Child Health Innovation - strengthening Integrated Management of Childhood Illness (IMCI) implementation

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Ilembe DCST Paediatrician
US Embassy Best Practices and Innovations workshop
03.11.17
IMCI tools and materials

**Job aids:**
- IMCI wall charts
- Recording forms

**Electronic IMCI**

**Supervision materials**
- IMCI wall charts updated/created
- Public license
- KZN DOH intranet resource

**Update HIV component**
- 3 day supervisors training
- Supervision tools (DCSTs)

**HIV Paediatric task team (KZN DOH):**
- Step by Step guide for paediatric and adolescent HIV. KZN DOH intranet resource
- IMCI Chart Booklet updates: KZN 2017 adaption for KZN DOH intranet resource

**Strength IMCI implementation**

**Paeds & adolescent HIV stationary**
- Healthy lifestyle
- HIV disclosure
- How to take ARVs
- Adherence and Virological failure

**Patient education material**
- Align with updated guidelines and simplify

**Develop and test with phased implementation**
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STEP 1 RECORD

1. [Image of a child and a health worker]
2. Past medical history
STEP 2 CONFIRM

<18 months
1. NAME DATE
2. NAME DATE

>18 months
1. ELISA
2. ELISA
2. ELISA
STEP 3
CAREGIVER ABLE TO GIVE ART

Mother Able & Willing to Give ART?

Literacy

6 STEPS - ART INITIATION
STEP 4  NURSE TO INITIATE ART

REFER NEXT LEVEL OF CARE

- TB
- <3Kg
- <1 month
- 2mths - 1yr > 50
- 1yr - 5yr > 40
- Classify
- SEVERE CLASSIFICATION
- CD4 < 50 cells/mL
- FAST BREATHING
- DANGER SIGNS
- WHO Stage 4
STEP 5  BASELINE RECORDING

Nutritional Assessment

Baseline Investigations
- CD4
- FBS
- CHOL
- TG

TB Screening

Developmental Screening

WHO Staging
STEP 6 START ART

- ABC <3yrs <10Kg
- 3TC <3yrs <10Kg
- LPV >3yrs >10Kg
- EFV >3yrs >10Kg
7 STEPS - HIV FOLLOW-UP

STEP 1: Assess & Classify

STEP 2: Monitor Progress on ART

STEP 3: Provide ART's

STEP 4: Provide Other HIV Treatments

STEP 5: Provide Routine Care

STEP 6: Counsel the Caregiver

STEP 7: Arrange Follow-Up Care
Follow-up for Children on ART: STEP 1 Assess & Classify

Danger Signs:
- Cough
- Wheeze
- Diarrhoea
- Fever
- Measles
- Ear Problem
- Sore Throat

Mothers Health:
- TB
- Immunizations

ART Danger Signs:
- Malnutrition
- Anemia
- HIV

Record:
- Step 2
- Step 4

7 STEPS - HIV FOLLOW-UP
Follow-Up for Children on ART:

**STEP 2** Monitor Progress on ART

1. Assess & classify for malnutrition and Anaemia
2. Assess development
3. Assess adherence
4. Assess drug related side-effects
5. Assess clinical progress
6. Monitor blood results

- VL
- CD4
- FBC
- CHOL
- TG

- Itching, Rashes
- Headache
- Diarrhoea
- FEVER
- TONGUE, DOWN, FIRE
- SLEEP DISTURBANCE

WHO Staging

ABC 3TC LPV EFV 2A
Follow-Up for Children on ART:

STEP 3 Provide ART

![Image of medication schedule]

- ART type for children under 3 years of age weighing less than 10 kg:
  - ABC + 3TC

- ART type for children over 3 years of age weighing more than 10 kg:
  - LPV or EFV

Note: The image contains a detailed schedule for medication administration, which is not transcribed here.
Follow-Up for Children on ART:
STEP 4 Provide Other HIV Treatments

Cotrimoxazole 200/40mg
Follow-Up for Children on ART:

**STEP 5** Provide Routine Care
Follow-Up for Children on ART:

STEP 6: Counsel the Caregiver

Disclosure

Counsel the Caregiver

Family members receiving right care?

