Acute Care

INTEGRATED MANAGEMENT OF ADOLESCENT AND ADULT ILLNESS

INTERIM GUIDELINES FOR FIRST-LEVEL FACILITY HEALTH WORKERS AT HEALTH CENTRE OR DISTRICT OUT PATIENT CLINIC

November 2004

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

- **Acute Care**—this module is for adolescents and adults.
  For children use the IMCI-HIV adaptation.
- **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: 3by5help@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, 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.

For more information about IMAI, please see www.3by5.org or contact 3by5help@who.int.

WHO HIV Department—IMAI Project
Integrated Management: Acute Care

Quick Check for Emergency Signs

Assess Acute Illness

Classify

Identify Treatments

Consider HIV-Related Illness

Prevention: Screening and Prophylaxis

Follow-up Care for Acute Illness

If laboratory tests are required, instructions for these are in the section, "Laboratory Tests", pages 109-122.

Detailed instructions are in the section, "Treatment", page 67.

Instructions for advice and counselling and HIV testing are in the section, "Advise and Counsel", page 95.

Link with Chronic HIV Care.
**Quick Check for Emergency Signs**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>24-26</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>28-30</td>
</tr>
<tr>
<td>Genito-urinary symptoms or lower abdominal pain in:</td>
<td>32-35</td>
</tr>
<tr>
<td>woman</td>
<td>36-37</td>
</tr>
<tr>
<td>man</td>
<td>38-39</td>
</tr>
<tr>
<td>Genital or anal sore or ulcer</td>
<td>40-45</td>
</tr>
<tr>
<td>Skin problem or lump</td>
<td>46-48</td>
</tr>
<tr>
<td>Headache or neurological problem</td>
<td>50-52</td>
</tr>
<tr>
<td>Mental problem</td>
<td>52</td>
</tr>
</tbody>
</table>

**Assess Acute Illness/Classify/Identify Treatments**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia</td>
<td>62</td>
</tr>
<tr>
<td>TB sputums</td>
<td>63</td>
</tr>
<tr>
<td>Fever</td>
<td>63</td>
</tr>
<tr>
<td>Persistent diarrhoea</td>
<td>64</td>
</tr>
<tr>
<td>Oral or oesophageal candida</td>
<td>64</td>
</tr>
<tr>
<td>Anogenital ulcer</td>
<td>65</td>
</tr>
<tr>
<td>Urethritis</td>
<td>65</td>
</tr>
<tr>
<td>Gonorrhea/chlamydia</td>
<td>65</td>
</tr>
<tr>
<td>Candida vaginitis</td>
<td>65</td>
</tr>
<tr>
<td>Bladder infection</td>
<td>65</td>
</tr>
<tr>
<td>Menstrual problem</td>
<td>66</td>
</tr>
<tr>
<td>PID</td>
<td>66</td>
</tr>
<tr>
<td>BV or trichomonas vaginitis</td>
<td>66</td>
</tr>
</tbody>
</table>
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/use epinephrine

**Treatment**

**IV/IM drugs:**
- benzathine PCN.......................... 69
- glucose .................................. 69
- IM antimalarial ......................... 70
- diazepam IV or rectally ............... 71
- IV/IM antibiotics ....................... 72

**Metered dose inhaler:**
- salbutamol.................................. 74

**Oral drugs**
- Oral antibiotics.......................... 76
- GC/chlamydia antibiotics ............. 78
- metronidazole ............................ 79
- Oral antimalarial ....................... 80
- paracetamol .............................. 80
- albendazole/mebendazole ............. 81
- prednisone ............................... 81
- amitriptyline ............................ 82
- haloperidol .............................. 83
- nystatin .................................. 84
- Antiseptic .................................. 84
- aciclovir ................................. 85
- fluconazole .............................. 85
- ketoconazole ............................. 85
- podophyllin .............................. 85
- Treat scabies ............................. 86
- Symptom control for cough/cold/bronchitis ..................... 87
- iron/folate ............................... 87
- Fluid plans A/B/C for diarrhoea ...... 88-91
- Refer urgently to hospital .......... 92-93

**Advise and Counsel**

- Provide key information on HIV .......... 96
- Advantages of knowing HIV status ... 97
- HIV testing and counselling .......... 98-99
- Implications of test result .......... 100
- Disclosure, involving partner ....... 101
- Counsel on safer sex .................. 102
- Educate/counsel on STIs ............... 103
- Basic counselling ...................... 104-105
- Counsel the depressed patient and family .......... 106-107

**Laboratory Tests**

- Collect sputums for TB ............... 110
- TB Suspects—register ................ 112
- Send sputum samples to laboratory .......... 113
- Malaria smear (thick film) .......... 115
- RPR (syphilis) testing ................ 116
- Rapid test for HIV (with informed consent and counselling) .......... 118-122

**Recording Form/Desk Aid**

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

**Laboratory Tests**

- (Some may be available only at health centre level.)
- Insert instructions for other lab tests which can be performed in clinic:
  - Haemoglobin
  - Urine dipstick for sugar or protein
  - Blood sugar by dipstick
  - Malaria dipstick
Steps to Use the IMAI Acute Care Module

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

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 (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 module.
- 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 (46-48)
- **Mental problem** (50-52)—use this page if patient complains of or appears depressed, anxious, sad or fatigued, or has an alcohol problem, recurrent multiple complaints or pain. Remember to use this page. If you have a doubt, use it.

  For special considerations in assessing adolescents, see *Adolescent Job Aid*.

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 (105).

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

The detailed treatment instructions are in the section called Treatment.

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

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* module, 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.

Remember that for all patients you need to also consider what Prevention and Prophylaxis are required. (Circle on the recording form.)
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 violent or aggressive patient, or other psychiatric emergency, also see the 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

Then Assess: Circulation (Shock)

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

Check for obstruction, wheezing and pulmonary oedema.

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.

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 and age

If severe abdominal pain:
- Is abdomen hard?

Check BP, pulse and 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 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.

- 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.

If trauma, use the Quick Check 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

Any sign present—measure temperature and BP.
• 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. 124).
• 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:**

- 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?

**LOOK AND LISTEN:**

- Is the patient lethargic?
- Count the breaths in one 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:**

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
</table>
| One or more of the following signs:  
- Very fast breathing or  
- High fever (39°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 a serious drug reaction. See Chronic HIV Care module. |
| 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 therapy, 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, 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:

<table>
<thead>
<tr>
<th>IF YES, ASK:</th>
<th>LOOK AND FEEL</th>
</tr>
</thead>
</table>
| • Have you lost weight?  
• What medications are you taking? | • Look for visible wasting.  
• Look for loose clothing.  
If present, did it fit before? |
| **If wasted or reported weight loss,** how much has your weight changed?  
• Ask about diet.  
• Ask about alcohol use. | **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:**  
• 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?  
• 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 haemoglobin result available, classify as SEVERE ANAEMIA if haemoglobin < 7 gm; SOME ANAEMIA if < than 10 gm.*
Use this table if visible wasting or weight loss:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- MUAC &lt; 160 mm or</td>
<td>SEVERE UNDER-NUTRITION</td>
<td>• Refer for therapeutic feeding if nearby or begin community-based feeding.</td>
</tr>
<tr>
<td>- MUAC 161-185 mm plus one of the following:</td>
<td></td>
<td>• Consider TB (send sputums if possible).</td>
</tr>
<tr>
<td>- Pitting edema to knees on both sides</td>
<td></td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td>- Cannot stand</td>
<td></td>
<td>• Counsel on HIV testing.</td>
</tr>
<tr>
<td>- Sunken eyes</td>
<td></td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Weight loss &gt; 5 % or</td>
<td>SIGNIFICANT WEIGHT LOSS</td>
<td>• Treat any apparent infection.</td>
</tr>
<tr>
<td>• Reported weight loss or</td>
<td></td>
<td>• If diarrhoea, manage as p. 28-30.</td>
</tr>
<tr>
<td>• Loose clothing which used to fit</td>
<td></td>
<td>• Increase intake of energy and nutrient-rich food—counsel on nutrition.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider TB (send sputums if possible); excess alcohol; and substance abuse.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider diabetes mellitus if weight loss accompanied by polyuria or increased thirst (dipstick urine for glucose).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Counsel on HIV testing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow up in two weeks.</td>
</tr>
</tbody>
</table>

*Weight loss < 5 %.

<table>
<thead>
<tr>
<th>NO SIGNIFICANT WEIGHT LOSS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Advise on nutrition.</td>
<td></td>
</tr>
</tbody>
</table>

Use this table if pallor

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Severe palmar and conjunctival pallor;</td>
<td>SEVERE ANAEMIA OR OTHER SEVERE PROBLEM</td>
<td>• Refer to hospital.</td>
</tr>
<tr>
<td>- Any pallor with:</td>
<td></td>
<td>• If not able to refer, treat as below and follow up in one week.</td>
</tr>
<tr>
<td>- 30 or more breaths per minute or</td>
<td></td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td>- Breathless at rest;</td>
<td></td>
<td>• Consider ARV side effect (especially ZDV) or cotrimoxazole side effects. (See <em>Chronic HIV Care.</em>)</td>
</tr>
<tr>
<td>- Bleeding gums or petechiae; or</td>
<td></td>
<td>• Consider malaria if low immunity or increased exposure. (See p. 24.)</td>
</tr>
<tr>
<td>- Black stools or blood in stools.</td>
<td></td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Palmar or conjunctival pallor.</td>
<td>SOME ANAEMIA</td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ARV drugs, especially ZDV, can cause anaemia. (See <em>Chronic HIV Care.</em>)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider malaria if low immunity or increased exposure. (See p. 24.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Give twice daily iron/folate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Counsel on adherence.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Advise to eat locally available foods rich in iron.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Give albendazole if none in last 6 months.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If heavy menstrual periods—see p. 35.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow up in 1 month.</td>
</tr>
</tbody>
</table>
Look in the mouth of all patients and respond to any complaint of mouth or throat problem:

<table>
<thead>
<tr>
<th>If you see any abnormality or patient complains of a mouth or throat problem, <strong>ASK:</strong></th>
<th><strong>LOOK</strong></th>
</tr>
</thead>
</table>
| • 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? |

If patient has white or red patches:

Classify:

If mouth ulcer or gum problem, p. 22.

