Unexplained fever**
  - **Herpes simplex ulceration (genital or oral)**

Other indications suggesting possible infection:

- Other sexually transmitted infections
- A spouse or partner or child:
  - -- known to be HIV positive
  - -- has HIV or HIV-related illness
- Unexplained death of young partner
- Injecting drug use
- High risk occupation

Consider TB and send sputums for examination of TB (p. 106) if any of these signs:

- **Cough for more than 2 weeks**
- **Father, mother, partner, or sibling diagnosed as TB**
- **Weight loss**
- **Hemoptysis**
- **Painless swelling in neck or armpit**
- **Sweats**
- **Weight loss**

☐ **If HIV status is unknown, advise to be tested for HIV infection:**

- Provide key information about HIV and AIDS, including how HIV is transmitted (p. 96). This may be provided by health worker or lay provider performing HIV testing and counseling or in a group pre-testing counselling session.
- Discuss advantages of knowing HIV status.
  - Discuss how testing results will help in planning and management. Encourage patient to share her results with you.
  - Explain available treatments for HIV infection in the area:
    - Acute and chronic clinical care.
    - INH and cotrimoxazole prophylaxis.
    - **ARV therapy. Explain availability and when it is used** (see *Chronic HIV Care* module).
    - Explain what follow-up and ongoing support is available.
- Discuss advantages and disadvantages of **disclosure** and involvement of the partner.
- **Offer HIV testing and counselling—see page 96.**
- Make sure testing is voluntary, after informed consent.

☐ **If patient has signs in bold in the gray box on the previous page:**

- These signs indicate HIV clinical stage 3 or 4. Patient is likely eligible for ARV therapy. HIV testing is urgent (see ***Chronic HIV Care with ARV Therapy*** module).

☐ **For patients with a positive HIV test:**

- Obtain a CD4 count if available.
- **Provide ongoing HIV Care—use the *Chronic HIV Care* module.**

Prevention: Check Status of Routine Screening, Prophylaxis and Treatment

Do this in all acute and chronic patients!

ASSESS	TREAT AND ADVISE
• Ask whether patient and family are sleeping under a bednet. - If yes, has it been dipped in insecticide?	• Encourage use of insecticide-treated bednet.
• Is patient sexually active? (For adolescent: have you started having sex yet?) • Determine if patient is at risk for HIV infection. • Is patient's HIV status known?	• Counsel on safer sex. See next page for adolescents. • Offer family planning. • If unknown status: - Offer HIV testing and explain its advantages (p. 98). - Counsel after HIV testing.
• Does patient smoke? • If adolescent, do you feel pressure to do so?	If yes, counsel to stop smoking (see ***Brief Interventions: Smoking Cessation)***. • If adolescent: Educate on hazards, help to say no.
• Does patient drink alcohol? If yes, calculate drinks/week over last 3 months. • Have you had 5 or more drinks on 1 occasion in last year?	• If more than 21 drinks/week for men, 14 for women or 5 drinks at once, assess further and counsel to reduce or quit (see Hazardous Alcohol module). • If adolescent: Educate on hazards, help to say no.
• Has patient over 15 years been screened for hypertension within last 2 years?	• Measure blood pressure. Repeat measurement if systolic > 120 mmHg . • If still elevated, see hypertension guidelines.
• Occupation with back strain or history of back pain.	• Exercises to stretch and strengthen abdomen and back. • Correct lifting and other preventive interventions.

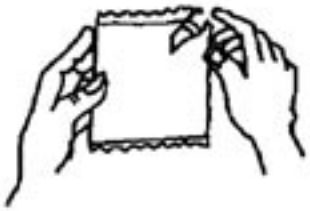
ASSESS	TREAT AND ADVISE
In adolescent girls and women of childbearing age: Check Tetanus Toxoid (TT) immunization status: - When was TT last given? - Which doses of TT was this?	If Tetanus Toxoid (TT) is due: • Give 0.5 ml IM, upper arm. • Advise her when next dose is due. • Record on her card. **TETANUS TOXOID (TT or Td) SCHEDULE:** • At first contact with woman of childbearing age or at first antenatal care visit, as early as possible during pregnancy. • At least 4 weeks after TT1 —>TT2. • At least 6 months after TT2 —>TT3. • At least 1 year after TT3 —>TT4. • At least 1 year after TT4 —>TT5.
In women of childbearing age: - Is she pregnant?	• If pregnant, discuss her plans, follow antenatal care guidelines. • If not pregnant, offer family planning.

SPECIAL PREVENTION FOR ADOLESCENTS **See *Adolescent Job Aid*.**

Counsel to:

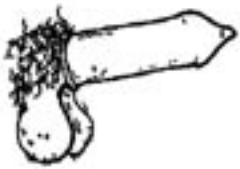
- **Delay sexual activity.** Counsel to start sexual activity only when ready to deal with challenges that accompany sex—infection with HIV and other sexually transmitted infections and unwanted pregnancy.
- Young people may know very little about HIV and how it is transmitted. Be sure to check their understanding expecially about how to protect themselves.
- **Advise to explore sexual pleasure in other safe forms of intimacy** (thigh sex, masturbation, massage, touching, hugging). No contact with the partner's semen or vaginal secretion and no unprotected vaginal or anal sex. Find non-sexual activities that you and your partner enjoy.
- Advise to **reduce** the number of sexual partners or, better yet, **be faithful to one**.
- Advise to protect themselves by using both condoms and another method of contraception (dual protection). **Demonstrate how to use a condom.**
- Discuss appropriate ways of saying no to unwanted sex and negotiating condom use. Reinforce skills to say no (teach or refer if she does not have the skills). Make sure girls understand that HIV risk increases with age of the man.
- **If unprotected sexual intercourse**, advise on emergency contraception and prevention and treatment of STI within 72 hours. If rape, see *Quick Check*.
- **Advise on voluntary counselling and testing for HIV.**
- Are you using drugs? Do you feel pressure to do so? Educate on hazards, help to say no.

Preventing HIV by Using Condoms



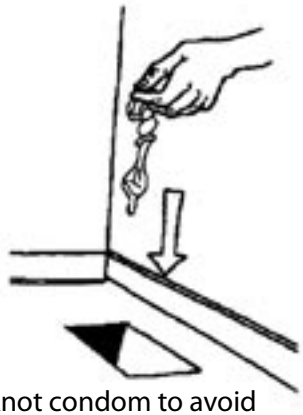
1. Open the untorn condom

2. Squeeze air from the teet of the condom



3. Roll rim of condom on erect penis

4. Hold condom and remove penis from vagina while still erect



5. Knot condom to avoid spilling sperm. Throw used condom in pit latrine or burn them

Illustrations courtesy of the Hesperian Foundation, *Where There Is No Doctor* and *Where Women Have No Doctor*.

Follow-up Care for Acute Illness

▶ Follow-up pneumonia

After 2 days, assess the patient:

- Check the patient with pneumonia using the Look and Listen part of the assessment on page 16.
- Also ask, and use the patient's record, to determine:
  - Is the breathing slower?
  - Is there less fever?
  - Is the pleuritic chest pain less?
  - How long has the patient been coughing?

Treatment:

- I**f signs of SEVERE PNEUMONIA OR VERY SEVERE DISEASE or no improvement in pleuritic chest pain,** give IM antibiotics and refer urgently to hospital.
- **If breathing rate and fever** are the same, change to the second-line oral antibiotic and advise to return in 2 days.

  Exception: refer to hospital if the patient:
  - has a chronic disease or
  - is over 60 years of age or
  - has suspected or known HIV infection
- **If breathing slower or less fever,** complete the 5 days of antibiotic. Return only if symptoms persist.

Also:

- If still coughing and cough present for more than 2 weeks, send 3 sputums for TB or send the patient to district hospital for sputum testing.
- Consider HIV-related illness (p. 54).
- If recurrent episodes of cough or difficult breathing and a chronic lung problem has not been diagnosed, refer patient to district hospital for assessment.

▶ **Follow-up TB: diagnosis based on sputum smear microscopy** (three sputum samples)

If:	Then:
Two (or three) samples are positive	Patient is **sputum smear-positive (has infectious pulmonary TB). Patients need TB treatment—see TB Care.**
Only one sample is positive	Diagnosis is **uncertain**. Refer patient to clinician for further assessment.
All samples are negative	Patient is **sputum smear-negative** for infectious pulmonary TB: - If no longer coughing, no treatment is needed. - If still coughing, refer to a clinician if available, or treat with a non-specific antibiotic such as co-trimoxazole or ampicillin. If cough persists, repeat examination of three sputum smears.

▶ Follow-up fever

If high or low malaria risk—examine malaria smear

If persistent fever—consider:

- TB
- HIV-related illness (see p. 54)

Refer if unexplained fever 7 days or more

▶ Follow-up persistent diarrhoea in HIV negative patient (for HIV positive, see *Chronic HIV Care* module)

- Advise to drink increased fluids (see Plan A, p. 88).
- Continue eating.
- Consider giardia infection—give metronidazole and follow up in 1 week.
- Stop milk products (milk, cheese).
- If elderly or confined to bed, do rectal exam to exclude impaction (diarrhoea can occur around impaction).
- If blood in stool, follow guidelines for dysentery.
- If fever, refer.
- If no response, refer. District clinician should evaluate.