Adherence

Child Support

sassa

Grant
Follow-Up for Children on ART:

**STEP 7** Arrange Follow-Up Care

- **1 Month**
- **OR**
- **3 Monthly**
# IMCI Recording Forms

## Child Age 2 Months Up To 5 Years

**Name: __________________________ Age: _______ Weight: _____ kg Temp: ______ °C Date: __________ Time: ______**

### What are the child's problems?

**CHECK FOR GENERAL DANGER SIGNS**
- [ ] Yes
- [ ] No
- [ ] Convulsions during this illness
- [ ] Lethargic or unconscious

**Cough or difficult breathing?**
- [ ] Yes
- [ ] No
- [ ] Fast breathing
- [ ] 0, SAT3 >90% in room air
- [ ] General danger signs

**Diarrhoea?**
- [ ] Yes
- [ ] No
- [ ] Restless or irritable
- [ ] Sunken eyes
- [ ] Not able to drink / drinking poorly
- [ ] Drinking eagerly, thirsty
- [ ] Normally
- [ ] Slowly
- [ ] Very slowly (< 2 secs)

**Fever (by history or feel ≥ 37.5 °C or above)?**
- [ ] Yes
- [ ] No
- [ ] Bulging fontanelle

**Measles?**
- [ ] Yes
- [ ] No
- [ ] Pneumonia
- [ ] Symptomatic HIV infection
- [ ] Convalescent cloudy
- [ ] Deep mouth ulcer
- [ ] Mouth ulcer
- [ ] Eyes draining pus

### General Danger Signs

**Always classify**
- [ ] Very severe disease

**Severe pneumonia or very severe disease**
- [ ] Pneumonia
- [ ] Cough or cold
- [ ] Recurrent wheeze
- [ ] Wheeze (past episode)

**Severe dehydration (2 signs)**
- [ ] Persistent diarrhoea (≥7 days)
- [ ] Dysesthesia (bleeding)

**Severe dysentery**
- [ ] Dehydration

**Suspected meningitis**
- [ ] Fever other cause
- [ ] Suspected severe malaria
- [ ] Malaria
- [ ] Fever other cause

**Suspected complicated measles**
- [ ] Measles (just follow up if result is positive)
- [ ] Suspected measles

**(SUB-SECTION FOR FEVER)**
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HIV FOLLOW UP 7 STEPS

(IMCI 2014 Participant Manual Module 9 p 315 - 331)
3. Problems like diarrhoea try to attack our body, but CD4 fights them to defend the body.

4. Now, HIV enters and starts to attack the CD4.
Scenario 24: Babalwa

On assessment now she is thin, but not wasted. MUAC: 12cm. Wt: 7.2kg. Ht: 70cm. Tp: 37.5 °C. There is no oedema of the feet. She is not pale, but has enlarged lymph glands in her neck and groin. Her parotid glands are very swollen, but not tender. She does not have thrush. You do a feeding assessment, but find that apart from a poor appetite there is no feeding problem.

a) What does the weight curve on the RTHC show?

b) Which features of HIV infection are present?

c) What are your classifications? Please complete your IMCI recording form and include the treatments you would give.

d) What other information would you like to have?
**CHILD AGE 2 MONTHS UP TO 5 YEARS**