If tooth problem or jaw pain or swelling, p. 22.
If patient has white or red patches:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Not able to swallow</td>
<td>SEVERE OESOPHAGEAL THRUSH</td>
<td>• Refer to hospital.</td>
</tr>
<tr>
<td>• Pain or difficulty swallowing</td>
<td>OESOPHAGEAL THRUSH</td>
<td>• If not able to refer, give fluconazole.</td>
</tr>
<tr>
<td>• White patches in mouth and</td>
<td>ORAL THRUSH</td>
<td>• Give fluconazole.</td>
</tr>
<tr>
<td>• Can be scraped off</td>
<td></td>
<td>• Give oral care.</td>
</tr>
<tr>
<td>• White patches on side of tongue and</td>
<td>ORAL (HAIRY) LEUKOPLAKIA</td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td>• Cannot be scraped off and</td>
<td></td>
<td>• No treatment needed.</td>
</tr>
<tr>
<td>• Painless.</td>
<td></td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td>• Instruct in oral care.</td>
<td></td>
<td>• Instruct in oral care.</td>
</tr>
<tr>
<td>• Enlarged lymph node on neck and</td>
<td>STREPTOCOCCAL SORE THROAT</td>
<td>• Give benzathine penicillin.</td>
</tr>
<tr>
<td>• White exudate on throat.</td>
<td></td>
<td>• Soothe throat with a safe remedy.</td>
</tr>
<tr>
<td>• Only 1 or no signs in the above row present.</td>
<td>NON-STREP SORE THROAT</td>
<td>• Give paracetamol for pain.</td>
</tr>
</tbody>
</table>

Use this table if sore throat without mouth problem:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Not able to swallow or</td>
<td>Refer urgently to hospital.</td>
</tr>
<tr>
<td>• Abscess.</td>
<td>Give benzathine penicillin.</td>
</tr>
<tr>
<td>• Enlarged lymph node on neck and</td>
<td>Give benzathine penicillin.</td>
</tr>
<tr>
<td>• White exudate on throat.</td>
<td>Soothe throat with a safe remedy.</td>
</tr>
<tr>
<td>• Only 1 or no signs in the above row present.</td>
<td>Give paracetamol for pain.</td>
</tr>
<tr>
<td>• Soothe throat with a safe remedy.</td>
<td>Return if not better.</td>
</tr>
</tbody>
</table>
Use this table if mouth ulcer or gum problem:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Deep or extensive ulcers of mouth or gums or</td>
<td>SEVERE GUM/MOUTH INFECTION</td>
<td>• Refer urgently to hospital unless only palliative care planned.</td>
</tr>
<tr>
<td>• Not able to eat</td>
<td></td>
<td>• Trial aciclovir.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Start metronidazole if referral not possible or distant.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If on ARV therapy, this may be drug reaction. (See Chronic HIV Care.)</td>
</tr>
<tr>
<td>• Ulcers of mouth or gums.</td>
<td>GUM/MOUTH ULCERS</td>
<td>• Show patient/family how to clean with saline, peroxide or sodium bicarbonate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If lips or anterior gums, give aciclovir.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Instruct in oral care.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td>• Bleeding from gums (in absence of other bleeding or other symptoms)</td>
<td>GUM DISEASE</td>
<td>• If on ARV, 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.)</td>
</tr>
<tr>
<td>• Swollen gums</td>
<td></td>
<td>• See Palliative Care for pain relief.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow up in 7 days.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Constant pain with:</td>
<td>DENTAL ABSCESS</td>
<td>• If fever, give antibiotics.</td>
</tr>
<tr>
<td>- Swollen face or gum near tooth or</td>
<td></td>
<td>• Lance abscess or pull tooth.</td>
</tr>
<tr>
<td>- Gum bubble or</td>
<td></td>
<td>• Refer urgently to dental assistant if not able to do so.</td>
</tr>
<tr>
<td>• Tooth pain when tapped or moved.</td>
<td></td>
<td>• Consider sinusitis. (Do not pull teeth if this is cause.)</td>
</tr>
<tr>
<td>• Pain when eating hot or cold food or</td>
<td>TOOTH DECAY</td>
<td>• Place gauze with oil of clove.</td>
</tr>
<tr>
<td>• Visible tooth cavities or</td>
<td></td>
<td>• Refer to dentist for care or pull tooth.</td>
</tr>
<tr>
<td>• Loss of tooth substance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 reconstitution syndrome in the 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?

<table>
<thead>
<tr>
<th>IF YES, ASK:</th>
<th>LOOK AND FEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>• How long have you had a fever?</td>
<td>• Look at the patient’s neurological condition. Is the patient:</td>
</tr>
<tr>
<td>• Any other problem?</td>
<td>— Lethargic?</td>
</tr>
<tr>
<td>• What medications have you taken?</td>
<td>— Confused?</td>
</tr>
<tr>
<td></td>
<td>— Agitated?</td>
</tr>
<tr>
<td>Determine if antimalarial and for how long.</td>
<td>• Count the breaths in one minute. Use table on p.16 to determine if fast breathing.</td>
</tr>
<tr>
<td><strong>Decide malaria risk:</strong></td>
<td>— If fast breathing, is it deep?</td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>• Check if able to drink.</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>• Feel for stiff neck.</td>
</tr>
<tr>
<td><strong>No</strong></td>
<td>• Check if able to walk unaided.</td>
</tr>
<tr>
<td><strong>If woman of childbearing age:</strong></td>
<td>• Skin rash?</td>
</tr>
<tr>
<td>• Are you pregnant?</td>
<td>• 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.)</td>
</tr>
<tr>
<td>• Is an epidemic of malaria occurring?</td>
<td>• Do malaria dipstick or smear if available.</td>
</tr>
</tbody>
</table>
| • HIV clinical stage 3 or 4. | **Classify**

If low immunity (with malaria transmission):
• Pregnant.
• Child < 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.

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.

If no malaria transmission and
• No travel to area with malaria transmission.
### Use this table if fever with high malaria risk:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or more of the following signs:</td>
<td>VERY SEVERE</td>
<td>• Give IM quinine or artemether.</td>
</tr>
<tr>
<td>• Confusion, agitation, lethargy or</td>
<td>FEBRILE</td>
<td>• Give first dose IM antibiotics.</td>
</tr>
<tr>
<td>• Fast and deep breathing or</td>
<td>DISEASE</td>
<td>• Give glucose.</td>
</tr>
<tr>
<td>• Not able to walk unaided or</td>
<td></td>
<td>• Refer urgently to hospital.</td>
</tr>
<tr>
<td>• Not able to drink or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Stiff neck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Fever or history of fever</td>
<td>MALARIA</td>
<td>• Give appropriate oral antimalarial.</td>
</tr>
<tr>
<td>• Fever or history of fever and</td>
<td></td>
<td>• Determine whether adequate treatment already given with the first-line antimalarial within 1 week—if yes, an effective second-line antimalarial is required.</td>
</tr>
<tr>
<td>• No new rash and</td>
<td></td>
<td>• Look for other apparent cause.</td>
</tr>
<tr>
<td>• No other apparent cause of fever or</td>
<td></td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td>• Dipstick or smear positive for malaria</td>
<td></td>
<td>• If fever for 7 days or more, consider TB.</td>
</tr>
<tr>
<td>• Other apparent cause of fever or</td>
<td>FEVER</td>
<td>• Treat according to the apparent cause.</td>
</tr>
<tr>
<td>• New rash or</td>
<td>MALARIA</td>
<td>(Exception: Also give IM antimalarial if patient is classified as SEVERE PNEUMONIA.)</td>
</tr>
<tr>
<td>• Dipstick or smear negative for malaria</td>
<td></td>
<td>• Consider HIV related illness if unexplained fever for &gt; 30 days (p. 54).</td>
</tr>
<tr>
<td>• If no apparent cause and fever for 7 days or more, send sputums for TB and refer to hospital for assessment.</td>
<td></td>
<td>• Consider fever related to ARV use. (See Chronic HIV Care.)</td>
</tr>
</tbody>
</table>

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

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

• 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.
Use this table if fever with no malaria risk:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Confusion, agitation, lethargy or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Not able to drink or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Not able to walk unaided or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Stiff neck</td>
<td>VERY SEVERE FEBRILE DISEASE</td>
<td>• Give first dose IM antibiotics.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Give glucose.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Refer urgently to hospital.</td>
</tr>
<tr>
<td>• Fever for 7 days or more</td>
<td>PERSISTENT FEVER</td>
<td>• Treat according to apparent cause.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider TB. (Send sputums/refer.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If no apparent cause, refer to hospital for assessment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider HIV related illness if unexplained fever for &gt; 7 days (p. 54).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider fever related to ARV use. (See \textit{Chronic HIV Care}.)</td>
</tr>
<tr>
<td>• None of the above</td>
<td>SIMPLE FEVER</td>
<td>• Follow up in 2-3 days if fever persists.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Treat according to apparent cause.</td>
</tr>
</tbody>
</table>
If the patient has diarrhoea:

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

Classify all patients with diarrhoea for DEHYDRATION:

If diarrhoea for 14 days or more and no blood, p. 28.

And if blood in stool, p. 28.
Use this table in all patients with diarrhoea:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two of the following signs:</td>
<td>SEVERE DEHYDRATION</td>
<td>• If no other severe classification, give fluid for severe dehydration, (Plan C on p. 90) then reassess. (This patient may not require referral.)</td>
</tr>
<tr>
<td>• Lethargic or unconscious</td>
<td></td>
<td>Or, if another severe classification:</td>
</tr>
<tr>
<td>• Sunken eyes</td>
<td></td>
<td>• Refer URGENTLY to hospital after initial IV hydration or, if not possible, with frequent sips of ORS on the way.</td>
</tr>
<tr>
<td>• Not able to drink or drinking poorly</td>
<td></td>
<td>If there is cholera in your area, give appropriate antibiotic for cholera (according to sensitivity data).</td>
</tr>
<tr>
<td>• Skin pinch goes back very slowly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two of the following signs:</td>
<td>SOME DEHYDRATION</td>
<td>• Give fluid and food for some dehydration. (See Plan B on p. 89.)</td>
</tr>
<tr>
<td>• Sunken eyes</td>
<td></td>
<td>• Advise when to return immediately.</td>
</tr>
<tr>
<td>• Drinks eagerly, thirsty</td>
<td></td>
<td>• Follow up in 5 days if not improving.</td>
</tr>
<tr>
<td>• Skin pinch goes back slowly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough signs to classify as some or severe dehydration</td>
<td>NO DEHYDRATION</td>
<td>• Give fluid and food to treat diarrhoea at home. (See Plan A on p. 88.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Advise when to return immediately.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow up in 5 days if not improving.</td>
</tr>
</tbody>
</table>
Also use this table if diarrhoea for 14 days or more and no blood:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
</table>
| • Some or severe dehydration present | SEVERE PERSISTENT DIARRHOEA | • Give fluids for dehydration (Plan B or C on pp. 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. 54).  
• 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. |
If female patient complains of genito-urinary symptoms or lower abdominal pain:

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

<table>
<thead>
<tr>
<th>IF YES, ASK:</th>
<th>LOOK AND FEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>• What is the problem?</td>
<td>• Feel for abdominal tenderness.</td>
</tr>
<tr>
<td>• What medications are you taking?</td>
<td>If tenderness:</td>
</tr>
<tr>
<td>Do you have:</td>
<td>— Is there rebound?</td>
</tr>
<tr>
<td>• Burning or pain on urination?</td>
<td>— Is there guarding?</td>
</tr>
<tr>
<td>• Increased frequency of urination?</td>
<td>— Can you feel a mass?</td>
</tr>
<tr>
<td>• Sore in your genital area?</td>
<td>— Are bowel sounds present?</td>
</tr>
<tr>
<td>• An abnormal vaginal discharge?</td>
<td>— Measure temperature.</td>
</tr>
<tr>
<td>— If yes, does it itch?</td>
<td>— Measure pulse.</td>
</tr>
<tr>
<td>• Any bleeding on sexual contact?</td>
<td>• Perform external exam, look for large amount of vaginal discharge. (If only small amount white discharge in adolescent, this is usually normal.)</td>
</tr>
<tr>
<td>• Has your partner had any problem?</td>
<td>• Look for anal or genital ulcer.</td>
</tr>
<tr>
<td>— If partner is present, ask him about urethral discharge or sores.</td>
<td>If present, also use p. 38.</td>
</tr>
<tr>
<td>• When was your last menstrual period?</td>
<td>• Feel for enlarged inguinal lymph mode.</td>
</tr>
<tr>
<td>— If missed period: Do you think you might be pregnant?</td>
<td>If present, also use p. 38.</td>
</tr>
<tr>
<td>• Are you using contraception? If yes, which one?</td>
<td>• If you are able to do bimanual exam, feel for cervical motion tenderness.</td>
</tr>
<tr>
<td>• Are you interested in contraception? If yes, use Family Planning guidelines.</td>
<td>• If burning or pain on urination or complaining for back or flank pain:</td>
</tr>
<tr>
<td>• Do you have very painful menstrual cramps?</td>
<td>— Percuss flank for tenderness.</td>
</tr>
<tr>
<td>• Have you had very heavy or irregular periods?</td>
<td>— If not able to refer, give ampicillin and metronidazole for possible appendicitis.</td>
</tr>
<tr>
<td>— If yes:</td>
<td>• If suspect gonorrhoea/chlamydia infection based on any of these factors:</td>
</tr>
<tr>
<td>— Is the problem new?</td>
<td>If abnormal vaginal discharge, p. 34.</td>
</tr>
<tr>
<td>— How many days does your bleeding last?</td>
<td>Burning or pain on urination or flank pain, p. 34.</td>
</tr>
<tr>
<td>— How often do you change pads or tampons?</td>
<td>If menstrual pain or missed period or bleeding irregular or very heavy periods, p. 35.</td>
</tr>
</tbody>
</table>
Use this table in all women with lower abdominal pain (other than menstrual cramps):