▶ Follow-up oral or oesophageal candida

- For suspected oesophagitis—if no response and not able to refer, give aciclovir if mouth lesions suggest herpes simplex.
- If not already tested for HIV, encourage testing and counselling.
- If HIV positive, see ***Chronic HIV Care*** module.

▶ Follow-up anogenital ulcer

If ulcer is healed: no further treatment

If ulcer is improving:

- Continue treatment for 7 more days
- Follow up in 7 days

If no improvement: refer

▶ Follow-up urethritis (male)

Rapid improvement usually seen in a few days with no symptoms after 7 days.

If not resolved, consider the following:

- Has patient been reinfected? Were partners treated? If not, treat partners and patient again.
- Make sure treatment for both GC and chlamydia was given and that patient adhered to treatment. If not, treat again.
- If trichomonas is an important cause of urethritis locally, treat patient and partner with metronidazole.
- If patient was adherent and no reinfection likely and resistant GC is common, give second-line treatment or refer.

For all patients

- Promote and provide condoms.
- Offer HIV testing and counselling, p. 98.
- Educate on STI, HIV and risk reduction.

▶ Follow-up candida vaginitis

Some improvement usually seen in a few days with no symptoms after 7 days of treatment.

If symptoms persist:

- Re-treat patient.
- Ask about oral contraceptive or antibiotic use—these can contribute to repeated candida infections.
- Consider HIV infection or diabetes, particularly if symptoms of polyuria or increased thirst or weight loss. Check urine glucose—if present, refer for fasting blood sugar, repeat candida infections are common. Consider prophylaxis (H16).
- Consider treating for cervicitis if not treated on the first visit.

▶ Follow-up bladder infection or menstrual problem

Consider STI if symptoms persist—treat patient and partner for GC/chlamydia.

If polyuria continues or is associated with increased thirst or weight loss, check for diabetes mellitus by dipstick of urine. If positive for sugar, refer for fasting blood sugar and further assessment.

Check adherence to treatment.

▶ Follow-up PID

Some improvement usually seen in 1-2 days but it may take weeks to feel better (chronic PID can cause pain for years).

If no improvement:

- Consider referral for hospitalization.
- If IUD in place, consider removal.

If some improvement but symptoms persist:

- Extend treatment. Make sure partner has been treated for GC/chlamydia. Follow up regularly and consider referral if still not resolved.

For all patients

- Promote and provide condoms.
- Offer HIV testing and counselling, p. 98.
- Educate on STI, HIV and risk reduction.

▶ Follow-up BV or trichomonas vaginitis

Some improvement usually seen in a few days with no symptoms after 7 days.

If symptoms persist:

- Re-treat patient and partner at same time.
- Consider treating candida infection and cervicitis if these were not treated on the first visit.
- For bacterial vaginosis (BV), make sure she avoids douching or using agents to dry vagina.
- Consider possibility of cervical cancer.

Treatments

Special advice for prescribing medications for symptomatic HIV or elderly patients

- For some medications, start low, go slow. (Give full dose of antimicrobials and ARV drugs).
- Expect the unexpected—unusual side effects and drug interactions.
- Need for dynamic monitoring—you may need to adjust medications with change in weight and illness.
- If on ARV therapy, be sure to check for drug interactions before starting any new medication—see ***Chronic HIV Care*** module.

Instructions for Giving IM/IV Drugs:

- Explain to the patient why the drug is given.
- Determine the dose appropriate for the patient's weight. For some drugs, it is preferable to calculate exact dose for weight.
- Use a sterile needle and sterile syringe for each patient.
- Measure the dose accurately.

▶ Give benzathine penicillin

For syphilis:

- Do not treat again for positive RPR if patient and partner both treated within last 6 months.
- Treat woman and her partner with 2.4 million units benzathine penicillin. If pregnant, plan to treat newborn.
- If allergic to penicillin: give doxycycline 100 mg twice daily for 14 days or tetracycline 500 mg orally 4 times daily for 14 days.

For rheumatic fever/heart disease (RF/RHD) prophylaxis:

- Give 1.2 million units every 4 weeks—see RF/RHD ***Chronic Care*** module.

Adolescent or adult	BENZATHINE PENICILLIN IM Add 5 ml sterile water to vial containing 1.2 million units = 1.2 million units/6 ml total volume
Primary syphilis	12 ml (6 ml in each buttock)
Prophylaxis: RF/RHD	6 ml every 4 weeks
Suspect streptococcal pharyngitis	6 ml once

▶ Give glucose

- Give by IV. Make sure IV is running well. Give by slow IV push.

	50% GLUCOSE SOLUTION*	25% GLUCOSE SOLUTION	10% GLUCOSE SOLUTION (5 ml/kg)
Adolescent or Adult	25 - 50 ml	50 - 100 ml	125 - 250 ml

* 50% glucose solution is the same as 50% dextrose solution or D50. This solution is irritating to veins. Dilute it with sterile water or saline to produce 25% glucose solution.

- If no IV glucose is available, give sugar water by mouth or nasogastric tube.
- To make sugar water, dissolve 4 level teaspoons of sugar (20 grams) in a 200 ml cup of clean water.

▶ Give IM antimalarial

☐ Give initial IM loading dose before referral.

Quinine 20 mg/kg:

- If IM, give same dose divided equally into two—one in each anterior thigh.
- If IV, dilute the loading dose with 10 ml/kg of IV fluid and infuse slowly over 4 hours.

Or artemether: Give one IM injection.

When able to take oral treatment, give a single dose of sulfadoxine-pyrimethamine, or if on quinine, give an adult a 500 mg tablet three times daily (children 10 mg/kg) to complete 7 days of treatment.

always give glucose with quinine

	QUININE* IM 20 mg/kg (Loading Dose)		**ARTEMETHER** (Loading Dose)
WEIGHT	150 mg/ml* (in 2 ml ampoules)	300 mg/ml* (in 2 ml ampoules)	80 mg/ml* (in 1 ml ampoules)
30-39 kg	4 ml	2 ml	1 ml
40-49 kg	5.4 ml	2.6 ml	2 ml
50-59 kg	7 ml	3.4 ml	2 ml
60-69 kg	8 ml	4 ml	2 ml

☐ If not able to refer, continue treatment as follows:

- **After loading dose of artemether**, give 1 ml artemether IM each day for 3 days until able to take oral medication.
- **After loading dose of quinine**, give quinine 10 mg/kg (half of above dose) every 8 hours in adults (every 12 hours in children) until able to take oral.
- If giving quinine by IV, dilute with 10 ml/kg or IV fluid and infuse slowly over 4 hours.
- If IM, give same dose divided equally in two—one in each anterior thigh.

* *Dosages are appropriate for quinine dihydrochloride. If quinine base, give 8.2 mg/kg every 8 hours.*

▶ Give diazepam IV or rectally

- Call for help to turn and hold patient.
- Draw up 4 ml dose from an ampoule of diazepam into a 5 ml syringe. Then remove the needle.
- Insert small syringe 4 to 5 centimeters into the rectum and inject the diazepam solution.

DIAZEPAM RECTALLY 10 mg/2 ml solution 0.5 mg/kg		**IV** 0.2-0.3 mg/kg
Initial dose	4 ml (20 mg)	2 ml (10 mg)
Second dose	2 ml (10 mg)	1 ml (5 mg)

- Hold buttocks together for a few minutes.

If convulsion continues after 10 minutes, give a second, smaller dose of 1 ml diazepam IV or 2 ml rectally.

Maintenance dose during transportation if needed and health worker accompanies:

- 2 ml rectal dose can be repeated every hour during emergency transport **or**
- Give slow IV infusion of 10 mg diazepam in 150 ml over 6 hours.

Stop the maintenance dose if breathing less than 16 breaths per minute. If respiratory arrest, ventilate with bag and mask.

Maximum total dose diazepam: 50 mg.