**Name:** Babalwa  
**Age:** 18 mth  
**Weight:** 7.2 kg  
**Temp:** 37.5 °C  
**Date:** today  
**Time:** now

What are the child's problems? **Insufficient weight gain**

<table>
<thead>
<tr>
<th>CHECK FOR GENERAL DANGER SIGNS</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT ABLE TO DRINK OR BREASTFEED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOMITS EVERYTHING</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Always classify</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VERY SEVERE DISEASE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COUGH OR DIFFICULT BREATHING?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For how long? ______ days</td>
</tr>
<tr>
<td>Counted _______ breaths per minute</td>
</tr>
<tr>
<td>Check indrawing</td>
</tr>
<tr>
<td>If wheeze, ask</td>
</tr>
<tr>
<td>Wheeze before this illness</td>
</tr>
<tr>
<td>Wheeze for more than 7 days</td>
</tr>
<tr>
<td>Stridor</td>
</tr>
<tr>
<td>Wheeze</td>
</tr>
<tr>
<td>Frequent cough at night</td>
</tr>
<tr>
<td>Treatment for asthma at present</td>
</tr>
<tr>
<td>Fast breathing</td>
</tr>
<tr>
<td>0, SATS &gt;90% in room air</td>
</tr>
<tr>
<td>GENERAL DANGER SIGNS</td>
</tr>
<tr>
<td>SEVERE PNEUMONIA OR VERY SEVERE DISEASE</td>
</tr>
<tr>
<td>PNEUMONIA</td>
</tr>
<tr>
<td>COUGH OR COLD</td>
</tr>
<tr>
<td>RECURRENT WHEEZE</td>
</tr>
<tr>
<td>WHEEZE (FIRST EPISODE)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIARRHOEA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For how long? ______ days</td>
</tr>
<tr>
<td>Blood in the stool</td>
</tr>
<tr>
<td>How much / what fluid has mother given:</td>
</tr>
<tr>
<td>Pinched abdomen skin goes back:</td>
</tr>
<tr>
<td>General condition: (2 clinical signs)</td>
</tr>
<tr>
<td>Lethargic or unconscious</td>
</tr>
<tr>
<td>Restless or irritable</td>
</tr>
<tr>
<td>Sunken eyes</td>
</tr>
<tr>
<td>Not able to drink / drinking poorly</td>
</tr>
<tr>
<td>Drinking eagerly, thirsty</td>
</tr>
<tr>
<td>Normally</td>
</tr>
<tr>
<td>Slowly</td>
</tr>
<tr>
<td>Very slowly (&lt; 2 secs)</td>
</tr>
<tr>
<td>SEVERE DEHYDRATION (2 SIGNS)</td>
</tr>
<tr>
<td>SOME DEHYDRATION (2 SIGNS)</td>
</tr>
<tr>
<td>NO VISIBLE DEHYDRATION</td>
</tr>
<tr>
<td>SEVERE PERSISTENT DIARRHOEA (&gt;14 + DEH)</td>
</tr>
<tr>
<td>PERSISTENT DIARRhoea</td>
</tr>
<tr>
<td>SEVERE DYSENTERY (BLOOD + DEH)</td>
</tr>
<tr>
<td>DYSENTERY (BLOOD)</td>
</tr>
<tr>
<td>DEH = DEHYDRATION</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEVER (by history or feel or 37.5°C or above)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For how long? ______ days</td>
</tr>
<tr>
<td>Malaria Risk. If malaria risk:</td>
</tr>
<tr>
<td>Malaria Test: Positive</td>
</tr>
<tr>
<td>Stiff neck</td>
</tr>
<tr>
<td>Bulging fontanelle</td>
</tr>
<tr>
<td>SUSPECTED MENINGITIS</td>
</tr>
<tr>
<td>FEVER OTHER CAUSE</td>
</tr>
<tr>
<td>SUSPECTED SEVERE MALARIA</td>
</tr>
<tr>
<td>SUSPECTED MALARIA</td>
</tr>
<tr>
<td>SEVERE OTHER CAUSE</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>MEASLES? (SUB-SECTION FOR FEVER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Fever</td>
</tr>
<tr>
<td>Symptomatic HIV infection</td>
</tr>
<tr>
<td>Contact with measles</td>
</tr>
<tr>
<td>SUSPECTED COMPLICATED MEASLES</td>
</tr>
<tr>
<td>MEASLES (JUST FOR FOLLOW UP IF RESULT IS POSITIVE)</td>
</tr>
<tr>
<td>SUSPECTED MEASLES</td>
</tr>
</tbody>
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### KZN IMCI Chart Booklet Adaptation:

**THEN CONSIDER HIV INFECTION IN ALL YOUNG INFANTS**

<table>
<thead>
<tr>
<th>Has the child been tested for HIV infection?</th>
<th>INFANT PROPHYLAXIS</th>
<th>HIV INFECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF YES, AND THE RESULT IS AVAILABLE, ASK:</td>
<td>INFANT IS BEGINNING 2 or 3 weeks of Infant ARV prophylaxis</td>
<td>HIV EXPOSED OR ARV PROPHYLAXIS</td>
</tr>
<tr>
<td>INFANT HAS POSITIVE PCR TEST</td>
<td>Complete appropriate ARV prophylaxis</td>
<td>HIV INFECTION</td>
</tr>
<tr>
<td>INFANT HAS NEGATIVE PCR TEST</td>
<td>Repeal PCR test according to testing schedule</td>
<td>HIV INFECTION</td>
</tr>
</tbody>
</table>

**IF NO TEST RESULT FOR CHILD, CLASSIFY ACCORDING TO MOTHER’S STATUS**

<table>
<thead>
<tr>
<th>If HIV positive</th>
<th>HIV EXPOSED OR ARV PROPHYLAXIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFANT HAS NEGATIVE PCR TEST</td>
<td>HIV EXPOSED OR ARV PROPHYLAXIS</td>
</tr>
<tr>
<td>INFANT IS NOT BREAST Feeding and was not breastfeed less than 6 weeks before the PCR test was done</td>
<td>HIV INFECTION</td>
</tr>
</tbody>
</table>