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

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

| 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.                                     |
Use this table in all women with abnormal vaginal discharge:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Itching or Curd-like vaginal discharge</td>
<td>CANDIDA VAGINITIS</td>
<td>• Treat with nystatin.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Return if not resolved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consider HIV-related illness if recurrent (p. 54).</td>
</tr>
<tr>
<td>• None of the above</td>
<td>BACTERIAL VAGINOSIS (BV) OR TRICHOMEONIASIS</td>
<td>• Give metronidazole 2 gm at once</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Return if not resolved.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Flank pain or Fever.</td>
<td>KIDNEY INFECTION</td>
<td>If systemically ill:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Give appropriate IM antibiotics.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Refer URGENTLY to hospital.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Also refer if on indinavir (an ARV drug).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If not:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Give appropriate oral antibiotics.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow up next day.</td>
</tr>
<tr>
<td>• Burning or pain on urination and Frequency and No abnormal vaginal discharge</td>
<td>BLADDER INFECTION</td>
<td>• Give appropriate oral antibiotics.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increase fluids.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow up in 2 days if not improved.</td>
</tr>
<tr>
<td>• None of the above</td>
<td>BLADDER INFECTION UNLIKELY</td>
<td>• Treat for vaginitis if abnormal discharge.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Dipstick urine if possible.</td>
</tr>
</tbody>
</table>
Use this table in all women with **menstrual pain or missed period or bleeding irregular or very heavy period:**

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Irregular bleeding and &lt;br&gt;• Sexually active or &lt;br&gt;• Any bleeding in known pregnancy</td>
<td>PREGNANCY-RELATED BLEEDING OR ABORTION</td>
<td>• Follow guidelines for vaginal bleeding in pregnancy (e.g. IMPAC *).</td>
</tr>
<tr>
<td>• Missed period and &lt;br&gt;• Sexually active and &lt;br&gt;• No contraceptive implant.</td>
<td>POSSIBLE PREGNANCY</td>
<td>• Discuss plans for pregnancy. &lt;br&gt;• If she wishes to continue pregnancy, use guidelines for antenatal care (e.g. IMPAC *).</td>
</tr>
<tr>
<td>Not pregnant with: &lt;br&gt;• New, irregular menstrual bleeding or &lt;br&gt;• Soaks more than 6 pads each of 3 days (with or without pain)</td>
<td>IRREGULAR MENSES OR VERY HEAVY PERIODS (MENORRHAGIA)</td>
<td>• Consider contraceptive use and need (see <em>Family Planning</em> guidelines): &lt;br&gt;- If contraception desired, suggest oral contraceptive pill. &lt;br&gt;- 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. &lt;br&gt;• If on ART, consider withdrawal bleeding from drug interaction. (See <em>Chronic HIV Care</em> module.) &lt;br&gt;• Refer for gynaecological assessment if unusual or suspicious bleeding in women &gt; 35 years. &lt;br&gt;• If painful menstrual cramps or to reduce bleeding, give ibuprofen (not aspirin). &lt;br&gt;• Follow up in 2 weeks.</td>
</tr>
<tr>
<td>• Only painful menstrual cramps</td>
<td>DYSMENORRHOEA</td>
<td>• If she also wants contraception, suggest oral contraceptive pill. &lt;br&gt;• Give ibuprofen. (Aspirin or paracetamol may be substituted but are less effective.)</td>
</tr>
</tbody>
</table>

* 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.)

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

*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:**

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdominal tenderness with: • Fever &gt; 38°C or • Rebound or • Guarding or • Mass or • Absent bowel sounds or • Not able to drink or • Pulse &gt; 110</td>
<td>SEVERE OR SURGICAL ABDOMINAL PROBLEM</td>
<td>• Give patient nothing by mouth (NPO). • Insert IV. • Give appropriate IV/IM antibiotics. • Refer URGENTLY to hospital *.</td>
</tr>
<tr>
<td>• Abdomen soft and none of the above signs</td>
<td>GASTROENTERITIS OR OTHER GI PROBLEM</td>
<td>• If diarrhoea, see p. 28. • If constipation, advise remedies. • Return if not improved.</td>
</tr>
</tbody>
</table>

**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:

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

* For haemorrhoids/anal fissure management, see Palliative Care.

If anogenital ulcer:

If painful inguinal node:

If warts:
<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
</table>
| • Only vesicles present | **GENITAL HERPES** | • Keep clean and dry.  
• Give aciclovir, if available.  
• Promote/provide condoms.  
• Educate on STIs, HIV and risk reduction. Offer HIV testing, counselling and RPR testing.  
• Consider HIV-related illness if ulcerations present > one month (p. 54).  
• Follow up in 7 days if sores not fully healed, and 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 STIs, 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 STIs, 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 STIs, HIV and risk reduction. |
If patient has a **skin problem or lump:**

<table>
<thead>
<tr>
<th>IF YES, ASK:</th>
<th>LOOK AND FEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do you have a sore, a skin problem or a lump?</td>
<td>• Are there lesions? Where? How many? Are they infected (red, tender, warm, pus or crusts)?</td>
</tr>
<tr>
<td>If yes, where is it?</td>
<td>• Feel for fluctuance. Are they tender?</td>
</tr>
<tr>
<td>• Does it itch?</td>
<td>• Feel for lymph nodes. Are they tender?</td>
</tr>
<tr>
<td>• Does it hurt?</td>
<td>• Look/feel for lumps.</td>
</tr>
<tr>
<td>• Duration?</td>
<td></td>
</tr>
<tr>
<td>• Discharge?</td>
<td></td>
</tr>
<tr>
<td>• Do other members of the family have the same problem?</td>
<td></td>
</tr>
<tr>
<td>• Are you taking any medication?</td>
<td></td>
</tr>
</tbody>
</table>

**If on ARV therapy,** skin rash could be a serious side effect. See *Chronic HIV Care.*

- Is it infected? Consider this in all skin lesions.
- If painful inguinal node or ano-genital ulcer or vesicles, see p. 39.
- If dark lumps, consider HIV-related illness, see p. 54.
- 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:

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

**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):

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fever or&lt;br&gt; • Systemically unwell or&lt;br&gt; • Infection extends to muscle</td>
<td>SEVERE SOFT TISSUE OR MUSCLE INFECTION</td>
<td>• Refer to hospital.&lt;br&gt; • Start IV/IM antibiotics. (If not available, give oral cloxacillin.)&lt;br&gt; • Consider HIV-related illness.</td>
</tr>
<tr>
<td>• Size &gt; 4 cm or&lt;br&gt; • Red streaks or&lt;br&gt; • Tender nodes or&lt;br&gt; • Multiple abscesses</td>
<td>SOFT TISSUE INFECTION OR FOLLICULITIS</td>
<td>• Start cloxacillin.&lt;br&gt; • Drain pus if fluctuance.&lt;br&gt; • Elevate the limb.&lt;br&gt; • Follow up the next day.</td>
</tr>
<tr>
<td>• Only red, tender, warm, pus or crusts—none of the signs in the pink or yellow row</td>
<td>IMPETIGO OR MINOR ABSCESS</td>
<td>• Clean sores with antiseptic.&lt;br&gt; • Drain pus if fluctuance.&lt;br&gt; • Follow up in 2 days.</td>
</tr>
</tbody>
</table>
Use this table if itching skin problems:

<table>
<thead>
<tr>
<th>Scabies</th>
<th>Papular itching rash (prurigo)</th>
<th>Eczema</th>
<th>Ringworm (tinea)</th>
<th>Dry itchy skin (xerosis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rash and excoriations on torso; burrows in webspace and wrist; face spared.</td>
<td>Itching rash with small papules and scratch marks. Dark spots with pale centers.</td>
<td>Wet, oozing sores or excoriated, thick patches.</td>
<td>Pale, round, bald scaling patches on scalp or round patches with thick edge on body or web of feet.</td>
<td>Dry and rough skin, sometimes with fine cracks.</td>
</tr>
</tbody>
</table>

- Manage with benzyl benzoate (p.86).
- Treat itching.
- If persistent, consider HIV-related illness (p. 54).

- Treat itching.
- Give chlorpheniramine 4 mg every 8 hours or promethazine hydrochloride 25 mg at night.
- 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 chlorpheniramine or promethazine.
- 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.*
Use this table if blister, sore or pustules:

<table>
<thead>
<tr>
<th>Contact dermatitis</th>
<th>Herpes zoster</th>
<th>Herpes simplex</th>
<th>Drug reaction</th>
<th>Impetigo or folliculitis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited to area in contact with problem substance. Early: blistering and red. Later: thick, dry, scaly.</td>
<td>Vesicles in 1 area on 1 side of body plus intense pain; or scars plus shooting pain.</td>
<td>Vesicular lesion or sores, also involving lips and/or mouth—see page 22.</td>
<td>Generalized red, widespread with small bumps or blisters; or 1 or more dark skin areas (fixed drug reaction).</td>
<td>Red, tender, warm crusts or small lesions.</td>
</tr>
<tr>
<td>• Hydrocortisone 1% ointment or cream. • If severe reaction with blisters, exudate or oedema, give prednisone. • Find and remove cause.</td>
<td>• 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 amitriptyline. • 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.</td>
<td>• If ulceration for &gt; 30 days, consider HIV related illness. • If first or severe ulceration, give aciclovir.</td>
<td>• Stop medications. • Give chlorpheniramine or promethazine HCl. • If peeling rash with involvement of eyes and/or mouth—refer urgently to hospital. • Give prednisione if severe reaction or any difficulty breathing.</td>
<td>See infection table on p. 41.</td>
</tr>
</tbody>
</table>

Is it infected? Ask this in all skin lesions. If yes, also use the infection classification table on page 41.
Use this table if skin rash with no or few symptoms:

<table>
<thead>
<tr>
<th>No or few symptoms</th>
<th>Leprosy</th>
<th>Seborrhoea</th>
<th>Psoriasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin patch(es) with:</td>
<td>• No sensation to light touch, heat or pain.</td>
<td>Greasy scales and redness, on central face, scalp, body folds, and chest.</td>
<td>Red, thickened and scaling patches (may itch in some). Often on knees and elbows, scalp and hairline, lower back.</td>
</tr>
<tr>
<td>• Any location.</td>
<td>• Pale or reddish or copper-colored.</td>
<td>• Place of origin (see Chronic Care module or other leprosy guidelines).</td>
<td>• Coal tar ointment 5% in salicylic acid 2%.</td>
</tr>
<tr>
<td>• Flat or raised or nodular.</td>
<td>• Chronic (&gt; 6 months).</td>
<td>• Expose to sunlight 30-60 minutes/day.</td>
<td>• Expose to sunlight 30-60 minutes/day.</td>
</tr>
<tr>
<td>• Not red or itchy or scaling.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 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).