▶ Give appropriate IV/IM antibiotic pre-referral

Classification	Antibiotic
Severe Pneumonia, Very Severe Disease	**First-line antibiotic:** _____ (Common choice: benzylpenicillin plus gentamicin) **Second-line antibiotic:** _____ (Common choice: chloramphenicol)
Very Severe Febrile Disease or suspect sepsis	**First-line antibiotic:** _____ (Common choice: chloramphenicol) **Second-line antibiotic:** _____ (Common choice: benzylpenicillin plus gentamicin; or ceftriaxone)
Severe soft tissue, muscle, or bone infection or suspected Staphylococcal infection	**First-line antibiotic:** _____ (Common choice: cloxacillin) **Second-line antibiotic:** _____ (Common choice:)
Severe or surgical abdomen **or** kidney infection	**First-line antibiotic:** _____ (Common choice: ampicillin plus gentamicin plus metronidazole) **Second-line antibiotic:** _____ (Common choice: ciprofloxacin plus metronidazole)

▶ IV/IM antibiotic dosing

WEIGHT	**BENZYLPENICILLIN** Dose: 50 000 units per kg.	**GENTAMICIN** Dose: 5 mg/kg/day. Calculate EXACT dose based on body weight. Only use these doses if this is not possible.	
	To a vial of 600 mg (1 000 000 units): Add 2.1 ml sterile water = 2.5 ml at 400 000 units/ml	Vial containing 20 mg = 2 ml at 10 mg/ml undiluted	Vial containing 80 mg = 2 ml at 40 mg/ml undiluted
30-39 kg	4 ml	15-19 ml	4-5 ml
40-49 kg	6 ml	20-24 ml	5-6 ml
50-59 kg	7 ml	25-29 ml	6-7 ml
60-69 kg	8 ml	30-34 ml	7.5-8.6 ml
	If not able to refer: Give above dose IV/IM every 6 hours	**If not able to refer: Give above dose once daily**	

	CHLORAMPHENICOL Dose: 40 mg per kg	**CLOXACILLIN** Dose: 25-50mg/kg	**AMPICILLIN** Dose: 50mg/kg
WEIGHT	Add 5.0 ml sterile water to vial containing 1000 mg = 5.6 ml at 180 mg/ml	IV: To a vial of 500 mg add 8 ml of sterile water to give 500 mg/10 mls IM: Add 1.3 ml of sterile water to a vial of 250 mg to give 250 mg/1.5 ml	To a vial of 500 mg add 2.1 ml sterile water = 2.5 ml for 500 mg
30-39 kg	8 ml	6-12 ml IM (20-40 ml IV)	10ml
40-49 kg	10 ml	7.5-15 ml (25-50 ml IV)	12 ml
50-59 kg	12 ml	9-18 ml IM (30-60 ml IV)	15 ml
60-69 kg	14 ml	10-20 ml IM (35-70 IV)	18ml
	If not able to refer: Give above dose IV/IM every 12 hours	**If not able to refer: Give above dose IV/IM every 4-6 hours**	**If not able to refer: Give above dose IV/IM every 6 hours**

▶ Give salbutamol by metered-dose inhaler

100 mcg/puff; 200 doses/inhaler
Use spacer and/or mask depending on patient.

- If SEVERE WHEEZING with severe respiratory distress: give 20 puffs of salbutamol in a row. If possible, give continuously by nebulizer.

  If no response in 10 minutes, give epinephrine. *

- If MODERATE WHEEZING or SEVERE WHEEZING without severe respiratory distress:

  2 puffs every 10 minutes x 5 times, then

  2 puffs every 20 minutes x 3 times, then

  2 puffs every 30 minutes x 6 times, then

  2 puffs every 3, 4 or 6 hours

- If MILD WHEEZING: 2 puffs every 20 minutes x 3 times, then 2 puffs every 3 to 6 hours.

* For further management of wheezing, see Quick Check and Emergency Treatments or Asthma Guidelines.

Instructions for Giving Oral Drugs

TEACH THE PATIENT HOW TO TAKE ORAL DRUGS AT HOME

- Determine the appropriate drugs and dosage for the patient's age and weight.
- Tell the patient the reason for taking the drug.
- Demonstrate how to measure a dose.
- Watch the patient practice measuring a dose by himself.
- Ask the patient to take the first dose.
- Explain carefully how to take the drug, then label and package the drug.
- If more than one drug will be given, collect, count and package each drug separately.
- Explain that all the oral drug tablets must be used to finish the course of treatment, even if the patient gets better.
- Support adherence.
- Check the patient's understanding before he or she leaves the clinic.

▶ Give appropriate oral antibiotic

For pneumonia if age 5 years up to 60 years

First-line antibiotic: _____
(Common choice: penicillin VK (oral) or cotrimoxazole)
Second-line antibiotic: _____
(Common choice: amoxicillin or erythromycin)

For pneumonia if age greater than 60 years

First-line antibiotic: _____
(Common choice: amoxicillin or cotrimoxazole)
Second-line antibiotic: _____
(Common choice: amoxicillin-clavulanate)

For dysentery

First-line antibiotic: _____
(Common choice: nalidixic acid or ciprofloxacin)
Second-line antibiotic: _____
(Common choice:)

For cholera

First-line antibiotic: _____
Second-line antibiotic: _____

For abscess, soft tissue infection, folliculitis

First-line antibiotic: _____
(Common choice: cloxacillin)
Second-line antibiotic: _____
(Common choice:)

For chancroid (treat for 7 days)

First-line antibiotic:_____
(Common choice ciprofloxacin or erythromycin)
Second-line antibiotic: _____

For lymphogranuloma venereum, treat for 14 days

First-line antibiotic: _____
(Common choice: doxycycline)
Second-line antibiotic: _____

For reactive lymphadenopathy

First-line antibiotic: _____
Second-line antibiotic: _____

For outpatient treatment PID

ciprofloxacin 500 mg single dose plus doxycycline twice daily for 14 days plus metronidazole 500 mg twice daily for 14 days

	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) Give two times daily for 5 days	AMOXICILLIN Give three times daily for 5 days		CLOXACILLIN Give three times daily for 5 days
AGE or WEIGHT	**ADULT TABLET** 80 mg trimethoprim + 400 mg sulphamethoxazole	**TABLET** 500 mg	**TABLET** 250 mg	**TABLET** 500 mg
5 years to 13 years (19-50 kg)	1	1/2	1	
14 years or more (> 50 kg)	2	1	2	1

	DOXYCYCLINE * Give two times daily for 5 days (avoid doxycycline in young adolescents)	ERYTHROMYCIN Give 4 times daily for 5 days		PEN VK Give 3 times daily for 5 days	CIPRO-FLOXACIN Give 2 times daily for 7 to 14 days
AGE or WEIGHT	**TABLET** 100 mg	**TABLET** 500 mg	**TABLET** 250 mg	**TABLET** 500 mg	**TABLET** 500 mg
5 years to 13 years (19-50 kg)	1	1/2	1	1	I/2
14 years or more (> 50 kg)	1	1	2	1	1

* Avoid Doxycycline in yound adolescents.

▶ Give antibiotics for possible GC/Chlamydia infection

IN NON-PREGNANT WOMAN, OR MAN:

First-line antibiotic combination for GC/chlamydia: _____
_____

(Common choice: ciprofloxacin plus doxycycline)

Second-line antibiotic combination if high prevalence resistant GC or recent treatment: _____

IN PREGNANT WOMAN:

First-line antibiotic combination for GC/chlamydia:_____
_____

(Common choice: cefixime plus amoxycillin)

Second-line antibiotic combination if high prevalence resistant GC or recent treatment: _____

▶ Antibiotics for gonorrhoea (GC)

SAFE FOR USE IN PREGNANCY: Ceftriaxone	125 mg IM
Cefixime 400 mg	1 tablet in clinic
Spectinomycin	2 grams IM
Kanamycin	2 grams IM
NOT SAFE FOR USE IN PREGNANCY: Ciprofloxacin 250 mg 500 mg	 2 tablets in clinic 1 tablet in clinic

▶ Give metronidazole

Advise to avoid alcohol when taking metronidazole

❖ **For bacterial vaginosis or trichomoniasis**

	METRONIZADOLE 250 mg tablet
Adolescent or adult	2 grams (8 tablets) at once in clinic or 2 tablets twice daily for 7 days

 For persistent diarrhoea, bloody diarrhoea, PID or severe gum/mouth infection:

Weight	**METRONIZADOLE** 250 mg tablet twice daily for seven days	**METRONIZADOLE** 500 mg tablet twice daily for 7 days
Adolescent or adult	2	1

▶ Antibiotics for chlamydia

SAFE FOR USE IN PREGNANCY:	
Amoxycillin 500 mg	1 tablet 3 times daily for 7 days
250 mg	2 tablets 3 times daily for 7 days
Azithromycin 250 mg	4 capsules in clinic
Erythromycin base 250 mg	2 tablets 4 times daily for 7 days
base 500 mg	1 tablet 4 times daily for 7 days
NOT SAFE FOR USE IN PREGNANCY OR DURING LACTATION:	
Doxycyline 100 mg	1 tablet 2 times daily for 10 days
Tetracycline 500 mg	1 tablet daily for 10 days

▶ Give appropriate oral antimalarial

First-line antimalarial: _____

Second-line antimalarial: _____

* *Do not* use sulfdadooxine/pyrimethamine for treatment if patient is on cotrimoxazole prophylaxis.

AGE or WEIGHT	CHLOROQUINE Give for 3 days						SULFADOXINE/ PYRIMETHAMINE Give single dose in clinic	ARTESUNATE + AMODIAQUINE Daily for 3 days	ARTEMETHER/ LUMEFANTRINE Twice daily for 3 days
	TABLET (150 mg base)			TABLET (100 mg base)			TABLET (500 mg sulfadoxine + 25 mg pyrimethamin)	TABLET (50 mg rtesunate + TABLET 150 mg base amodiaquine)	TABLET (20 mg artemether + 120 mg lumefantrine)
	Day 1	Day 2	Day 3	Day 1	Day 2	Day 3			
5 yr-7 yr (19-24 kg)	1 1/2	1 1/2	1	2 1/2	2 1/2	1	1 1/2	2 + 2	2
8 yr-10 yr (25-35 kg)	2 1/2	2 1/2	1	3 1/2	3 1/2	2	2	2 + 2	3
11 yr-13 yr or small or wasted adult (36-50 kg)	3	3	2	5	5	2 1/2	2 1/2	3 + 3	4
14 yr + (> 50 kg)	4	4	2	6	6	3	3	4 + 4	4

▶ Give paracetamol for pain

- Give every 6 hours (or every 4 hours if severe pain).
- Do not exceed 8 tablets (4 grams) in 24 hours. If pain not controlled with paracetamol, alternate aspirin with paracetamol. If pain is chronic, see ***Palliative Care*** guidelines P8. If severe acute pain, see ***Quick Check*** module.