**Classify child according to mother’s HIV status**

<table>
<thead>
<tr>
<th>Mother is HIV positive</th>
<th>HIV EXPOSED OR ARV PROPHYLAXIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFANT IS HIV TESTED</td>
<td>HIV INFECTION</td>
</tr>
<tr>
<td>INFANT HAS NEGATIVE PCR TEST</td>
<td>HIV INFECTION</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIV Test done on mother</th>
<th>HIV Test result available</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV TEST NOT AVAILABLE</td>
<td>HIV UNKNOWN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mother HIV negative</th>
<th>HIV UNLIKELY</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFANT IS HIV TESTED</td>
<td>HIV INFECTION</td>
</tr>
<tr>
<td>INFANT HAS NEGATIVE PCR TEST</td>
<td>HIV INFECTION</td>
</tr>
</tbody>
</table>

**Follow thesix steps for initiation of ART (p. 8)**
- Assess antiretroviral prophylaxis (p. 5).
- Assess feeding and counseling (p. 9, 17-24).
- Ask about the caregivers health and ensure that she is receiving the necessary care and treatment.
- Provide long-term follow-up (p. 5).

**Additional notes:**
- Follow the care process for the young infant (p. 12).
- Continue ART (p. 5).
- Continue feeding and counseling (p. 9, 17-24).
- Ask about the caregivers health and ensure that she is receiving the necessary care and treatment.
- Provide follow-up care (p. 5).

**KZN IMCI adoption 2017**
THEN CONSIDER HIV INFECTION IN ALL YOUNG INFANTS

Has the child been tested for HIV infection?

**IF YES, AND THE RESULT IS AVAILABLE, ASK:**

- What was the result of the test?
- Was the test only done when the test was done, or had the child been tested less than 6 weeks before the test was done?
- Is the child currently breastfeeding HIV positive?
- HIV testing in infants 0-2 months:
  - Use an HIV PCR test.
  - If HIV PCR test positive, do second HIV PCR test to confirm status.
  - All HIV exposed infants should have been tested at birth. If this was done, makes sure that the infant still tests positive to determine HIV status in this age group.
- If the test results are negative, request:
  - At 10 weeks of age—low risk HIV-exposed infants (received 6 weeks ARV prophylaxis)
  - At 14 weeks—all high risk HIV exposed infants who received extended (12 weeks) ARV prophylaxis
  - If the child is not breastfeeding, test again at 6 weeks after stopping breastfeeding
  - Before 18 months of age, use an HIV PCR test to determine the child’s HIV status. Do not rely on an antibody test to determine HIV status in this age group.

**IF NO TEST RESULT FOR CHILD, CLASSIFY ACCORDING TO MOTHER’S STATUS**

ASK:
- Was the mother tested for HIV during pregnancy or since the child was born?
- IF YES, was the test negative or positive?

Classify child according to Mother’s HIV status

- **Mother is HIV positive**
  - HIV EXPOSED
    - Complete appropriate ARV prophylaxis (p. 12)
    - Provide care and counseling (p. 24)
    - Ask about the caregiver’s health and ensure that she is receiving the necessary care and treatment.
    - Provide follow-up care (p. 51)

- **Mother is HIV negative**
  - HIV UNLIKELY
    - Counsel the caregiver on the importance of HIV testing, and offer HIV testing.
    - Rationale on the basis of the child’s or the mother’s test.

- **Mother is HIV negative**
  - HIV UNLIKELY
    - Ensure that mother receives HIV testing monthly if she is breastfeeding.

- **Mother is HIV positive**
  - HIV EXPOSED
    - Provide care and counseling (p. 24)
    - Ask about the caregiver’s health and ensure that she is receiving the necessary care and treatment.
    - Provide follow-up care (p. 51)

- **Mother is HIV negative**
  - HIV UNLIKELY
    - Counsel the caregiver on home care for the young infant (p. 12)