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

<table>
<thead>
<tr>
<th>IF YES, ASK:</th>
<th>LOOK AND FEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Do you have weakness in any part of your body?</td>
<td>Assess for focal neurological problems:</td>
</tr>
<tr>
<td>- Have you had an accident or injury involving your head recently?</td>
<td>• Look at face-flaccid on one side?</td>
</tr>
<tr>
<td>- Have you had a convulsion?</td>
<td>• Problem walking?</td>
</tr>
<tr>
<td>- Assess alcohol/drug use.</td>
<td>• Problem talking?</td>
</tr>
<tr>
<td>- Are you taking any medications?</td>
<td>• Problem moving eyes?</td>
</tr>
<tr>
<td>- Do you feel like your brain/mind is working more slowly?</td>
<td>• Flaccid arms or legs?</td>
</tr>
<tr>
<td>- Do you have trouble keeping your attention on any activity for long?</td>
<td>- If yes, loss of strength?</td>
</tr>
<tr>
<td>- Do you forget things that happened recently?</td>
<td>• Feel for stiff neck.</td>
</tr>
<tr>
<td>- Ask family:</td>
<td>• Measure BP.</td>
</tr>
<tr>
<td>- Has the patient’s behaviour changed?</td>
<td>• Is patient confused?</td>
</tr>
<tr>
<td>- Is there a memory problem?</td>
<td>If memory problem by patient or family report, tell patient you want to check his/her memory:</td>
</tr>
<tr>
<td>- Is patient confused?</td>
<td>- Name 3 unrelated objects, clearly and slowly.</td>
</tr>
<tr>
<td></td>
<td>Ask patient to repeat them:</td>
</tr>
<tr>
<td></td>
<td>- Can he/she repeat them?</td>
</tr>
<tr>
<td></td>
<td>(registration problem?)</td>
</tr>
<tr>
<td></td>
<td>If yes, wait 5 minutes and again ask, &quot;Can you recall the 3 objects?&quot; (recall problem?)</td>
</tr>
<tr>
<td><strong>If confused:</strong></td>
<td>If confused, test strength.</td>
</tr>
<tr>
<td>- When did it start?</td>
<td>If headache, feel for sinus tenderness.</td>
</tr>
<tr>
<td>- Determine if patient is oriented to place and time.</td>
<td>If confused or disoriented, look for physical cause, alcohol or drug medication toxicity, or withdrawal.</td>
</tr>
<tr>
<td><strong>If headache:</strong></td>
<td></td>
</tr>
<tr>
<td>- For how long?</td>
<td></td>
</tr>
<tr>
<td>- Visual defects?</td>
<td></td>
</tr>
<tr>
<td>- Vomiting?</td>
<td></td>
</tr>
<tr>
<td>- On one side?</td>
<td></td>
</tr>
<tr>
<td>- Prior diagnosis of migraine?</td>
<td></td>
</tr>
<tr>
<td>- In HIV patient, new or unusual headache?</td>
<td></td>
</tr>
</tbody>
</table>

If delusions or bizarre thoughts, see p. 50.

If acute headache or loss of body function:

If painful feet or legs:

If cognitive problems, see p. 48.
Use this table if headache or neurological problem:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Loss of body functions or</td>
<td>SERIOUS NEUROLOGICAL PROBLEM</td>
<td>• Refer urgently to hospital.</td>
</tr>
<tr>
<td>• Focal neurological signs or</td>
<td></td>
<td>• If stiff neck or fever, give IM antibiotics and IM antimalarial.</td>
</tr>
<tr>
<td>• Stiff neck or</td>
<td></td>
<td>• If flaccid paralysis in adolescent &lt; 15 years, report urgently to EPI programme.</td>
</tr>
<tr>
<td>• Acute confusion or</td>
<td></td>
<td>• If recent convulsion, have diazepam available during referral.</td>
</tr>
<tr>
<td>• Recent head trauma or</td>
<td></td>
<td>• Consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td>• Recent convulsion or way</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Behavioural changes or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Diastolic BP &gt; 120 or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Prolonged headache (&gt; 2 weeks) or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• In known HIV patient:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Any new unusual headache or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Persistent headache more than 1 week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Tenderness over sinuses</td>
<td>SINUSITIS</td>
<td>• Give appropriate oral antibiotics.</td>
</tr>
<tr>
<td>• Repeated headaches with</td>
<td></td>
<td>• Give ibuprofen.</td>
</tr>
<tr>
<td>- Visual defects or</td>
<td></td>
<td>• If recurrent, consider HIV-related illness (p. 54).</td>
</tr>
<tr>
<td>- Vomiting or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- One-sided or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Migraine diagnosis</td>
<td>MIGRAINE</td>
<td>• Give ibuprofen and observe response.</td>
</tr>
<tr>
<td>• None of the above</td>
<td>TENSION HEADACHE</td>
<td>• If more pain control is needed, see Palliative Care guidelines on acute pain.</td>
</tr>
<tr>
<td>• Painful burning or numb or cold feeling in feet or lower legs</td>
<td>PAINFUL LEG NEUROPATHY</td>
<td>• Give paracetamol.</td>
</tr>
<tr>
<td>• If on INH, give pyridoxine. If chronic diarrhoea, try ORS.</td>
<td></td>
<td>• Check vision—try glasses if …</td>
</tr>
<tr>
<td>• Consider HIV-related illness (p. 54), syphilis (do RPR, p.116); diabetes (check sugar); ARV side effect—see Chronic HIV Care.</td>
<td></td>
<td>• Suggest neck massage.</td>
</tr>
<tr>
<td>• Refer for further assessment if cause unclear.</td>
<td></td>
<td>• Reduce: stress, alcohol and drug use.</td>
</tr>
<tr>
<td>• Treat with low-dose amitriptyline (p. 82).</td>
<td></td>
<td>• Refer if headache more than 2 weeks.</td>
</tr>
<tr>
<td>• If on ARV drugs, this may be a side effect. (See Chronic HIV Care.)</td>
<td></td>
<td>• If recurrent, consider HIV-related illness (p. 54).</td>
</tr>
</tbody>
</table>

Use this table if painful leg neuropathy:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>PAINFUL LEG NEUROPATHY</th>
</tr>
</thead>
<tbody>
<tr>
<td>• If on INH, give pyridoxine. If chronic diarrhoea, try ORS.</td>
<td></td>
</tr>
<tr>
<td>• Consider HIV-related illness (p. 54), syphilis (do RPR, p.116); diabetes (check sugar); ARV side effect—see Chronic HIV Care.</td>
<td></td>
</tr>
<tr>
<td>• Refer for further assessment if cause unclear.</td>
<td></td>
</tr>
<tr>
<td>• Treat with low-dose amitriptyline (p. 82).</td>
<td></td>
</tr>
<tr>
<td>• Follow up in 3 weeks.</td>
<td></td>
</tr>
</tbody>
</table>
Use if cognitive problems—problems thinking or remembering or disorientation:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
</table>
| • 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 (p. 52) 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. 83). |

No reduced level of consciousness with:  
• Serious memory problems or  
• Slowed thinking with trouble keeping attention or  
• Misplaces important objects or  
• Loss of orientation  
| DEMENTIA | • Consult or 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. |
If patient has a mental problem, looks depressed or anxious, sad, fatigued, alcohol problem or recurrent multiple problems:

<table>
<thead>
<tr>
<th>IF YES, ASK:</th>
<th>LOOK AND FEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>How are you feeling? (Listen without interrupting.) Ask:</td>
<td>• Does patient appear:</td>
</tr>
<tr>
<td>— Do you feel sad or depressed?</td>
<td>— Agitated</td>
</tr>
<tr>
<td>— Have lost interest/pleasure in things you usually enjoy?</td>
<td>— Restless</td>
</tr>
<tr>
<td>— Do you have less energy than usual?</td>
<td>— Depressed</td>
</tr>
<tr>
<td>If yes to any of the above three questions, ask for these depression symptoms:</td>
<td>• Is patient oriented to time and place?</td>
</tr>
<tr>
<td>— disturbed sleep</td>
<td>• Is patient confused?</td>
</tr>
<tr>
<td>— appetite loss (or increase)</td>
<td>• Does the patient express bizarre thoughts? If yes,</td>
</tr>
<tr>
<td>— poor concentration</td>
<td>— Does the patient express incredible beliefs (delusions) or see or hear things others cannot (hallucinations)?</td>
</tr>
<tr>
<td>— moves slowly</td>
<td>• Is the patient intoxicated with alcohol or on drugs which might cause these problems?</td>
</tr>
<tr>
<td>— decreased sex drive</td>
<td>• Does patient have a tremor?</td>
</tr>
<tr>
<td>— loss of self-confidence or esteem</td>
<td>• Does patient appear:</td>
</tr>
<tr>
<td>— thoughts of suicide or death</td>
<td>— Agitated</td>
</tr>
<tr>
<td>— guilty feelings</td>
<td>— Restless</td>
</tr>
<tr>
<td>Have you had bad news for yourself or your family?</td>
<td>• Is patient oriented to time and place?</td>
</tr>
<tr>
<td>If suicidal thoughts, assess the risk:</td>
<td>• Is patient confused?</td>
</tr>
<tr>
<td>— Do you have a plan?</td>
<td>• Does the patient express incredible beliefs (delusions) or see or hear things others cannot (hallucinations)?</td>
</tr>
<tr>
<td>— Determine if patient has the means.</td>
<td>• Is the patient intoxicated with alcohol or on drugs which might cause these problems?</td>
</tr>
<tr>
<td>— Find out if there is a fixed time-frame.</td>
<td>• Does patient have a tremor?</td>
</tr>
<tr>
<td>— Is the family aware?</td>
<td>If fatigue or loss of energy, consider medical causes of fatigue such as anaemia (p. 18), infection, medications, lack of exercise, sleep problems, fear of illness, HIV disease progression.</td>
</tr>
<tr>
<td>— Has there been an attempt? How? Potentially lethal?</td>
<td>If confusion or cognitive problems, see p. 48.</td>
</tr>
<tr>
<td>Do you drink alcohol? If yes:</td>
<td>If HIV patient, consider underlying medical problem or drug toxicity for any new change in mental status.</td>
</tr>
<tr>
<td>— Calculate drinks per week over last 3 months.</td>
<td></td>
</tr>
<tr>
<td>— Have you been drunk more than 2 times in past year?</td>
<td></td>
</tr>
</tbody>
</table>

If sad or loss of interest or decreased energy:

If bizarre thoughts:

If tense, anxious, or excess worrying, p. 52.

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

If HIV patient, consider underlying medical problem or drug toxicity for any new change in mental status.
Use this table if sad or loss of interest or decreased energy:

<table>
<thead>
<tr>
<th>SIGNS:</th>
<th>CLASSIFY AS:</th>
<th>TREATMENTS:</th>
</tr>
</thead>
</table>
| • 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 |
| • Five 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 amitryptyline (p. 82)  
• Educate patient and family about medication  
• Refer for counselling if available or provide basic counselling to counter depression (see p. 106-107)  
• 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 amitryptyline 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 diazepam 5 mg or amitryptiline 25 mg at night for one week only. |

Use this table in all with bizarre thoughts:

<table>
<thead>
<tr>
<th>POSSIBLE PSYCHOSIS</th>
<th>TREATMENTS:</th>
</tr>
</thead>
</table>
| • Delusions  
• Hallucinations | • Exclude alcohol intoxication or drug toxicity or ARV side effect (especially EFV)  
• Consider infection and other causes—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:**
- Sudden episodes of extreme anxiety or
- Anxiety in specific situations or
- Exaggerated worry or
- Inability to relax or
- Restlessness

---
**CLASSIFY AS:**
ANXIETY DISORDER

---
**TREATMENTS:**
- Counsel on managing anxiety according to specific situation.
- Teach patients slow breathing and progressive relaxation.
- If severe anxiety, consider short-term use of diazepam (up to 2 weeks only). Refer if severe anxiety > 1 month.
- 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
- Anxiety
- Hallucinations

---
**SEVERE WITHDRAWAL SIGNS**

---
**TREATMENTS:**
- Refer to a treatment center or hospital.
- Give diazepam for withdrawal if not able to refer; monitor daily.
- Give thiamine to all, and glucose if poor nutrition.