Adolescent or Adult	**paracetamol** 500 mg tablet
40-50 kg or more	1 tablet
50 kg or more	1-2 tablets

▶ Give albendazole or mebendazole

albendazole 400 mg single dose OR

mebendazole 500 mg single dose

▶ Give prednisolone

For acute moderate or severe wheezing, before referral:

Give prednisolone or prednisone 60 mg orally.

Or if not able to take oral medication give either:

- hydrocortisone 300 mg IV or IM, or
- methyprednisolone 60 mg IV/IM

For asthma or COPD not in control, where prednisone is in the treatment plan, give prednisolone or prednisone.

Give high dose for several days then taper, stop. COPD may require longer treatment at low level (see Practical Approach to Lung Health—PAL Guidelines).

	prednisone or prednisolone 5 mg tablets						
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
ADULT	7	7	7	6	5	4	3

▶ Give amitriptyline

Useful for depression; insomnia; helps relieve pain when used with opioids; for some neuropathic pain; in low dose for sleep.

 For depression:

Educate about the drug (patient and family):

- Not addictive.
- Do not use with alcohol.
- Takes 3 weeks to get a response in depression—don't be discouraged; often see effect on sleep or pain within 2-3 days.
- May feel worse initially. Side effects usually fade in 7-10 days (dry mouth, constipation, difficulty urinating, dizziness).
- Will need to continue for 6 months. Do not stop abruptly.
- If suicide risk, give only 1 week supply at time or have caregiver dispense drug.
- May impair ability to perform skilled tasks such as driving—take precautions until used to drug.

 For painful foot/leg neuropathy:

Low dose amitripyline—25 mg at night or 12.5 mg twice daily (some experts advise starting as low as 12.5 mg daily. Wait 2 weeks for response, then increase gradually to 50 mg

 For problems with sleep:

Use low dose at night—12.5 to 25 mg.

Weight	Starting dose	After 2 weeks, increase to:	2 weeks later if inadequate response
< 40 kg	0.5-1 mg/kg		
40 kg or more	50 mg at night	25 mg AM 75 mg at night	50 mg AM 100 mg at night

▶ Give haloperidol

- **If psychosis with acute agitation or dangerous to self or others:**

  For the most uncontrollable patients

  Give haloperidol 5 mg IM every hour up to 3 injections (total 15 mg).

  For less disturbed patients

  Give 1-2 mg haloperidol orally 2-5 times per day.

  If necessary, give 2 mg IM every 4-6 hours up to total dose 15 mg .

  For delirium in elderly or HIV infection or other complicating illness

  Give low dose haloperidol 0.5–1.0 mg orally once or twice daily. Avoid sedatives (diazepam). Side effects are more common.

- **For vomiting:**

  Give 0.5 to 1 mg orally once or twice daily.

▶ Treat with nystatin

Treat oral thrush with nystatin:

- Suck on nystatin uncoated lozenges twice daily or apply nystatin suspension 5 times daily (after each meal and between meals) for 7 days (or until 48 hours after lesions resolve).

Treat candida vaginitis with nystatin pessaries:

- Dosage: 100 000 IU daily by vaginal pessaries.
- Dispense 14 nystatin suppositories.

If relapse—treat first week of every month or when needed (consider HIV-related illness and diabetes).

▶ Treat with antiseptic

Wash hands before and after each treatment.

To treat impetigo or herpes zoster with local bacterial infection:

- Gently wash with soap and water.
- Paint with topical antiseptic. Choices include:
  - chlorhexidine
  - polyvidone iodine
  - full-strength gentian violet (0.5%)
  - brilliant green
- Keep skin clean by washing frequently and drying after washing.

▶ Give aciclovir

- **Primary infection:**
  200 mg 5 times daily for 7 days or
  400 mg 3 times daily for 7 days.
- **Recurrent infection:**
  As above except for 5 days only.

▶ Give fluconazole

- For resistant oral thrush or vaginal candidiasis:
  oral 200 mg in clinic then 100 mg daily for 7-14 days until resolved.
- For suspected oesophageal candidiasis:
  oral 400 mg in clinic then 200 mg per day for 14 days. If no response in 3-5 days, increase to 400 mg per day.

  Avoid in pregnancy.

▶ Apply podophyllin

- **By health worker**—10-20% in compound tincture of benzoin.
  Apply weekly.
  Apply only to warts—avoid and protect normal tissue. Let dry.
  Wash thoroughly 1-4 hours after application.
- **By patient**—only if Podofilox or Imiquimod are available.

▶ Treat scabies

Treat with either:	Treatment period	Warnings For all treatments—will initially itch more (as mites die and lead to inflammatory response) and then itch goes away
1% Lindane (gamma benzene hexachloride) cream or lotion	Once—wash off after 24 hours (after 12 hours in children)	Potentially toxic if overused Avoid in pregnancy and small children
25% benzyl benzoate emulsion—dilute 1:1 for children; 1:3 for infants	At night, wash off in morning—repeat x 3? (variable recommendations)	Tendency to irritate the skin
5% permethrin cream		Expensive, very low systemic absorption and toxicity

- Patient and all close contacts must be treated simultaneously—whole household and sexual partners, even if asymptomatic.
- Do not bathe before applying the treatment (increases systemic absorption and does not help).
- Apply the cream to the whole skin surface giving particular attention to the flexures, genitalia, natal cleft, between the fingers and under the fingernails. Include the face, neck and scalp but avoid near the eyes and mouth.
- The cream may irritate the skin a little, especially if there are excoriations.
- Keep on for the treatment period.
- If any cream is washed off during the treatment period (e.g., hands) reapply immediately.
- Wash the cream off at the end of the treatment period.
- Itching should start to diminish within a few days but may persist for a number of weeks. This does not mean that the treatment has failed. Another cream may help with the itching (crotamiton or topical steroid).

▶ Advise on symptom control for cough/cold/bronchitis

☐ **Advise to use a safe, soothing remedy for cough**

- Safe remedies to recommend:

_____

_____

_____

_____

_____

- Harmful remedies to discourage:

_____

_____

_____

_____

_____

☐ **If running nose interferes with work:**
suggest decongestant

☐ **For fever, give paracetamol** (p. 78)

▶ Give iron/folate

☐ **For anaemia:** 1 tablet twice daily

iron/folate tablets:
iron 60 mg, folic acid 400 microgram

Dehydration

▶ Plan A for adolescents/adults: treat diarrhoea at home.

- **Counsel the patient on the 3 Rules of Home Treatment: Drink extra fluid, continue eating, when to return.**

1. **Drink extra fluid** (as much as the patient will take)—any fluid (except fluids with high sugar or alcohol) or ORS.
   - Drink at least 200-300 ml in addition to usual fluid intake after each loose stool.
   - If vomiting, continue to take small sips. Antiemetics are usually not necessary.
   - Continue drinking extra fluid until the diarrhoea stops.
     - It is especially important to provide ORS for use at home when:
       -- the patient has been treated with Plan B or Plan C during this visit.
       -- the patient cannot return to a clinic if the diarrhoea gets worse.
       -- the patient has persistent diarrhoea or large volume stools.

     IF ORS is provided: TEACH THE PATIENT HOW TO MIX AND DRINK ORS. GIVE 2 PACKETS OF ORS TO USE AT HOME.
2. **Continue eating.**
3. **When to return.**

▶ Plan B for adolescents/adults: treat some dehydration with ORS

Give in clinic recommended amount of ORS over 4-hour period.

- **Determine amount of ORS to give during first 4 hours.**

* *Use the patient's age only when you do not know the weight. The approximate amount of ORS required (in ml) can also be calculated by multiplying the patient's weight (in kg) times 75.*

- If the patient wants more ORS than shown, give more.