KZN IMCI Chart Booklet adaption 2017
KZN IMCI Chart Booklet adaption

INITIATING ART IN CHILDREN: Follow the six steps

**STEP 1: RECORD PATIENT DETAILS AND HISTORY**
- Record the following information in the Paediatric and Adolescent Stationary.
  1. Patient details.
  2. Caregiver details: Details of primary and secondary caregiver.
  3. Past medical history:
      - Allergies
      - Mode of transmission
      - ARVs prior to ART start date including PMTCT prophylaxis
      - ART transfer in details
      - Discordance status
      - Immunization status (update from RTHB)
      - Past medical history including surgical history

**STEP 2: DECIDE IF THE CHILD HAS CONFIRMED HIV INFECTION**
- Child <18 months:
  - HIV infection is confirmed if the first positive PCR test is confirmed with a second positive PCR test.
  - Proceed to Steps 3 - 6 whilst awaiting second PCR result (i.e. initiate on basis of first PCR result but confirm with second result).
- Child >18 months:
  - Two different rapid antibody tests are positive OR one rapid test and an ELISA (lab test) are positive.
  - If the first HIV test is positive and the second test is negative (discordant), REFER
  - Send outstanding tests but proceed to step 3 whilst awaiting results.

All HIV-infected children are eligible for ART regardless of CD4 count and WHO stage, according to the Universal Test and Treat (UTT) guidelines.

**STEP 3: DECIDE IF THE CAREGIVER IS ABLE TO GIVE ART**
- Check that the caregiver is willing and able to administer ART.
- Complete psychosocial readiness and social record sections in the HIV clinical chart.
- The caregiver should ideally have disclosed the child's HIV status to another adult who can assist with providing ART (or be part of a support group).
- If caregiver is able to give ART, move to Step 4
- If not, classify as HIV INFECTION not on ART. Work with the counsellors and social worker to initiate ART as soon as possible.
- If caregiver not willing or able to administer ART after consultation with the social worker and HIV counsellors, REFER.

**STEP 4: TO DECIDE IF A IMCI NURSE SHOULD INITIATE ART**
- Check for the following:
  - General danger signs or any severe classification
  - Infant <1 month of age
  - Child weighs less than 3 kg
  - TB
  - Fast breathing
  - Any WHO stage 4 condition
  - If any of these are present, refer to next level of care for ART initiation.
  - If none present, move to Step 5.

**STEP 5: ASSESS AND RECORD BASELINE INFORMATION**
1. Nutritional assessment:
   - Weight, height/length, head circumference (if <2 years), MUAC.
   - BMI or WtHt 2 score. Classify based on findings.
2. Assess and classify for Anaemia.
3. TB screening and features.
4. Developmental screening (use chart in addendum or RTHB).
5. WHO clinical staging.
6. Reproductive health.
7. Baseline laboratory investigations:
   - CD4 count and Haemoglobin.
   - Cholesterol and Triglyceride (if on lipovir/tritonavir).
   - ALT (if on nustavir or TB treatment).
   - If the child has SEVERE ACUTE MALNUTRITION, SEVERE ANAEMIA (HB < 7 g/dl) or TB refer to the next level of care for management and for initiation of ART.
   - If HB is 7 g/dl - 10 g/dl classify as ANAEMIA and treat (p. 32). Do not delay starting ART.
   - Send any outstanding laboratory tests. If the child already meets the criteria for starting ART, do not wait for the results before starting ART.

**STEP 6: START ART**
- If the child <5 years or weighs less than 10 kg, use regimen ABC, 3TC, Efavir (p55-56).
- If the child is 3 years or older, and weighs 10 kg or more, use regimen ABC, 3TC, EPV (p57-58).
- Remember to give cotrimoxazole (p. 39).
- Give other routine treatments (p. 35).
- Follow-up after one week.

**NOTE:**
All children should be fast-tracked.
Record all information on the relevant Paediatric and Adolescent Stationary.
IDENTIFY SKIN PROBLEMS