---
**HAZARDOUS ALCOHOL USE**

---
**TREATMENTS:**
- 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, and/or
- 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)
  - 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 97.
- 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!
## Prevention: Screening and Prophylaxis

<table>
<thead>
<tr>
<th>ASSESS</th>
<th>TREAT AND ADVISE</th>
</tr>
</thead>
</table>
| • Ask whether patient and family are sleeping under a bednet.  
  - If yes, has it been dipped in insecticide? | • Encourage use of insecticide-treated bednets.        |
| • Is patient sexually active? (For adolescent: Have you started having sex yet? See next page.)  
  • 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. 97), and  
    - 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 is smoking: educate on hazards, help to say no. If not, provide positive reinforcement. |
| • Does patient drink alcohol? If yes, calculate drinks per 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 Brief Interventions: Hazardous Alcohol.)  
  • If adolescent is drinking: educate on hazards, help to say no. If not, provide positive reinforcement. |
| • 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. |
### Special Prevention for Adolescents

**ASSESS**

- Is patient sexually active?
- **If yes—sexually active**, also ask:
  - does the patient use condoms?
  - was the patient forced to have sex?
  - does the patient consider him/herself to be at risk of HIV, other STIs or pregnancy?
  - does patient know his/her HIV status?

Young people may know very little about HIV and how it is transmitted. Be sure to check their understanding, especially about how to protect themselves.

**TREAT AND ADVISE**

- **If no**, encourage the patient to delay initiation of penetrative vaginal, anal or oral sexual intercourse, and to avoid anything that brings him/her into contact with his/her partner’s semen or vaginal secretions.
  - Advise to explore sexual pleasure in other forms of intimacy. Find non-sexual activities that you and your partner enjoy.

- **If yes—sexually active**, provide information and counselling about the prevention of HIV, STIs and pregnancy, **emphasizing that condoms are dual protection for pregnancy and STIs/HIV**.
  - Advise the patient to reduce the number of partners or, better yet, be faithful to one.
  - Advise to use condoms correctly and consistently every time that s/he has sexual intercourse.

**Demonstrate how to use a condom.**

- Discuss appropriate ways of saying no to unwanted sex and negotiating condom use. Reinforce skills to say no. (Refer to an appropriate organization or group if s/he does not have the skills.) Make sure girls understand that they cannot tell by looking at someone if the person is infected with HIV and that HIV risk increases with the age of the man.
- Offer HIV testing and counselling. (See p. 98-99.)

- **If unprotected sexual intercourse**, advise on emergency contraception within 72 hours and prevention and treatment of STIs.
- If patient has been forced to have sex or raped, see **Quick Check** module.
Always use condoms

How you should use condoms:

1. Open condoms and check expiry date.
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.
5. Knot condom to avoid spilling sperm. Throw used condom in pit latrine or burn it.

Condoms should be put on at the beginning of intercourse, not just before ejaculation.
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:
- If 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)

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

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 in men

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.

Follow-up gonorrhoea/chlamydia infection in women

- Make sure treatment for both GC and chlamydia was given and that patient adhered to treatment. If not, treat again.
- If abnormal discharge or bleeding on sexual contact continues after re-treatment, refer for gynaecological assessment. Persistence of these symptoms after repeated treatment can be an early sign of cervical cancer, especially in women > 35 years.

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.

For all patients

- Promote and provide condoms.
- Offer HIV testing and counselling, p. 98.
- Educate on STIs, HIV and risk reduction.
Follow-up bladder infection or menstrual problem

Consider STIs 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 STIs, 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.
• If discharge persists after re-treatment, refer for gynaecological assessment.
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.

<table>
<thead>
<tr>
<th>Adolescent or adult</th>
<th>BENZATHINE PENICILLIN IM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Add 5 ml sterile water to vial containing 1.2 million units = 1.2 million units/6 ml total volume</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Primary syphilis</th>
<th>Prophylaxis: RF/RHD</th>
<th>Suspect streptococcal pharyngitis</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 ml (6 ml in each buttock)</td>
<td>6 ml every 4 weeks</td>
<td>6 ml once</td>
<td></td>
</tr>
</tbody>
</table>

**Give glucose**

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

<table>
<thead>
<tr>
<th>GLUCOSE SOLUTION</th>
<th>50% GLUCOSE SOLUTION</th>
<th>25% GLUCOSE SOLUTION</th>
<th>10% GLUCOSE SOLUTION (5 ml/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent or Adult</td>
<td>25 - 50 ml</td>
<td>50 - 100 ml</td>
<td>125 - 250 ml</td>
</tr>
</tbody>
</table>

* 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 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 3 times daily (children 10 mg/kg) to complete 7 days of treatment.

<table>
<thead>
<tr>
<th>WEIGHT</th>
<th>QUININE* IM (Loading Dose)</th>
<th>ARTEMETHER (Loading Dose)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-39 kg</td>
<td>150 mg/ml * (in 2 ml ampoules)</td>
<td>300 mg/ml * (in 2 ml ampoules)</td>
</tr>
<tr>
<td></td>
<td>4 ml</td>
<td>2 ml</td>
</tr>
<tr>
<td>40-49 kg</td>
<td>5.4 ml</td>
<td>2.6 ml</td>
</tr>
<tr>
<td>50-59 kg</td>
<td>7 ml</td>
<td>3.4 ml</td>
</tr>
<tr>
<td>60-69 kg</td>
<td>8 ml</td>
<td>4 ml</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>DIAZEPAM RECTALLY</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 mg/2 ml solution</td>
<td>0.2-0.3 mg/kg</td>
</tr>
<tr>
<td>0.5 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Initial dose</td>
<td>4 ml (20 mg)</td>
</tr>
<tr>
<td>Second dose</td>
<td>2 ml (10 mg)</td>
</tr>
</tbody>
</table>

- 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

<table>
<thead>
<tr>
<th>Classification</th>
<th>Antibiotic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Severe Pneumonia, Very Severe Disease</strong></td>
<td><strong>First-line antibiotic:</strong></td>
</tr>
<tr>
<td></td>
<td>________________________________________________________________________</td>
</tr>
<tr>
<td></td>
<td>(Common choice: benzylpenicillin plus gentamicin)</td>
</tr>
<tr>
<td></td>
<td><strong>Second-line antibiotic:</strong></td>
</tr>
<tr>
<td></td>
<td>________________________________________________________________________</td>
</tr>
<tr>
<td></td>
<td>(Common choice: chloramphenicol)</td>
</tr>
<tr>
<td><strong>Very Severe Febrile Disease or suspect sepsis</strong></td>
<td><strong>First-line antibiotic:</strong></td>
</tr>
<tr>
<td></td>
<td>________________________________________________________________________</td>
</tr>
<tr>
<td></td>
<td>(Common choice: chloramphenicol)</td>
</tr>
<tr>
<td></td>
<td><strong>Second-line antibiotic:</strong></td>
</tr>
<tr>
<td></td>
<td>________________________________________________________________________</td>
</tr>
<tr>
<td></td>
<td>(Common choice: benzylpenicillin plus gentamicin; or ceftriaxone)</td>
</tr>
<tr>
<td><strong>Severe soft tissue, muscle, or bone infection or suspected Staphylococcal infection</strong></td>
<td><strong>First-line antibiotic:</strong></td>
</tr>
<tr>
<td></td>
<td>________________________________________________________________________</td>
</tr>
<tr>
<td></td>
<td>(Common choice: cloxacinil)</td>
</tr>
<tr>
<td></td>
<td><strong>Second-line antibiotic:</strong></td>
</tr>
<tr>
<td></td>
<td>________________________________________________________________________</td>
</tr>
<tr>
<td></td>
<td>(Common choice: )</td>
</tr>
<tr>
<td><strong>Severe or surgical abdomen or kidney infection</strong></td>
<td><strong>First-line antibiotic:</strong></td>
</tr>
<tr>
<td></td>
<td>________________________________________________________________________</td>
</tr>
<tr>
<td></td>
<td>(Common choice: ampicillin plus gentamicin plus metronidazole)</td>
</tr>
<tr>
<td></td>
<td><strong>Second-line antibiotic:</strong></td>
</tr>
<tr>
<td></td>
<td>________________________________________________________________________</td>
</tr>
<tr>
<td></td>
<td>(Common choice: ciprofloxacin plus metronidazole)</td>
</tr>
</tbody>
</table>
## IV/IM antibiotic dosing

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

<table>
<thead>
<tr>
<th>WEIGHT</th>
<th>CHLORAMPHENICOL</th>
<th>CLOXACILLIN</th>
<th>AMPICILLIN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dose: 40 mg per kg</td>
<td>Dose: 25-50mg/kg</td>
<td>Dose: 50mg/kg</td>
</tr>
<tr>
<td>Add 5.0 ml sterile water to vial containing 1000 mg = 5.6 ml at 180 mg/ml</td>
<td>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</td>
<td>To a vial of 500 mg add 2.1 ml sterile water = 2.5 ml for 500 mg</td>
<td></td>
</tr>
<tr>
<td>30-39 kg</td>
<td>8 ml</td>
<td>6-12 ml IM (20-40 ml IV)</td>
<td>10ml</td>
</tr>
<tr>
<td>40-49 kg</td>
<td>10 ml</td>
<td>7.5-15 ml (25-50 ml IV)</td>
<td>12 ml</td>
</tr>
<tr>
<td>50-59 kg</td>
<td>12 ml</td>
<td>9-18 ml IM (30-60 ml IV)</td>
<td>15 ml</td>
</tr>
<tr>
<td>60-69 kg</td>
<td>14 ml</td>
<td>10-20 ml IM (35-70 IV)</td>
<td>18ml</td>
</tr>
<tr>
<td>If not able to refer: Give above dose IV/IM every 12 hours</td>
<td>If not able to refer: Give above dose IV/IM every 4-6 hours</td>
<td>If not able to refer: Give above dose IV/IM every 6 hours</td>
<td></td>
</tr>
</tbody>
</table>
**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 module 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 1 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 s/he 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
<table>
<thead>
<tr>
<th>AGE or WEIGHT</th>
<th>COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) Give 2 times daily for 5 days</th>
<th>AMOXICILLIN Give 3 daily for 5 days</th>
<th>CLOXACILLIN Give 3 times daily for 5 days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>ADULT TABLET</strong> 80 mg trimethoprim + 400 mg sulphamethoxazole</td>
<td><strong>TABLET</strong> 500 mg</td>
<td><strong>TABLET</strong> 500 mg</td>
</tr>
<tr>
<td>5 years to</td>
<td>1</td>
<td>1/2</td>
<td>1</td>
</tr>
<tr>
<td>13 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(19-50 kg)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 years</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>or more (&gt;</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>50 kg)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE or WEIGHT</th>
<th>DOXYCYCLINE * Give 2 times daily for 5 days (avoid doxycycline in young adolescents)</th>
<th>ERYTHROMYCIN Give 4 times daily for 5 days</th>
<th>PEN VK Give 3 times daily for 5 days</th>
<th>CIPROFLOXACIN Give 2 times daily for 7 to 14 days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>TABLET</strong> 100 mg</td>
<td><strong>TABLET</strong> 500 mg</td>
<td><strong>TABLET</strong> 250 mg</td>
<td><strong>TABLET</strong> 500 mg</td>
</tr>
<tr>
<td>5 years to</td>
<td>1</td>
<td>1/2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>13 years</td>
<td></td>
<td></td>
<td>1</td>
<td>1/2</td>
</tr>
<tr>
<td>(19-50 kg)</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>14 years</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>or more (&gt;</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>50 kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Avoid doxycycline in young 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)

<table>
<thead>
<tr>
<th>SAFE FOR USE IN PREGNANCY:</th>
<th>125 mg IM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceftriaxone</td>
<td></td>
</tr>
<tr>
<td>Cefixime 400 mg</td>
<td>1 tablet in clinic</td>
</tr>
<tr>
<td>Spectinomycin</td>
<td>2 grams IM</td>
</tr>
<tr>
<td>Kanamycin</td>
<td>2 grams IM</td>
</tr>
<tr>
<td>NOT SAFE FOR USE IN PREGNANCY:</td>
<td></td>
</tr>
<tr>
<td>Ciprofloxacin 250 mg</td>
<td>2 tablets in clinic</td>
</tr>
<tr>
<td>500 mg</td>
<td>1 tablet in clinic</td>
</tr>
</tbody>
</table>
**Give metronidazole**