AGE*	5-14 years	15 years and older
WEIGHT	20- < 30 kg	30 kg or more
In ml	1000-2200	2200-4000

- **If the patient is weak, help him or her take the ORS:**
  - Give frequent small sips from a cup.
  - If the patient vomits, wait 10 minutes. Then continue, but more slowly.
  - If patient wants more ORS than shown, give more.
- **After 4 hours:**
  - Reassess the patient and classify for dehydration.
  - Select the appropriate plan to continue treatment.
  - Begin feeding the patient in clinic.
- **If the patient must leave before completing treatment:**
  - Show how to prepare ORS solution at home.
  - Show how much ORS to give to finish 4-hour treatment at home.
  - Give enough ORS packets to complete rehydration. Also give 2 packets as recommended in Plan A.
  - Explain the 3 Rules of Home Treatment:

    1. Drink extra fluid

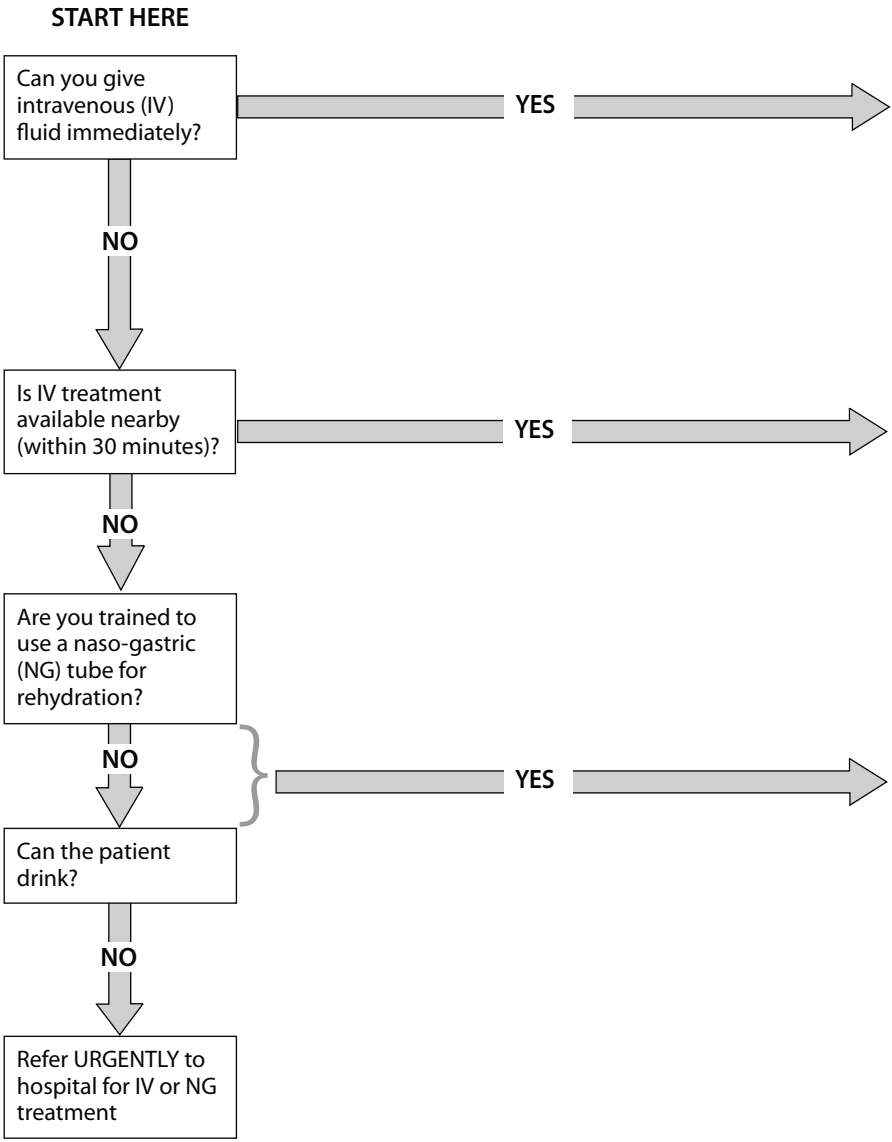
    2. Continue eating

    3. When to return

See Plan A for recommended fluids

▶ Plan C: Treat severe dehydration quickly—at any age

 FOLLOW THE ARROWS. IF ANSWER IS "YES", GO ACROSS. IF "NO", GO DOWN.



- Start IV fluid immediately. If the patient can drink, give ORS by mouth while the drip is set up. Give 100 ml/kg Ringer's Lactate Solution (or, if not available, normal saline), divided as follows:

Age	First give: 30 ml/kg in:	Then give 70 ml/kg:
Infants (under 12 months)	1 hour*	5 hours
Older (12 months or older, including adults)	30 minutes*	2 1/2 hours

* *Repeat once if radial pulse is very weak or not detectable.*

- Reassess the patient every 1-2 hours. If hydration status is not improving, give the IV drip more rapidly.
- Also give ORS (about 5 ml/kg/hour) as soon as the patient can drink: usually after 3-4 hours (infants) or 1-2 hours for children, adolescents, and adults.
- Reassess an infant after 6 hours and older patient after 3 hours. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment.

- Refer URGENTLY to hospital for IV treatment.
- If the patient can drink, provide the mother or family/friend with ORS solution and show how to give frequent sips during the trip.

- Start rehydration by tube (or mouth) with ORS solution: give 20 ml/kg/hour for 6 hours (total of 120 ml/kg).
- Reassess the patient every 1-2 hours:
  - If there is repeated vomiting or increasing abdominal distension, give the fluid more slowly.
  - If hydration status is not improving after 3 hours, send the patient for IV therapy.
- After 6 hours, reassess the patient. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment.

NOTE: If possible, observe the child at least 6 hours after rehydration to be sure the mother can maintain hydration giving the child ORS solution by mouth.

▶ Refer urgently to hospital*

- ☐ Discuss decision with patient and relatives.
- ☐ Quickly organize transport.
- ☐ Send with patient:
  - Health worker if airway problem or shock .
  - Relatives who can donate blood.
  - Referral note.
  - Essential emergency supplies (below).
- ☐ Warn the referral centre if possible by radio or phone.
- ☐ During transport:
  - Watch IV infusion.
  - Keep record of all IV fluids and medications given and time of administration.
  - If transport takes more than 4 hours, insert Foley catheter to empty bladder; monitor urine output.

*If referral is difficult and is refused: Adapt locally

* If chronic illness, determine if palliative care is preferred.

Does patient have known terminal disease in a late stage? (HIV/AIDS, COPD, lung cancer, etc).

Discuss needs with family and patient—can these be better met at home, with support?

Essential Emergency Supplies To Have During Transport

Emergency Drugs	Quantity for Transport
• Diazepam (parenteral)	30 mg
• Artemether or	160 mg (2 ml)
• Quinine	300 mg
• Ampicillin	2 grams
• Gentamicin	240 mg
• IV glucose—50% solution	50 ml
• Ringer's lactate (take extra if distant referral)	4 litres

Emergency Supplies	Quantity for Transport
IV catheters and tubing	2 sets
Clean dressings	
Gloves, one of which is sterile	at least 2 pairs
Clean towels	3
Sterile syringes and needles	
Urinary catheter	

Advise and Counsel

▶ Provide key information on HIV (Human Immune Deficiency Virus)

Counsel on how HIV is transmitted and not transmitted.

HIV is a virus that destroys parts of the body's immune system. A person infected with HIV may not feel sick at first, but slowly the body's immune system is destroyed. He/she becomes ill and is unable to fight infection. Once a person is infected with HIV, he or she can give the virus to others.

HIV can be transmitted through:

- Exchange of HIV-infected body fluids such as semen, vaginal fluid or blood during unprotected sexual intercourse.
- HIV-infected blood transfusions.
- Injecting drug use.
- Sharing of instruments for tattoo.
- From an infected mother to her child during:
  - pregnancy
  - labour and delivery
  - postpartum through breastfeeding

HIV cannot be transmitted through hugging or kissing or mosquito bites.

A special blood test is done to find out if the person is infected with HIV.

▶ Discuss advantages of knowing HIV status

Knowing HIV status is important.

If positive, knowing this will let the patient:

- Protect themselves from re-infection and their sexual partner(s) from infection.
- Gain early access to Chronic HIV Care and support including:
  - cotrimoxazole prophylaxis
  - regular follow-up and support
  - ARV therapy. Explain availability and when it is used (see *Chronic HIV Care* module).
- Cope better with HIV infection.
- Make choices about future pregnancies.
- Access interventions to prevent transmission from mothers to their infants (see PMTCT materials).
- Plan for the future.

Explain the psychological and emotional consequences of HIV.

If negative, knowing this will help the patient explore ways to remain negative.