IF SKIN HAS BLISTERS/SORES/PUSTULES

<table>
<thead>
<tr>
<th>LOOK</th>
<th>CLASSIFY</th>
<th>TREAT</th>
<th>FEATURES IN HIV INFECTION</th>
</tr>
</thead>
</table>
| • Mild fever preceding the rash.  
• Rash begins on the trunk and face, later spreads to the arms and legs.  
• Vesicles appear progressively over days and form scabs after they rupture.  
• Contagious from the fever starts until 6 days after the lesions have appeared; all lesions have crusted.  
• Usually lasts for about 1 week. | CHICKEN POX | • Limit contact with other children and pregnant women until all lesions have crusted.  
• Ensure adequate hydration.  
• Cut fingernails short and discourage scratching.  
• Treat itching:  
• Apply calamine lotion  
• In severe cases, give an oral antihistamine: Chlorpheniramine 0.1 mg/kg/dose 0-6 hour (EDL p22.3).  
• Refer urgently if severe rash or complications (e.g. pneumonia, jaundice, meningitis, mycosis, hepatitis). Will need oral aciclovir 20 mg/kg/dose 0 hourly for 7 days (Doctor initiated, EDL p10.3). | • Initial presentation in immunocompromised children.  
• May last longer.  
• Complications like secondary bacterial infection, mycosis, hepatitis, encephalitis, meningitis and pneumonia are more frequent.  
• Chronic infection with continued appearance of new lesions for >1 month.  
• Typical vesicles evolve into non-healing ulcers that become necrotic and crusted |
| • Vesicles in one area on one side of body with intense pain or sores plus shooting pain.  
• They are uncommon in children except when they are immuno-compromised. | HERPES ZOSTER | • Keep lesions clean and dry.  
• Avoid oral 20 mg/kg 4 times daily for 7 days.  
• If the eye or the tip of the nose is involved – REFER TO OPHTHALMOLOGY.  
• Give paracetamol for pain relief (p.4).  
• Follow up in 7 days.  
• Refer if disseminated disease, involvement of the eye, pneumonia or suspected meningitis  
• Monitor for secondary bacterial infection. | • Duration of disease longer.  
• Haemorrhagic vesicles, neurotropic ulceration.  
• Rarely recurrent, disseminated or multi-dermatomal.  
• A clinical stage 2 defining disease (p.64) |
| • Pustules and papules with honey-coloured crusts.  
• Commonly starts on the face or buttocks, then spreads to the neck, hands, arms and legs. | IMPETIGO | • Good personal and household hygiene to avoid spread of infection.  
• Wash and soak sores in soapy water to soften and remove scabs.  
• Apply antiseptic 8 hourly: Povidone iodine 5% cream or 10% ointment.  
• Drain pus if fluctuant.  
• Give antibiotic if extensive lesions: Clamoxacin, oral, 1-2.5mg/kg/dose 6 hourly (EDL p32.2). OR: Fluloxacinil, oral, 500mg 6 hourly (EDL p22.4).  
• Refer urgently if child has fever and or if infection extends to the muscles. |
HIV Step-by-Step guide
HIV Step-by-Step guide

CHAPTER 2A

MANAGEMENT OF AN HIV EXPOSED INFANT AND UNCOMPROMICATED HIV INFECTED CHILD

Level 1: First line of care ART

1. Overview
2. Consider HIV in all young infants and children:
   2.1 Identifying young infants and children in different settings
   2.2 EMTCT
   2.3 Cotrimoxazole prophylaxis
3. HIV counselling and testing services
4. Provide care for the HIV positive child
5. Initiating ART in HIV positive children: Follow the 6 steps
6. Following up with the child on ART. Follow the 7 steps

Overview of the HIV services for the uncomplicated young infant and child

1. Considering HIV infection in all young infants and children:
2.1 Identifying young infants and children in different settings (using IMCI)
2.2 EMTCT
   - Routine testing for HIV exposed infants
   - Infant prophylaxis for HIV exposed infants
2.3 Cotrimoxazole prophylaxis
   - Tools: IMCI chart booklet and recording forms
3. HIV counselling and testing services stage 1-7
   - Tools: Hand of safety and keeping my body healthy
4. Provide care for HIV positive child
5. Initiating ART
   - Page 27
6. Provide follow up care
   - Page 45

Refer to next level of care if indicated in Step 4. See Chapter 3.
HIV Step-by-Step guide

05 Initiating ART in HIV positive children

Follow the six steps

STEP 1
Record patient details and past medical history

STEP 2
Decide if the child has confirmed HIV infection

STEP 3
Decide if the caregiver is able to give ART

STEP 4
Decide if a nurse should initiate ART

STEP 5
Access and record baseline information

STEP 6
Start ART

STEP 1
Record patient details and past medical history

Step 1: Record patient details and history

Take a comprehensive medical history and record the following information in the Paediatric and Adolescent Clinical Stationary.

1. Patient details:
   - Record the personal and demographic details of the patient.

2. Caregiver details:
   - Record the personal and demographic details of primary caregiver.
   - Record the personal and demographic details of secondary caregiver or contact person.