Advise to avoid alcohol when taking metronidazole

- For bacterial vaginosis or trichomoniasis

<table>
<thead>
<tr>
<th>Weight</th>
<th>METRONIDAZOLE 250 mg tablet twice daily for seven days</th>
<th>METRONIDAZOLE 500 mg tablet twice daily for 7 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent or adult</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

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

**Antibiotics for chlamydia**

<table>
<thead>
<tr>
<th>SAFE FOR USE IN PREGNANCY:</th>
<th>METRONIDAZOLE 250 mg tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amoxycillin 500 mg</td>
<td>1 tablet 3 times daily for 7 days</td>
</tr>
<tr>
<td>250 mg</td>
<td>2 tablets 3 times daily for 7 days</td>
</tr>
<tr>
<td>Azithromycin 250 mg</td>
<td>4 capsules in clinic</td>
</tr>
<tr>
<td>Erythromycin base 250 mg</td>
<td>2 tablets 4 times daily for 7 days</td>
</tr>
<tr>
<td>base 500 mg</td>
<td>1 tablet 4 times daily for 7 days</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOT SAFE FOR USE IN PREGNANCY OR DURING LACTATION:</th>
<th>METRONIDAZOLE 250 mg tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doxycyline 100 mg</td>
<td>1 tablet 2 times daily for 10 days</td>
</tr>
<tr>
<td>Tetracycline 500 mg</td>
<td>1 tablet daily for 10 days</td>
</tr>
</tbody>
</table>
Give appropriate oral antimalarial

First-line antimalarial: ______________________
Second-line antimalarial: ____________________

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

<table>
<thead>
<tr>
<th>AGE or WEIGHT</th>
<th>SULFADOXINE/ PYRIMETHAMINE</th>
<th>ARTESUNATE + AMODIAQUINE</th>
<th>ARTEMETHER/ LUMEFANTRINE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Give single dose in clinic</td>
<td>Daily for 3 days</td>
<td>Twice daily for 3 days</td>
</tr>
<tr>
<td></td>
<td>TABLET (500 mg sulfadoxine + 25 mg pyrimethamine)</td>
<td>TABLET (50 mg rtesunate + TABLET 150 mg base amodiaquine)</td>
<td>TABLET (20 mg artemether + 120 mg lumefantrine)</td>
</tr>
<tr>
<td>10-13 yr or small or wasted adult (36-50 kg)</td>
<td>2 ½</td>
<td>3 + 3</td>
<td>4</td>
</tr>
<tr>
<td>14 yr + (&gt; 50 kg)</td>
<td>3</td>
<td>4 + 4</td>
<td>4</td>
</tr>
</tbody>
</table>

Give paracetamol for pain

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

<table>
<thead>
<tr>
<th>Adolescent or Adult</th>
<th>paracetamol 500 mg tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-50 kg or more</td>
<td>1 tablet</td>
</tr>
<tr>
<td>50 kg or more</td>
<td>1-2 tablets</td>
</tr>
</tbody>
</table>
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 under control, where prednisone is in the treatment plan, give prednisolone or prednisone.
   Give high dose for several days, then taper, and then stop.
   COPD may require longer treatment at low level. (See Practical Approach to Lung Health—PAL Guidelines.)

<table>
<thead>
<tr>
<th>prednisolone or prednisone 5 mg tablets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
</tr>
<tr>
<td>ADULT</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>
Give amitriptyline

Useful for depression, insomnia and for some neuropathic pain. Helps relieve pain when used with opioids and for sleep, in a low dose.

❖ For depression:
   Educate about the drug (the 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 (dry mouth, constipation, difficulty urinating and dizziness) usually fade in 7-10 days.
   • Will need to continue for 6 months. Do not stop abruptly.
   • If suicide risk, give only one 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 elderly or HIV patients, warn to stand up slowly (risk of orthostatic hypotension).
   • HIV clinical stage 3 or 4 patients are very sensitive to side effects of amitriptyline.

<table>
<thead>
<tr>
<th>Weight</th>
<th>Starting dose</th>
<th>After 1 week, increase to:</th>
<th>After 2 weeks, increase to:</th>
<th>2 weeks later if inadequate response</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 40 kg</td>
<td>0.5-1 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 kg or more</td>
<td>50 mg pm</td>
<td>75 mg pm</td>
<td>25 mg am 75 mg pm</td>
<td>50 mg am 100 mg pm</td>
</tr>
<tr>
<td>Elderly or HIV stage 3 or 4 patient</td>
<td>25 mg pm</td>
<td>25 mg am 50 mg pm</td>
<td>25 mg am 50 mg pm</td>
<td></td>
</tr>
</tbody>
</table>

❖ For painful foot/leg neuropathy:
   Low-dose amitriptyline—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.
Give haloperidol

Indications:
psychosis, acute severe agitation, or danger to self or others.
Make sure any underlying medical condition is also treated.

- If medically healthy:
  haloperidol 5 mg once or twice daily.

- If medically ill, elderly or HIV clinical stage 3 or 4:
  haloperidol 0.5 to 1 mg once or twice daily (orally or IM).

- In uncontrollable HIV clinical stage 3 or 4 patient:
  haloperidol 2 mg and, if no response in one hour, add haloperidol 2 mg.
  Then, if still not adequately sedated, add diazepam 2 to 5 mg orally.

Side effect of haloperidol: stiffness, tremor, muscle spasm and motor restlessness. (HIV positive patients are especially sensitive to the side-effects of haloperidol.)

If acute severe muscle spasm, especially of the mouth, neck or eyes:
- Maintain airway.
- Stop haloperidol.
- Give diazepam 5 mg rectally.
- Refer.
- If available, give biperiden 5 mg IM.
**Treat with nystatin**

- **Treat oral thrush with nystatin:**
  - Suck on nystatin uncoated lozenges twice daily or apply nystatin suspension five times daily (after each meal and between meals) for seven 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 five times daily for seven days or
  400 mg three times daily for seven days.

- **Recurrent infection:**
  As above except for five days only.

**Give fluconazole**

- 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.

**Give ketoconazole**

- For resistant oral thrush or vaginal candidiasis, give ketoconazole 200 mg daily.

**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

<table>
<thead>
<tr>
<th>Treat with one of the following:</th>
<th>Treatment period</th>
<th>Warnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% Lindane (gamma benzene hexachloride) cream or lotion</td>
<td>once—wash off after 24 hours (after 12 hours in children)</td>
<td>potentially toxic if overused; avoid in pregnancy and small children</td>
</tr>
<tr>
<td>25% benzyl benzoate emulsion—dilute 1:1 for children; 1:3 for infants</td>
<td>at night, wash off in morning—repeat x 3? (variable recommendations)</td>
<td>tendency to irritate the skin</td>
</tr>
<tr>
<td>5% permethrin cream</td>
<td></td>
<td>expensive, very low systemic absorption and toxicity</td>
</tr>
</tbody>
</table>

- Patient and all close contacts must be treated simultaneously—whole household and sexual partners, even if asymptomatic.
- Clothing or bed linen that as possibly been contaminated by the patient in the two days prior to the start of treatment should be washed and dried well (or dry-cleaned).
- 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. 80)

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; or
       -- 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.

<table>
<thead>
<tr>
<th>AGE *</th>
<th>5-14 years</th>
<th>≤15 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEIGHT</td>
<td>20 &lt; 30 kg</td>
<td>30 kg or more</td>
</tr>
<tr>
<td>In ml</td>
<td>1000-2200</td>
<td>2200-4000</td>
</tr>
</tbody>
</table>

- If the patient is weak, help him/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 four 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 four-hour treatment at home.
  - Give enough ORS packets to complete rehydration. Also give two 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 HERE

Can you give intravenous (IV) fluid immediately? YES

Is IV treatment available nearby (within 30 minutes)? YES

Are you trained to use a naso-gastric (NG) tube for rehydration?

YES

Can the patient drink?

NO

Refer URGENTLY to hospital for IV or NG treatment.

NO
• 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:

<table>
<thead>
<tr>
<th>Age</th>
<th>First give 30 ml/kg in:</th>
<th>Then give 70 ml/kg:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants (under 12 months)</td>
<td>1 hour *</td>
<td>5 hours</td>
</tr>
<tr>
<td>Older (12 months or older, including adults)</td>
<td>30 minutes *</td>
<td>2 ½ hours</td>
</tr>
</tbody>
</table>

* 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 six 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 six 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 by radio or phone, if possible.
- During transport:
  - Watch IV infusion.
  - Keep record of all IV fluids, medications given and time of administration.
  - If transport takes more than four hours, insert Foley catheter to empty bladder; monitor urine output.

* If referral is difficult and is refused:

* 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

<table>
<thead>
<tr>
<th>Drug</th>
<th>Quantity for Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diazepam (parenteral)</td>
<td>30 mg</td>
</tr>
<tr>
<td>Artemether or</td>
<td>160 mg (2 ml)</td>
</tr>
<tr>
<td>Quinine</td>
<td>300 mg</td>
</tr>
<tr>
<td>Ampicillin</td>
<td>2 grams</td>
</tr>
<tr>
<td>Gentamicin</td>
<td>240 mg</td>
</tr>
<tr>
<td>IV glucose—50% solution</td>
<td>50 ml</td>
</tr>
<tr>
<td>Ringer’s lactate</td>
<td>4 litres</td>
</tr>
<tr>
<td></td>
<td>(take extra if distant referral)</td>
</tr>
</tbody>
</table>

### Emergency Supplies

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity for Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV catheters and tubing</td>
<td>2 sets</td>
</tr>
<tr>
<td>Clean dressings</td>
<td></td>
</tr>
<tr>
<td>Gloves, one of which is sterile</td>
<td>at least 2 pairs</td>
</tr>
<tr>
<td>Clean towels</td>
<td>3</td>
</tr>
<tr>
<td>Sterile syringes and needles</td>
<td></td>
</tr>
<tr>
<td>Urinary catheter</td>
<td></td>
</tr>
</tbody>
</table>
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. S/he becomes ill and is unable to fight infection. Once a person is infected with HIV, s/he 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; and
  - 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; and
  - 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. 101).
• Use Chronic HIV Care module.
HIV testing and counselling for clinical care

- **Explain about HIV testing and counselling:**
  - HIV testing and counselling enable people to learn whether they are infected.
  - Testing is voluntary. The patient has the right to refuse.
  - The HIV test will help with clinical care; knowing status has many advantages.
  - It provides an opportunity to learn and accept HIV status in a confidential environment.
  - It includes a blood test with before and after counselling.
  - Test result will be kept confidential within the medical team, and used for purposes of clinical care.
  - Patient makes decision about any further disclosure.

Based on availability of testing in your facility and the patient’s preference:
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. 97).
  - 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. 100), 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 the patient.
- The patient decides whom to disclose the result to.
- The result will only be provided to another person with his/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 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 for 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 s/he 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, etc.).
Support disclosure

- Discuss advantages of disclosure.
- Ask the patient if they have disclosed their result or are willing to disclose the result to anyone.
- Discuss concerns about disclosure to partner, children and other family, friends.
- Assess readiness to disclose HIV status and to whom. Assess social network. (Start with least risky.)
- 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 domestic violence is a risk, create a plan for a safe environment.

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).

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

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

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

Disadvantages of involving and testing the partner: danger of blame, violence and 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 (STIs) 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 s/he is infected and can transmit infection to the partner. A condom should be used, 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:
  - Discuss 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.**

**Ask:** Will you be able to use condoms? Check for barriers.
Educate and counsel on STIs

- Speak in private, with enough time, and assure confidentiality.
- Explain:
  - The disease.
  - How it is acquired.
  - How it can be prevented.
  - The treatment.
  - That most STIs can be cured, except HIV, herpes and genital warts.
  - The need also to 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.
- Listen to the patient: is there stress or anxiety related to STIs?
- Promote safer sexual behaviour to prevent HIV and STIs.
  - 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 and family.