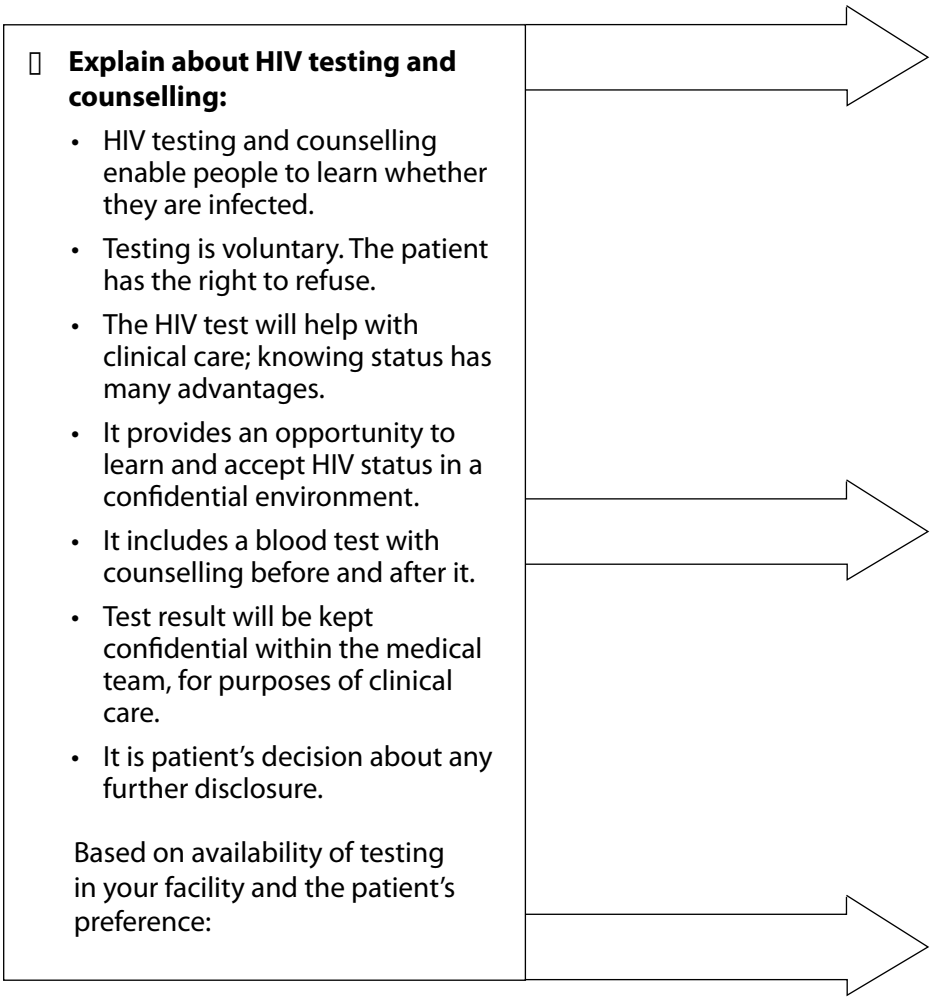
Encourage HIV testing and counselling

- Explain HIV testing (next page).
- Explain implications of results (p. 100).
- Counsel on safer sex, including correct and consistent use of condoms (p. 102). Provide condoms.

If positive:

- It is especially important to practice safer sex—to avoid infecting others, to avoid other sexually transmitted infections, and to avoid getting a second strain of HIV. Adult men should be advised to avoid sex with teenagers outside marriage, to avoid spreading the infection to the next generation.
- Discuss benefits of disclosure and involving and testing the partner (p. 99).
- Use ***Chronic HIV Care*** module.

▶ HIV testing and counselling for clinical care



☐ **If HIV testing and counselling are available in your facility and you are trained to do it, use national HIV guidelines to provide:**

- Pre-test counselling—essential components:
  - The advantages of knowing HIV status (p. 101).
  - Management of social and psychological consequence of a positive test and disclosure.
  - Availability of support and care after testing.
- Explain how test is performed.
- Obtain informed consent.
- Give results, discuss the implications of the test result (p. 98), and give post-test counselling.
- If HIV positive, begin providing HIV care (see ***Chronic HIV Care*** module). This includes ongoing counselling and support.
- Counsel on disclosure and benefits of involving the partner (p. 101).

☐ **If HIV testing and counselling are not available in your facility, explain:**

- Where to go for in-clinic HIV testing and counselling.
- How test is performed.
- How test results will be made available and kept confidential within the medical team.
- When and how results are given.
- Cost.
- Arrange to see patient after testing.
- Explain how the result will be used for clinical care, and the advantages of knowing HIV status.
- Give pre-test counselling.

☐ **If patient wants anonymous testing or confidential testing from a separate HIV testing service, explain about VCT centres:**

Address of VCT centre in your area _____

☐ **Discuss confidentiality of the result from a VCT service:**

- Assure the patient that the test result is confidential and may even be anonymous.
- The result will be only shared with him or her.
- The patient decides whom to disclose the result to.
- The result will only be provided to another person with his or her written consent.

If the result is needed for clinical care, explain the advantage of sharing the result with the medical team.

▶ Implications of the test result

Make sure patient wishes to receive the result (this is part of the informed consent process).

If test result is positive and has been confirmed:

- Explain her that a positive test result means that (s)he is carrying the infection.
- Give post-test counselling and provide support (p. H50).
- Offer ongoing care (see ***Chronic HIV Care*** module) and arrange a follow-up visit.

If test result is negative:

- Share relief or other reactions with the patient.
- Counsel on the importance of staying negative by correct and consistent use of condoms and other practices to make sex safer.
- If recent exposure or high risk, explain that a negative result can mean either that he or she is not infected with HIV, or is infected with HIV, but has not yet made antibodies against the virus. (This is sometimes called the "window" period—3 to 6 months.) Repeat HIV testing can be offered after 8 weeks.

If the patient has not been tested, has been tested but does not want to know results, or does not disclose the result:

- Explain the procedures to keep the results confidential.
- Reinforce the importance of testing and the benefits of knowing the result.
- Explore barriers to testing, to knowing, and to disclosure (fears, misperceptions).

▶ Encourage disclosure

- Ask the patient if they have disclosed their result or are willing to disclose the result to anyone.
- Discuss concerns about disclosure to partner, children, other family, friends.
- Assess readiness to disclose HIV status and to whom.
- Assess social support and needs (refer to support groups). See H59.
- Provide skills for disclosure (role play and rehearsal can help).
- Help the patient make a plan for disclosure.
- Encourage attendance of the partner to consider testing, explore barriers to this.
- Reassure that you will keep the result confidential.

If the patient does not want to disclose the result:

- Reassure that the results will remain confidential.
- Explore the difficulties and barriers to disclosure. Address fears and lack of skills (help provide skills).
- Continue to motivate. Address the possibility of harm to others.
- Offer another appointment and more help as needed (such as peer counsellors).

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

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

- Have greater impact on increasing acceptance of condom use, practicing safer sex to avoid infection or avoiding unwanted pregnancy.
- Help to decrease the risk of suspicion and violence.
- Help to increase support to their partners.
- Motivate him to get tested.

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

Health worker should try to counsel couples together, when possible.

▶ Counsel on safer sex and condom use

- **Safer sex is any sexual practice that reduces the risk of transmitting HIV and other sexually transmitted infections (STI) from one person to another.**
  - Protection can be obtained by:
    - Abstaining from sexual activity.
    - Correct and consistent use of condoms; condoms must be used before any penetrative sex, not just before ejaculation.
    - Choosing sexual activities that do not allow semen, fluid from the vagina, or blood to enter the mouth, anus or vagina of the partner, and not touching the skin of the partner where there is an open cut or sore.

- **If HIV positive:**
  - Explain to the patient that she/he is infected and can transmit infection to his/her partner. They should use a condom as above.
  - If partner's status is unknown, counsel on benefits of involving and testing the partner (p. 101).
  - For women: explain the extra importance of avoiding infection during pregnancy and breastfeeding. The risk of infecting the baby is higher if the mother is newly infected.

- **If HIV negative OR result is unknown:**
  - Explain the risk of HIV infection and how to avoid it.
  - If partner's status is unknown, counsel on benefits of testing the partner.
  - For women: explain the extra importance of remaining negative during pregnancy and breastfeeding. The risk of infecting the baby is higher if the mother is newly infected during this time.

Make sure the patient knows how to use condoms and where to get them. **Provide easy access to condoms in clinic in a discrete manner.**

▶ Educate and counsel on STI

- **Speak in private, with enough time and assure confidentiality.**
- **Explain:**
  - The disease.
  - How it is acquired.
  - How it can be prevented.
  - The treatment.
  - Most STIs can be cured, exceptions are HIV and herpes.
  - The need to also treat the partners (except for vaginitis):
    - Recent sex partner(s) are likely to be infected but may be unaware.
    - If partners are untreated, they may develop complications.
    - Sex with untreated partners can lead to re-infection.
    - Treatment of the partner, even if no symptoms, is important to the health of the partner and to you.

Special counselling for adolescents:
See Adolescent Job Aid

- **Listen to the patient: what is the stress or anxiety, what aspect of STI?**
- **Promote safer sexual behaviour to prevent HIV and STI.**
  - Counsel on limiting partners (or abstinence) and careful selection of partners.
  - Instruct in condom use (p. 102).
- **Educate on HIV.**
- **Advise HIV testing and counselling (p. 98).**
- **Inform the partner(s) or spouse.**
  - Ask the patient, can you do this? Ask, is it possible for you to:
    - Talk with your partner about the infection?
    - Convince your partner to get treatment?
    - Bring/send your partner to the health centre?
  - Determine your role as the health worker.
  - Strategies to discuss and introduce condom use.
  - Risk of violence or stigmatizing reactions from partners, family.

Refer for counselling on:
- **Concerns about herpes infection (no cure)**
- **Possible infertility related to PID**
- **Behavioural risk assessment**
- **Patient with multiple partners**
- **Difficult circumstances or risk**

Laboratory Tests

Collect sputum for examination for TB

- **Explain** that the TB suspect needs a sputum examination to determine whether there are TB bacilli in the lungs.

- **List** the TB suspect's name and address in the Register of TB Suspects.

- **Label** sputum containers (not the lids).
  - 3 samples are needed for diagnosis of TB.
  - 2 samples are needed for follow-up examination.

TB SPECIMEN
Name: _____
Health facility: _____
Date: _____
Specimen no. _____

- **Fill out *Request for Sputum Examination* form.**

- **Explain and demonstrate, fully and slowly, the steps to collect sputum.**
  - Show the TB suspect how to open and close the container.
  - Breathe deeply and demonstrate a deep cough.
  - The TB suspect must produce sputum, not only saliva.
  - Explain that the TB suspect should cough deeply to produce sputum and spit it carefully into the container.