3. Past medical history:
   - Record:
     - Allergies
     - Mode of transmission of HIV infection
     - ARVs prior to ART start date, including PMTCT prophylaxis
     - ART transfer in details
     - Disclosure status
     - Past medical and surgical History, including immunisation status and nutrition status (update from RTHB)
   - Record in Paediatric and Adolescent Clinical Stationary
IMCI tools and materials

Develop and test with phased implementation

Electronic IMCI

Job aids:
- IMCI wall charts
- Recording forms

Supervision tools (DCSTs)

- IMCI wall charts updated/created
- Public license
- KZN DOH intranet resource

Supervision

Training materials

• 3 day supervisors training
• Powerpoint presentations created (3 day training)
• Used by RTC
• KZN DOH intranet resource

Paeds & adolescent HIV stationary

Pamphlets:
- Healthy lifestyle
- HIV disclosure
- How to take ARVs
- Adherence and Virological failure

Patient education material

HIV Paediatric task team (KZN DOH):
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Update HIV component

Strengthen IMCI implementation

Align with updated guidelines and simplify
Patient education material

We need to take special medicine for the strong germ. This medicine is called "good night" medicine and it will put the strong germ to sleep. When the germ is asleep our soldier cells can be strong again and keep our bodies well.

There are some other things we can do to keep our soldier cells strong and healthy.

- Eat lots of different healthy foods
- Take our medicine every day, like the nurse told us
- Drink lots of water
- Rest and sleep
- Exercise and play
- Think about things that make us happy
Inside our blood, we can have many different kinds of germs. These germs can make us sick.

Some of these germs are:

- Strong Germ
- Bad Germs
- Ukuyi the Washing Germ
- Silly the Scary Germ
- Silly the Smiley Germ
- Ukuyi the Manly Germ
- Tini the Tiny Germ

Germs can make our bodies feel sick in different ways.

If you have felt sick with any of these germs before, please tell the nurse.

In our bodies we have soldier cells. These soldier cells live in our blood. They protect our body from getting sick.

When the germs come into our bodies, the soldier cells fight them and get rid of them.

Sometimes we get a germ that is too strong and there are too many germs. These germs get rid of our soldier cells and then we start to get sick.
How can I help my child to have good adherence?

- Talk to your child about their health and taking their medication (disclosure).

- If your child is under 10 we can help you to use the correct words to describe their illness.

- If your child is over 10 we can help you to name their illness and help your child to understand what is happening in their bodies and how the medication helps them to stay well.

Children have good adherence when they are told the truth and included in their health journey.

- Talk to someone at the clinic if you are struggling with adherence or need help to talk to your child.
Patient education material

What is good adherence to medication?
Taking the right dose, at the right time, every single day, under the right conditions (for example, keeping the medication in the fridge as prescribed by the nurse or doctor). We call this good adherence.

Take every dose:

1. Everyday
2. At the right time (with or without food, stored at the right temperature etc)
3. Under the right conditions
4. Complete the course as prescribed

What can happen if my child does not have good adherence?
The strong germ will make many copies of itself and your child’s viral load will be high. This means that your child’s soldier cells will be few. The body will not be able to fight other diseases and your child will become sick.

If your child misses too many doses, the medication will stop working. We call this treatment failure.

We may need to change your medication. This medication is harder to take and has more side effects.

How does medication help my child to stay well?
By taking medication, as prescribed, the strong germ will not be able to make copies of itself.

We can measure how many copies of strong germ are in your child’s body. This is called viral load.

If your child has good adherence, the viral load will be low. Meaning that the medication is controlling the strong germ.

If the viral load is low your child’s immune system (soldier cells) will become stronger and the body will be able to fight off other diseases, keeping your child well and healthy.
Patient education material

Tips to remember

When giving medication:
- Give at the same time as daily activities.
- Tie a reminder to TV show
- Set alarms as reminders
- Use a diary and mark off when medication is taken
- Use a pill box
- Use a reward system for your child
- Including your child in their health journey makes them learn responsibility for taking their own medication as they get older.

Should I give the medication with food?
Not all medication is the same. Here is the guide:
- Medications without food:
  - Lamivudine (3TC)
  - Aluvudine (ABC)
  - Tenofovir (TDF)
  - Zidovudine (AZT)
  - Nevirapine (NVP)
  - Lopinavir/Ritonavir solution
- Medications with food:
  - Lopinavir/Ritonavir solution

Avoid fatty foods:
- Fatty (Cheese) - best at bed time

Even natural or traditional medicine might not go well with medication.