Special counselling for adolescents: See Adolescent Job Aid.
Basic counselling

All providers can apply counselling skills in a range of clinical situations. These include:

- educating patients
- providing emotional support
- supporting patients with mental illness such as depression or anxiety disorders
- addressing multiple aspects of HIV care (HIV testing, disclosure of HIV status, safer sex and condom use, adherence to care and treatment)
- intervening in a crisis situation

Elements of basic counselling

- Establish a good relationship.
- Find out (what) the patient’s current situation (is).
- Respond with empathy.
- Provide feedback that enables the patient to make sense of the situation.
- Offer information.
- Help the patient recognize strengths.
- Help the patient identify and find ways to connect with family or friends who can provide support.
- Teach specific skills that help patients deal with their situation:
  - Relaxation techniques such as deep breathing or progressive muscular relaxation or positive imagery.
  - Problem solving.
- Provide encouragement.
- Convey hope.
Useful tools for counselling:
- Use more open-ended than closed questions.
  - Open-ended question: What problems have you had recently in taking your medicines?
  - Closed question: Did you take your medicine today?
- Listen carefully, paying attention to verbal and non-verbal communication.
- Clarify responses that you do not understand.
- Use role-playing to help the patient develop skills and confidence to carry out a plan.
- Allow time for questions from the patient.
- Ask about suicidal thoughts (in the case of crises and mental illness).

The counsellor’s role:
- Provide confidentiality.
- Provide support.
- Help the patient prioritize problems.
- Be aware of the patient’s treatment.
- Be aware of other referral resources.
- Be aware of the patient’s social-support resources.
- Advocate for the patient.

When working with patients:
- Ensure privacy.
- Minimize interruptions.
- Ensure patient’s comfort.
- Agree on the length of time you need.
- Make arrangements for follow-up when necessary.
Counsel the depressed patient and family

- Review the symptoms of depression that the patient is experiencing.

- Give essential information.
  - Explain that the symptoms are part of the illness called depression.
  - Depression is common and effective treatment is available.
  - Depression is not a sign of weakness or laziness.
  - The patient is trying hard to manage.

- Recognize the distress of the patient by saying that you understand how badly s/he feels and that you want to be of some assistance to him/her.

- Inquire of the patient how depressed s/he feels at the moment compared to how s/he has been feeling, in order to inform your treatment plan.

- Ask if s/he has thought about hurting themselves or if s/he is thinking much about death.

  If risk of suicide and harm to others, see Quick Check guidelines.

- Plan short-term activities which give the patient enjoyment or build confidence.

- Identify current life problems or social stresses. Focus on small, specific steps the patient might take towards managing these problems.
  - If breavement after a death, see Palliative Care module, p. 48.
  - If HIV+, give support. (See p. H9).
  - If new TB diagnosis and worried about HIV, give support.
  - Teach new problem-solving techniques.
Encourage patient to resist pessimism and self-criticism:
- Not to act on pessimistic ideas (end marriage, leave job).
- Not to concentrate on negative or guilty thoughts.

If counselling is not sufficiently helpful, consider these additional interventions:
- Give amitriptyline, especially if sleep and appetite are significantly disturbed. (See p. 82.)
  - If already on anti-depressant, check on adherence and dose. The dose may need to be raised.
  - Remind patient that it takes 2-3 weeks for the medication to work.
  - After improvement, discuss action to be taken if signs of depression return.
- Refer to support group.
- Refer to skilled counsellor.
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).
  - Three samples are needed for diagnosis of TB.
  - Two samples are needed for follow-up examination.

- **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 One:
- 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 Two:
- Receive early-morning sample from the TB suspect (Sample Two).
- Collect another "on-the-spot" sample (Sample Three).

✔️ 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 113.)
<table>
<thead>
<tr>
<th>Date</th>
<th>TB Suspect Number</th>
<th>Name of TB Suspect</th>
<th>Age M/F</th>
<th>Complete Address</th>
<th>Date Sputum Sent to Lab</th>
<th>Date Results Received</th>
<th>Results of Sputum Examinations</th>
<th>TB Treatment Card Opened? (record date)</th>
<th>Observations/ Clinician’s Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- If negative, record “Neg.”
- If positive, record the grade (+, ++, +++).
- When a result is “scanty,” record the number.
Send sputum samples to laboratory

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

- When you have all 3 samples, pack the sputum containers in a transport box. Enclose the Request for Sputum Examination. (See next page.) If there are samples for more than 1 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; and
    - 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.
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:

<table>
<thead>
<tr>
<th>DATE</th>
<th>SPECIMEN</th>
<th>RESULTS</th>
<th>POSITIVE (GRADING)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date ______  Examined by (Signature) ____________________________________________

The completed form (with results) should be sent to the health facility and to the District Tuberculosis Unit.
Instructions for some lab tests which can be performed in clinic:

❖ **Haemoglobin**
   Insert local method.

❖ **Urine dipstick for sugar or protein:**
   • Follow instructions from test package.

❖ **Blood sugar by dipstick**

❖ **Malaria dipstick**
   • Insert instructions from test package.

❖ **Malaria smear (thick film):**
   • *Prepare a thick film (so that printed letters can’t be read through it).*
   • Air dry.
   • Cover with diluted Leishman stain (1:3) for 7 mins
     OR cover with diluted Geimsa (1:10) for 15 mins
     OR dip for two seconds in Field stain A and wash with water, and then two
     seconds in Field stain B and wash in water.
   • Allow to dry.
   • Examine a minimum of 100 fields under X100.
   
   Result: look for red chromatin dot, blue cytoplasm.

   **Note:**
   If the film is positive, do a thin film to identify the species.
   When dealing with Plasmodium falciparum do an exact parasite count.

   **Grading:**

<table>
<thead>
<tr>
<th>Parasite count</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10 malaria parasites per 100 fields</td>
<td>+</td>
</tr>
<tr>
<td>10 to 100 malaria parasites per field</td>
<td>++</td>
</tr>
<tr>
<td>1 to 10 parasites per field</td>
<td>+++</td>
</tr>
<tr>
<td>10 to 100 parasites per field</td>
<td>++++</td>
</tr>
</tbody>
</table>
Perform RPR* test for syphilis and respond to result

- 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 ml) 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 1 test card. Be careful not to contaminate the remaining test circles. Use a clean spreader for each 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 in 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 on 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
Perform rapid HIV test, interpret results, then counsel

Collection of blood from a finger tip

- Always use gloves to take or transfer blood.
- Rub the finger tip warm to get the blood circulating (index, middle or ring finger).
- Clean the finger with alcohol and allow to air dry.
- Hold finger lower than elbow.
- Prick the finger with a clean and sterile unused lancet.
- Collect a drop of blood on the specimen loop and transfer this to the sample port. Repeat this procedure according to the test used, e.g. *Determine HIV 1/2 1-2 time(s)* and *Uni-Gold HIV* two times.
- Dispose the used lancet in a biohazardous safe container.
- Complete the specific test procedure.
- Disinfect finger and cover with a plaster.
- Follow universal safety precautions for waste disposal. The preferred methods are autoclaving at 120°C for 60 minutes or by incineration.

Test kits

- You should have at least two different test kits available.
- Only use test kits and testing algorithms as recommended by the national and/or international bodies.
- Respect expiry dates—kits that have expired should not be used.
- Strictly follow storage procedures.
- If kits have been stored at 2–8°C, allow kits to reach room temperature by removing them from the refrigerator approximately 20 minutes before using them.
• Validate your test kit using the manufacturer’s directions and the positive and negative controls provided. If possible run the controls for each new operator, new test batch or if you are concerned with storage conditions.

• Strictly follow testing procedures.

• Very strictly respect the recommended reading time.

• Always label specimens and/or test devices clearly.

• Prepare worksheet on which specimen numbers are clearly written and results are immediately recorded.

This is an example of a testing plan based on Uni-Gold HIV™ and Determine HIV™1/2. Adapt locally to your country’s chosen kits.

❖ Uni-Gold HIV™

• If refrigerated, remove test kit from refrigerator and allow it to reach room temperature (20–25°C).

• Prepare your worksheet, indicating test batch number and expiry date; indicate operator name and date.

• Check that expiry time has not lapsed.

• After appropriate time, validate that test is working properly by using positive and negative controls; you are now ready to start testing clinical specimens.

• Write specimen number on worksheet.

• Remove Uni-Gold HIV test device from protective wrapping.

• Write specimen number on test device.

• Collect whole blood finger prick (see document).

• Add two drops of blood to the sample port.

• Add two drops of wash reagent to the sample port.

• Allow ten minutes for reaction to occur.

• Read result at the end of ten minutes. Do not read after 20 minutes as result is no longer stable.

• Interpret result.
One line in the control region: → Negative result
Two lines in the control region and one in the test region: → Positive result
No lines: → Inconclusive result

- Record test results on worksheet.
- Post-test counselling.

❖ Determine HIV™ 1/2

Same first 8 points as for the Uni-Gold HIV, ending with:

- Collect whole blood finger prick (see document).
- With the precision pipette apply 50 µl of sample to the sample pad (arrow symbol).
- Wait until blood is absorbed and then apply one drop of chase buffer to the sample pad.
- Allow 15 minutes for reaction to occur.
- Read the result. Result should be read between 15–60 minutes after sample addition.
- Interpret result.

One line in the control region: → Negative result
Two lines in the control region and one in the test region: → Positive result
No lines: → Invalid result

- Record test result on worksheet.
- Interpret result. (See flow chart on p. 122.)
- Post-test counselling (see document).

At the end of the working day, store materials as appropriate. Clean the testing area with disinfectant.
**NEGATIVE**
A line in the control region only indicates a negative test result.

**POSITIVE**
A line of any intensity in the test region, plus a line forming in the control region, indicates a positive result.

**INCONCLUSIVE**
No line appears in the control region. The test, should be repeated with a fresh device, irrespective of a line developing in the test region.
Algorithm for Use of Rapid HIV Tests in Testing and Counselling Services

Pre-Test education and/or counselling:

Ensure informed consent

First HIV rapid test (screening test)

POSITIVE test result *

Counsel for positive result and
Initiate care and treatment as appropriate. See *Chronic HIV Care with ARV Therapy* module.

Negative test result
Counsel for negative result

Second HIV rapid test (confirmatory test)

Positive test result

Negative test result

Repeat as above or
Refer.