- **Collect**
  - Give the TB suspect the container and lid.
  - Send the TB suspect outside to collect the sample in the open air if possible, or to a well-ventilated place, with sufficient privacy.
  - When the TB suspect returns with the sputum sample, look at it. Is there a sufficient quantity of sputum (not just saliva)? If not, ask the TB suspect to add some more.
  - Explain when the TB suspect should collect the next sample, if needed.

Schedule for collecting three sputum samples

Day 1:

- **Collect "on-the-spot" sample as instructed above (Sample 1).**
- **Instruct the TB suspect how to collect an early morning sample tomorrow (first sputum after waking). Give the TB suspect a labelled container to take home. Ask the TB suspect to bring the sample to the health facility tomorrow.**

Day 2:

- **Receive early morning sample from the TB suspect (Sample 2).**
- **Collect another "on-the-spot" sample (Sample 3).**

- **When you collect the third sample, tell the TB suspect when to return for the results.**

- **Store**
  - Check that the lid is tight.
  - Isolate each sputum container in its own plastic bag, if possible, or wrap in newspaper.
  - Store in a cool place.
  - Wash your hands.

- **Send**
  - Send the samples from health facility to the laboratory. *(See page 109)*

Year _____

REGISTER OF TB SUSPECTS

Facility _____

Date	TB Suspect Number	Name of TB Suspect	Age		Complete Address	Date Sputum Sent to Lab	Date Results Received	Results of Sputum Examinations			TB Treatment Card Opened? (record date)	Observations/ Clinician's Diagnosis
			M	F				1	2	3		

If negative, record "Neg."

If positive, record the grade (+, ++, +++).

When a result is "scanty," record the number.

TB LABORATORY FORM
REQUEST FOR SPUTUM EXAMINATION

Name of health facility _____ Date _____

Name of patient _____ Age _____ Sex: M ❒ F ❒

Complete address _____

_____ District _____

Reason for examination:

Diagnosis ❒ TB Suspect No. _____

OR Follow-up ❒ Patient's District TB No.* _____

Disease site: Pulmonary ❒ Extrapulmonary ❒ (specify)_____

Number of sputum samples sent with this form _____

Date of collection of first sample _____ Signature of specimen collector _____

* Be sure to enter the patient's District TB No. for follow-up of patients on TB treatment.

RESULTS (to be completed by Laboratory)

Lab. Serial No. _____

(a) Visual appearance of sputum:

Mucopurulent ☐ Blood-stained ☐ Saliva ☐

(b) Microscopy:

DATE	SPECIMEN	RESULTS	POSITIVE (GRADING)			
			+++	++	+	scanty (1–9)
	1		☐	☐	☐	☐
	2		☐	☐	☐	☐
	3		☐	☐	☐	☐

Date _____ Examined by (Signature) _____

The completed form (with results) should be sent to the health facility and to the District Tuberculosis Unit.

Send sputum samples to laboratory

- Keep the samples in a refrigerator or in as cool a place as possible until transport.

- When you have all three samples, pack the sputum containers in a transport box. Enclose the Request for Sputum Examination. (See previous page.) If there are samples for more than one patient, enclose a Request for Sputum Examination for each patient's samples.

- If a patient does not return to the health facility with the second sample within 48 hours, send the first sample to the laboratory anyway.

- Send the samples to the laboratory as soon as possible. Do not hold for longer than 3–4 days. The total time from collection until reaching the laboratory should be no more than 5 days. Sputum samples should be examined by microscopy no later than 1 week after they have been collected.

- Prepare a dispatch list to accompany each transport box. (See example below.) The dispatch list should identify the sputum samples in the box. Before sending the box to the laboratory:
  - Check that the dispatch list states:
    - the correct total number of sputum containers in the box,
    - the identification numbers on the containers,
    - the name of each patient.
  - Check that a *Request for Sputum Examination* is enclosed for each patient.
  - Close the box carefully.
  - Write the date on the dispatch list.

Put the dispatch list in an envelope and attach envelope to the outside of the transport box.

Insert instructions for lab tests which can be performed in clinic:

- *Haemoglobin*
- *Urine dipstick for sugar or protein*
- *Blood sugar by dipstick*
- *Malaria dipstick or smear*
- *Rapid test for HIV (with informed consent and counselling)*

Perform RPR* test for syphilis and respond to results

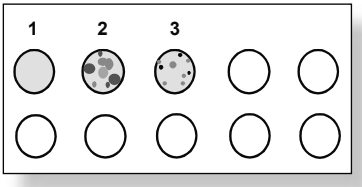
- Have patient sit comfortably on chair. Explain procedure and obtain consent. Put on gloves.
- Use a sterile needle and syringe. Draw up 5 ml blood from a vein. Put in a plain test tube.
- Let test tube sit 20 minutes to allow serum to separate. (Or centrifuge 3-5 minutes at 2000-3000 rpm.) In the separated sample, serum will be on top.
- Use sampling pipette to withdraw some of the serum. Take care not to include any red blood cells from the lower part of the separated sample.
- Hold the pipette vertically over a test card circle. Squeeze teat to allow one drop (50 micro-liter) of serum to fall onto a circle. Spread the drop to fill the circle using a toothpick or other clean spreader.

  ***Important**: Several samples may be done on one test card. Be careful not to contaminate the remaining test circles. Use a clean spreader for every sample. Carefully label each sample with a patient name or number.*
- Attach dispensing needle to a syringe. Shake antigen.* Draw up enough antigen for the number of tests done (one drop per test).
- Holding the syringe vertically, allow exactly one drop of antigen to fall onto each test sample. **Do not stir**.
- Rotate the test card smoothly on the palm of the hand for 8 minutes.** (Or rotate on a mechanical rotator.)

INTERPRETING RESULTS

- After 8 minutes rotation, inspect the card in good light. Turn or tilt the card to see whether there is clumping (reactive result). Most test cards include negative and positive control circles for comparison.

Example Test Card



1. **Non-reactive** (no clumping or only slight roughness) - Negative for syphilis
2. **Reactive** (highly visible clumping) - Positive for syphilis
3. **Weakly reactive** (minimal clumping) - Positive for syphilis
   NOTE: Weakly reactive can also be more finely granulated and difficult to see than this illustration.

* Make sure antigen was refrigerated (not frozen) and has not expired.

** Room temperature should be 73º - 85ºF (22.8º - 29.3ºC).

Assure confidentiality in performing the RPR test

If RPR positive:

- Determine if the patient and partner have received adequate treatment.
- If not, treat patient and partner for syphilis with benzathine penicillin. (p.69)
  - If patient has just delivered: Treat newborn with benzathine penicillin.
  - Follow up newborn in 2 weeks.
- Counsel on safer sex. Advise to use condoms.

Note: Do not test for cure with a repeat RPR.

The RPR remains positive for some time although the titer goes down.

* RPR = Rapid Plasma Reagin

INTEGRATED MANAGEMENT OF ADOLESCENT/ADULT ILLNESS– ACUTE CARE RECORDING FORM

Name: _____ Age: _____ Weight: _____ BP:_____ Sex: M F

What are the patient's problems?_____ _____ *Pregnant?*

Acute illness/ Follow-up acute/ Follow-up chronic **Quick check– emergency signs?** *Yes No* **If yes**,_____

	ASSESS (circle all signs present)	**CLASSIFY Then list TREATMENTS**
All patients	**___Yes ___No DOES THE PATIENT HAVE COUGH OR DIFFICULT BREATHING?** **If yes, ASK:** • For how long? ____ • Are you having chest pain? **If yes**, new? Severe? Describe it: _____ • Do you have night sweats? • Do you smoke? • On treatment for: Asthma? Emphysema or chronic bronchitis(COPD)? Heart failure? TB? **If no**: • Have you had previous episodes of cough or difficult breathing? *Recurrent episodes* **If recurrent episodes**: —Do these episodes wake you up at night or in the early morning? *Yes No* **LOOK, LISTEN**: • Is the patient: —Lethargic? • Count the breaths in one minute: _____ *Fast breathing? Very fast breathing?* • Uncomfortable lying down? • Look/listen for wheezing. • Measure temperature _____ *38°C or above* • **If not able to walk unaided or appears ill**, also: —Count pulse: _____ —Measure BP: _____	
All patients	**X CHECK ALL PATIENTS FOR UNDERNUTRITION AND ANAEMIA** • Have you lost weight? — **If wasted or weight loss**, Old weight_____ Diet: Problem:_____ Alcohol use —**If pallor**: - Black stools? - Blood in stools? - Epigastric pain? - Blood in urine? —**If menstruating**: Heavy periods? • Look for visible severe wasting. —Loose clothing? —**If wasted or weight loss**: Weight:___kg Wt loss____% MUAC_____ Sunken eyes? Oedema to knees? Pitting? • Look at palms and conjunctiva for pallor. *Severe pallor*? *Some pallor*? —**If pallor**,—Count breaths in one minute:___ —Breathlessness? —Measure haemoglobin:_____ —Bleeding gums? —Petechiae?	
ents	**X LOOK IN ALL MOUTHS __IF MOUTH OR THROAT PROBLEM** • Do you have pain? **If yes**, tooth, mouth or throat? —**If yes**, when swallowing? When hot or cold food? • Problems swallowing? Look in mouth for: • White patches —**If yes**, can they be removed? *Yes No* • Ulcer —**If yes**, deep or extensive?	