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

Name: ____________________________________    Age: ______    Weight: _____   BP:____ Sex:   M   F
What are the patient’s problems?_____________________________   _______________________

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

<table>
<thead>
<tr>
<th>ASSESS (circle all signs present)</th>
<th>CLASSIFY</th>
</tr>
</thead>
<tbody>
<tr>
<td>___Yes ___No  DOES THE PATIENT HAVE COUGH OR DIFFICULT BREATHING?</td>
<td>LOOK, LISTEN:</td>
</tr>
<tr>
<td>If yes, ASK:</td>
<td>• Is the patient:  —Lethargic?</td>
</tr>
<tr>
<td>• For how long? _____</td>
<td>• Count the breaths in one minute: ______ Fast Very fast breathing? breathing?</td>
</tr>
<tr>
<td>• Are you having chest pain? If yes, new? Severe? Describe it: _________________</td>
<td>• Uncomfortable lying down?</td>
</tr>
<tr>
<td>• Do you have night sweats?</td>
<td>• Look/listen for wheezing.</td>
</tr>
<tr>
<td>• Do you smoke?</td>
<td>• Measure temperature________ 39 C or above</td>
</tr>
<tr>
<td>• On treatment for:</td>
<td>• If not able to walk unaided or appears ill, also:</td>
</tr>
<tr>
<td>Asthma?</td>
<td>• Count the pulse________</td>
</tr>
<tr>
<td>Emphysema or chronic bronchitis(COPD)?</td>
<td>• Measure BP____________</td>
</tr>
<tr>
<td>Heart failure?</td>
<td></td>
</tr>
<tr>
<td>TB?</td>
<td></td>
</tr>
<tr>
<td>If no:</td>
<td></td>
</tr>
<tr>
<td>• Have you had previous episodes of cough or difficult breathing? Recurrent episodes</td>
<td></td>
</tr>
<tr>
<td>If yes:</td>
<td></td>
</tr>
<tr>
<td>—Do these episodes wake you up at night or in the early morning? Yes ’No</td>
<td></td>
</tr>
<tr>
<td>—Do these episodes occur with exercise? Yes No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>X CHECK ALL PATIENTS FOR UNDERNUTRITION AND ANAEMIA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Have you lost weight?</td>
<td>• Look for visible severe wasting. —Loose clothing?</td>
</tr>
<tr>
<td>— If wasted or weight loss,</td>
<td>—If wasted or weight loss: Weight:<em><strong><strong>kg Wt loss</strong></strong></em>%</td>
</tr>
<tr>
<td>Diet:: Problem:___________________________</td>
<td>MUAC_______ Sunken eyes? Oedema to knees? Pitting?</td>
</tr>
<tr>
<td>Alcohol use</td>
<td>• Look at palms and conjunctiva for pallor. Severe pallor?</td>
</tr>
<tr>
<td>— If pallor: - Black stools? - Blood in stools?</td>
<td>Some pallor? —If pallor,</td>
</tr>
<tr>
<td>— If menstruating: Heavy periods?</td>
<td>—Count breaths in one minute: ______</td>
</tr>
<tr>
<td></td>
<td>—Breathlessness? —Measure haemoglobin: _______</td>
</tr>
</tbody>
</table>

+ IF MOUTH OR THROAT PROBLEM |

| Look in mouth for: |
|------------------|----------|
| • White patches | • If yes, can they be removed? Yes  No |
| • Ulcer | • If yes, deep or extensive? |
| • Tooth cavities | • If yes, bleeding from gums |
| • Loss of tooth substance | • If yes, swelling of gums |
| • Pus | • If yes, purple lumps |
| | | | | |
**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**

___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

—Do these episodes wake you up at night or in the early morning?  Yes   No

—Do these episodes occur with exercise?  Yes  No

**LOOK, LISTEN:**

- Is the patient:  —Lethargic?  
- Count the breaths in one minute: _____  Fast breathing?  
- Uncomfortable lying down?  
- Look/listen for wheezing.  
- Measure temperature_______  39 C or above

If not able to walk unaided or appears ill, also:

- Count the pulse_______
- Measure BP _________

**PATIENTS FOR UNDERNUTRITION AND ANAEMIA**

- Have you lost weight?  — If wasted or weight loss, Diet:: Problem:___________________________

- Alcohol use  — If pallor:  — Black stools? - Blood in stools?  — 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?  

—If pallor,  

- Count breaths in one minute: _____  
- Breathlessness?      
- Measure haemoglobin: ____________

**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?
- Problems chewing?
- Not able to eat?

**Prevention, prophylaxis– all patients**

Encourage insecticide-treated bednet  
Counsel on safer sex  Offer family planning  
Offer VCT for HIV  Counsel to stop smoking  
Counsel to reduce or quit alcohol  
Measure BP

☐ If back pain history or risk, teach exercise & correct lifting

**All patients**

• 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?

• Any other problem?

**Adolescent girls:** Update tetanus toxoid

**Women of childbearing age:**

Update tetanus toxoid  
Give mebendazole if due  
If pregnant, give antenatal care  
If not pregnant, offer family planning

**ALL patients**

Counsel to reduce or quit alcohol  
Encourage insecticide-treated bednet  
Counsel on safer sex  
Offer family planning  
Offer VCT for HIV  
Counsel to stop smoking  
Measure BP

**ALL patients**

If back pain history or risk, teach exercise & correct lifting

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

- How long have you had a fever? _____________
- Have you taken an antimalarial in the previous week?  
  If yes, what and for how long? ________________

**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

What is the problem?_______________________

• Burning or pain on urination?
• Sore in your genital area?
• Abnormal vaginal discharge?  If yes, does it itch?
• Bleeding on sexual contact?
• Partner have problem?  (If present: Ask yes, no)
• When was last period?
• Periods: heavy or irregular periods?  New?
  —Days of bleeding:____  Number pads used:____
• Missed a period?  If yes, possibly pregnant?
• Interested in contraception?  If yes— FP guidelines
• Very painful menstrual cramps?
• Periods: very heavy or irregular periods?  If yes, new?
  —Days of bleeding:____  Number pads used:____

• Feel for abdominal tendemess —If pain:
  —Rebound?  —Guarding?  —Mass?
  —Absent bowel sounds?  —Temperature____
  —Pulse______
• External exam: —Large amount vaginal discharge?
  —Genital ulcer?  —Enlarged inguinal lymph node?
• If able to do bimanual exam, cervical motion tenderness?
• If burning or pain on urination, percuss back: Flank pain?

____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?

• Look for scrotal swelling  • Feel for tendemess.
• Look for ulcer  • Look for urethral discharge
• Feel for rotated or elevated testis.
• Feel for abdominal pain —If tendemess:
  —Rebound?  —Guarding?  —Mass?
  —Absent bowel sounds?  —Temperature:____
  —Pulse:_____ Genital ulcer?

____IF ANOGENITAL ULCER OR SORE

• Are these new? Recurrent?

• 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?
  —If yes, where is it?
• Is there itching?  • Does it hurt?
• Do other family members have same problem?
• Where are the lesions?
• How many are there?
• Are they infected (red, tender, warm, pus or crusts)?
• Feel for fluctuance.
• Are they tender?  • Is there sensation to light touch?
• Look/feel for lumps.
• Is there swelling there?
• Do they move?
• Do you have a lump?  —If yes, for how long?
• Look/feel for lumps.
• Where are the lesions?
### IF FEMALE PATIENT HAS GENITO-URINARY SX OR LOWER ABDOMINAL PAIN

- What is the problem? ____________________
- Feel for abdominal tenderness — If pain — Rebound? — Guarding? — Mass?
- Sore in your genital area? — Absent bowel sounds? — Temperature ______
- Does it itch? — Partner have problem? (If present, cervical motion tenderness?)
- If able to do bimanual exam
- When was last period? — Periods: heavy or irregular periods? — New? — Days of bleeding: ______ — Number pads used: ______

### IF MALE PATIENT HAS GENITO-URINARY SX OR LOWER ABDOMINAL PAIN

- Genital exam: What is your problem? ____________________
- Look for scrotal swelling
- Feel for tenderness.
- Discharge from urethra? — If yes, for how long?
- Look for ulcer
- Look for urethral discharge
- Burning or pain when you urinate?
- Pain in your scrotum?
- Feel for abdominal pain — If tenderness — Rebound? — Guarding? — Mass?
- Have you had any trauma there? — If yes,
- Look for anogenital sores.
- If present, are there vesicles? — Are these new? Recurrent?
- Look for warts.
- Look/feel for enlarged lymph node in inguinal area.
- If present, is it painful?

### IF ANOGENITAL ULCER OR SORE

- Look for anogenital sores.
- If present, are there vesicles?
- Are these new? Recurrent?
- Look for warts.
- Look/feel for enlarged lymph node in inguinal area.
- If present, is it painful?

### IF SKIN PROBLEM OR LUMP

- Where are the lesions? — How many are there? — If yes, where is it?
- Are they tender?
- Are they infected (red, tender, warm, pus or crusts)?
- Is there itching?
- Does it hurt?
- Feel for fluctuance.
- Do other family members have same problem?
- Are you taking any medication?
- Feel for lymph nodes. Are they tender?
- Do you have a lump? — If yes, for how long?
- — Discharge?

### IF HEADACHE OR NEUROLOGICAL PROBLEM

- Weakness in any part of body?
- Accident or injury involving head?
- Convulsion?
- Alcohol use? _________ Drug use? _________
- Brain/mind working more slowly?
- Are you taking any medication?
- Trouble keeping attention?
- Forget things that happened recently?
- If memory problem, test registration/recall.
- Ask family: — Patient’s behaviour changed?
  — Memory problem?
  — Patient confused? — If confused, when did it start?
  — If confused, disoriented to place or time?
- If headache:
  — For how long? — One-sided?
  — Visual defects? — Prior diagnosis migraine?

### IF MENTAL PROBLEM, LOOKS DEPRESSED OR ANXIOUS, SAD, FATIGUE, RECURRENT MULTIPLE PROBLEMS, HEAVY

- How are you feeling? (listen without interrupting)
- Do you drink alcohol? — If yes: Drinks/week over last 3 months:
  — Have you had 5 or more drinks on 1 occasion in last year?
- Do you feel sad, depressed?
- Loss of interest/pleasure?
- Loss of energy? 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?
- Does patient appear: — Agitated? — Restless?
  — Depressed? — 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 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?
- Does patient appear: — 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

### 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?
<table>
<thead>
<tr>
<th>Acute Care Acronyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
</tr>
<tr>
<td>ARV</td>
</tr>
<tr>
<td>ART</td>
</tr>
<tr>
<td>BP</td>
</tr>
<tr>
<td>BV</td>
</tr>
<tr>
<td>CD4</td>
</tr>
<tr>
<td>cm</td>
</tr>
<tr>
<td>COPD</td>
</tr>
<tr>
<td>EPI</td>
</tr>
<tr>
<td>GC</td>
</tr>
<tr>
<td>GI</td>
</tr>
<tr>
<td>GYN</td>
</tr>
<tr>
<td>Hg</td>
</tr>
<tr>
<td>HIV</td>
</tr>
<tr>
<td>IM</td>
</tr>
<tr>
<td>IMAI</td>
</tr>
<tr>
<td>IMCI</td>
</tr>
<tr>
<td>IMPAC</td>
</tr>
<tr>
<td>INH</td>
</tr>
<tr>
<td>IU</td>
</tr>
<tr>
<td>IUD</td>
</tr>
<tr>
<td>IV</td>
</tr>
<tr>
<td>kg</td>
</tr>
<tr>
<td>mcg</td>
</tr>
<tr>
<td>MD</td>
</tr>
<tr>
<td>MDT</td>
</tr>
<tr>
<td>mg</td>
</tr>
<tr>
<td>ml</td>
</tr>
<tr>
<td>mm</td>
</tr>
<tr>
<td>MO</td>
</tr>
<tr>
<td>MUAC</td>
</tr>
<tr>
<td>NG</td>
</tr>
<tr>
<td>NPO</td>
</tr>
<tr>
<td>ORS</td>
</tr>
<tr>
<td>PCN</td>
</tr>
<tr>
<td>PGL</td>
</tr>
<tr>
<td>PID</td>
</tr>
<tr>
<td>PMTCT</td>
</tr>
<tr>
<td>RF</td>
</tr>
<tr>
<td>RHD</td>
</tr>
<tr>
<td>RPR</td>
</tr>
<tr>
<td>RPM</td>
</tr>
<tr>
<td>STIs</td>
</tr>
<tr>
<td>Td</td>
</tr>
<tr>
<td>TB</td>
</tr>
<tr>
<td>TT</td>
</tr>
<tr>
<td>ZDV</td>
</tr>
</tbody>
</table>
This is one of 4 IMAI modules relevant for HIV care:

- **Acute Care**—this module is for adolescents and adults. For children use the IMCI-HIV adaptation.
- **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: 3by5help@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, 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.

For more information about IMAI, please see www.3by5.org or contact 3by5help@who.int.
This is one of 4 IMAI modules relevant for HIV care:

- **Acute Care**—this module is for adolescents and adults. For children use the IMCI-HIV adaptation.
- **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: 3by5help@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, 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.

For more information about IMAI, please see www.3by5.org or contact 3by5help@who.int.

---

WHO HIV Department—IMAI Project


The World health Organization does not warrant that the information contained in this publication is complete and correct, and shall not be liable for any damages incurred as a result of its use. The mention of specific companies or of certain manufacturers’ products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.