All pati

- Problems chewing?
- Not able to eat?
- What medications are you taking?

- Tooth cavities • Loss of tooth substance
- Bleeding from gums • Swelling of gums • Gum bubble
- Pus • Dark lumps • Swelling over jaw • Enlarged neck node
- **If tooth pain**, does tapping/moving tooth cause pain?

Are you in pain? If yes, where? **Grade pain 0 1 2 3 4 5**
Are you taking any medications?

All patients

Prevention, prophylaxis– all patients

☐ Encourage insecticide-treated bednet
☐ Counsel on safer sex ☐ Offer family planning
☐ Offer HIV testing&counselling ☐ Counsel to stop smoking
☐ Counsel to reduce or quit alcohol
☐ Measure BP
☐ If back pain history or risk, teach exercise &correct lifting

Women/girls of childbearing age:
☐ Update tetanus toxoid
☐ Give mebendazole if due
☐ If pregnant, give antenatal care
☐ If not pregnant, offer family planning
☐ Special prevention for adolescents

___IF FEVER (by history or feels hot or temperature 37.5ºC or above)

- How long have you had a fever? _____
- Any other problem?
- What medications have you taken in the previous week? **If yes**, antimalarial? For how long? _____

Decide malaria risk: *High Low No*
- Where do you usually live?
- Recent travel to a malaria area?
- If woman of childbearing age: Pregnant?
- Epidemic of malaria occurring?
- HIV clinical stage 3 or 4?

- Is the patient: — Lethargic? — Confused? —Agitated?
- Count the breaths in one minute: _____ *Fast breathing*?
  —**If fast,** is it deep?
- Check if able to drink *Not able to drink*
- Feel for stiff neck
- Skin rash?
- Check if able to walk unaided *Not able to walk unaided*
- Headache? **If yes**, for how long?_____ *Prolonged*
- Look for apparent cause of fever _____
- Malaria dipstick or smear:

__IF DIARRHOEA

- For how long? _____ Days
  —**If more than 14 days**, have you been treated before for persistent diarrhoea? *Yes No*
  —**If yes**, with what?
  When?
- Is there blood in the stool?

- Look at the patient's general condition
  Lethargic or unconscious?
- Look for sunken eyes.
- Is the patient:
  —Not able to drink or drinking poorly?
  —Drinking eagerly, thirsty?
- Pinch the skin of the inside forearm. Does it go back:
  Very slowly (longer than 2 seconds)? Slowly?

___ IF FEMALE PATIENT HAS GENITO-URINARY SX OR LOWER ABDOMINAL PAIN	CLASSIFY Then list TREATMENTS
What is the problem?_____ • What medications are you taking? • Burning or pain on urination? • Increased frequency of urination? • Sore in your genital area? • Abnormal vaginal discharge? **If yes**, does it itch? • Bleeding on sexual contact? • Partner have problem? (**If present**: *Discharge or sore?*) • When was last period? **If missed a period**, possibly pregnant? • Are you using contraception? • Interested in contraception? **If yes**, use FP guidelines • Very painful menstrual cramps? • Periods: very heavy or irregular periods? **If yes,** new? —Days of bleeding:____ Number pads used:_____ • Feel for abdominal tenderness —**If pain**: —Rebound? —Guarding? —Mass? —Absent bowel sounds? —Temperature:_____ —Pulse:_____ • External exam: —Large amount vaginal discharge? —Anal or genital ulcer? —Enlarged inguinal lymph node? • **If able to do bimanual exam**, cervical motion tenderness? • **If burning or pain on urination**, percuss flank: Flank tenderness?	
___IF MALE PATIENT HAS GENITO-URINARY SX OR LOWER ABDOMINAL PAIN	
• What is your problem?_____ • Discharge from urethra? —**If yes**, for how long? • Burning or pain when you urinate? • Pain in your scrotum? —**If yes**, have you had any trauma there? • Do you have sores? Genital exam: • Look for scrotal swelling • Feel for tenderness. • Look for ulcer • Look for urethral discharge • Feel for rotated or elevated testis. • Feel for abdominal pain — **If tenderness**: —Rebound? —Guarding? —Mass? —Absent bowel sounds? —Temperature:_____ —Pulse:_____	
___ IF ANOGENITAL ULCER OR SORE • Are these new? Recurrent? • Vesicles before? • Look for anogenital sores. **If present**, are there vesicles? • Look for warts • Look/feel for enlarged lymph node in inguinal area. —**If present,** is it painful?	
___ IF SKIN PROBLEM OR LUMP • Do you have a sore or skin problem or lump? • Are there lesions? **If yes**, where? How many? • Are they infected (red, tender, warm, pus or crusts)?	

—**If yes**, where is it?

- Does it itch? • Does it hurt?
- For how long? • Discharge?
- Do other family members have same problem?
- Are you taking any medication?

- Feel for fluctuance. Are they tender?
- Feel for lymph nodes. Are they tender?
- Look/feel for lumps

___IF HEADACHE OR NEUROLOGICAL PROBLEM

- Weakness in any part of body?
- Accident or injury involving head?
- Convulsion?
- Alcohol use?_____Drug use?_____
- Are you taking any medications?
- Ask family: —Patient's behaviour changed?
  —Memory problem? —Patient confused?
  —**If confused**, when did it start? —Disoriented to place or time?
- **If headache**:
  —For how long? —One-sided?
  —Visual defects? —Prior diagnosis migraine?
  —Vomiting? —In HIV patient, new unusual headache?

- Assess for focal neurological problems:
  —Test strength
  —Look at face: flaccid on one side?
  —Problem walking?
  —Problem talking?
  —Problem moving eyes?
  —Flaccid arms or legs? **If yes**, loss of strength?
- Feel for stiff neck
- Measure BP:_____
- Is patient confused?
- **If patient reports weakness**, test strength.
- **If headache**, feel for sinus tenderness

___IF MENTAL PROBLEM, LOOKS DEPRESSED OR ANXIOUS, SAD, FATIGUE, RECURRENT MULTIPLE PROBLEMS, HEAVY ALCOHOL USE

- How are you feeling? (listen without interrupting)
- Do you feel sad, depressed?
- Lost interest/pleasure?
- Less energy than usual? **If any of these 3 present**, ask for depression symptoms:
  —Disturbed sleep —Appetite loss (or increase)
  —Poor concentration —Moves slowly
  —Decreased libido
  —Loss of self-confidence or esteem
  —Thoughts of suicide or death —Guilty feelings
- Have you had bad news?
- Do you drink alcohol? —**If yes**:
  —Drinks/week over last 3 months:____
  —Drunk more than 2 times in past year?

- Does patient appear: —Agitated? —Depressed?
  —Disoriented to time or place?
- Is patient confused?
- Does the patient express bizarre thoughts? **If yes**,
  —Does the patient express incredible beliefs (delusions) or sees or hears things others cannot (hallucinations)?
  —Is the patient intoxicated with alcohol or on drugs which might cause these problems?
- Does patient have a tremor?

If suicidal thoughts, assess the risk:
- Do you have a plan?
- Determine if patient has the means
- Find out if there is a fixed timeframe
- Is the family aware?
- Has there been an attempt? How? Potentially lethal?

Acute Care Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ARV	Antiretroviral
ART	Antiretroviral Therapy
BP	Blood Pressure
BV	Bacterial Vaginosis
CD4	Count of the lymphocytes with a CD4 surface marker per cubic millimetre of blood
Cm	Centimetre
COPD	Chronic Obstructive Pulmonary Disease
EPI	Expanded Programme on Immunization
GC	Gonorrhoea
GI	Gastrointestinal
GYN	Gynaecological
Hg	Mercury
HIV	Human Immunodeficiency Virus
IM	Intramuscular
IMAI	Integrated Management of Adolescent and Adult Illness
IMPAC	Integrated Management of Pregnancy and Childbirth
INH	Isoniazid
IU	International Units
IUD	Intrauterine Device
IV	Intravenous
Kg	Kilogram
Mcg	Microgram
MD	Medical Doctor
MDT	Multi-Drug Therapy (for leprosy)
Mg	Milligram
Ml	Millilitre
Mm	Millimetre
MO	Medical Officer
MUAC	Middle Upper Arm Circumference
NG	Naso-gastric
NPO	Nothing per os = nothing by mouth
ORS	Oral Rehydration Solution
PCN	Penicillin
PGL	Persistent Generalised Lymphadenopathy
PID	Pelvic Inflammatory Disease
PMTCT	Prevention of Mother to Child Transmission (of HIV)
RF	Rheumatic Fever
RHD	Rheumatic Heart Disease
RPR	Rapid Plasma Reagent test for syphilis
RPM	Rotations per Minute
STI	Sexually Transmitted Infection
Td	Tetanus Diphtheria
TB	Tuberculosis
TT	Tetanus Toxoid
ZDV	Zidovudine