- What must I keep the medication?
  - Always keep medicine in a cool, dry and dark place.
  - Avoid keeping medicine in the kitchen or bathroom.
  - Some medicines need to be kept in the fridge.
  - Kaleta solution

- What side effects can you expect?
  - Most children do not get side effects.
  - The side effects differ from one ARV to another.
  - The most common side effects when starting ARVs include diarrhea, nausea, and vomiting - these will clear up with time.
  - Sometimes children can get more serious side effects, like:
    - Severe stomach pain
    - Fast or difficulty in breathing
    - Pain in feet
    - Rash in the mouth and on the body
    - Severe vomiting and diarrhoea

Short-term side effects:
- Dizziness, nightmares, diarrhoea and confusion caused by Clevudine, Stavudin
- Vomiting and Diarrhoea - if this lasts more than two days or is severe bring the child to the clinic.

IMPORTANT REMINDER
All serious side effects should be managed by a doctor or nurse. If a child is experiencing any serious side effects, or fears, take him to the clinic as soon as possible.

IMPORTANT REMINDER
Always ask the healthcare provider before taking any other medication.

MY Medicine and I

Serving medicine to Children

health
Department: Health
PROVINCE OF KWAZULU-NATAL

FIGHTING DISEASE, FIGHTING POVERTY, SAVING LIVES
Patient education material

What medication will my child need?

In most cases a child will need at least 6 types of medication:
- Multivitamin in the morning
- Co-trimoxazole (diarrhoea) daily
- Combination of 3 ART medicines

Additional medicines:
- TB
- Deworming
- Vitamin A drops

What do I need to know?

1. The name of the medicine
2. When and how often to give each medicine.
3. How much of each medicine to give (this may change at almost every visit, based on your child's weight).

IMPORTANT REMINDER
Please make sure that your child is weighed at every clinic visit and recorded on the Road to Health card.

What are common questions?

What if my child vomits after I give the medicine?
- If the child vomits within 30 minutes of giving the medicine, give it again.
- If the child vomits after 30 minutes of giving the medicine - do not give it again until the next dose.

What if I forget to give the medicine?
For 12 hourly doses:
- If you remember before 6 hours - give it
- If it is more than 6 hours - skip the dose

For once daily doses:
- If you remember before 12 hours - give it
- If it is more than 12 hours - skip the dose

How should I give the medicine to my child?

The amount of medication to give can be found on the label.

If the label states to give 2ml, as an example, you will need to:

STEP 1: Place the tip of the syringe in the liquid medicine.

STEP 2: Draw up the liquid until the plunger is in line with the correct number on the syringe e.g. 2.

STEP 3: Pick the syringe to move any liquids to the top then push the plunger down to remove those bubbles.

STEP 4: Repeat step 1 and 2, if necessary (to make sure you have the right amount of liquid).

STEP 5: Give this amount to the child in their mouth e.g. 2ml

IMPORTANT REMINDER
Never give a double dose!

When is the best time to give the medication?

- A time that suits you and your child's routine
- For twice daily doses - give medication 12 hours apart or as close to 12 hours as possible

What is good adherence?

Take every dose:

1. Everyday
2. At the right time (with or without food, stored at the right temperature etc)
3. Under the right conditions
4. Complete the course as prescribed
IMCI tools and materials

**Job aids:**
- IMCI wall charts
- Recording forms

**Paeds & adolescent HIV stationary**

**Patient education material**

**Electronic IMCI**

**Strengthen IMCI implementation**

**Supervision**

**Training materials**

**Update HIV component**

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- Public license
- KZN DOH intranet resource

- 3 day supervisors training
- Supervision tools (DCSTs)

- PowerPoint presentations created (3 day training)
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**Align with updated guidelines and simplify**

**Develop and test with phased implementation**

**Pamphlets:**
- Healthy lifestyle
- HIV disclosure
- How to take ARVs
- Adherence and Virological failure

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**Align with updated guidelines and simplify**

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WHY?

• ↑case finding for HIV, TB, malnutrition.
• Strengthen case management:
  ➢ Decision support: Guidance throughout the consultation.
  ➢ Reduce risk of classification and treatment errors.
  ➢ Facilitate completeness of assessments and treatments for children and prevents skipping steps during case management.
• Strengthen linkages between communities and facilities.
• Strengthen and simplify data quality and reporting.
IMCI innovation: e-IMCI
IMCI innovation: e-IMCI
IMCI innovation: e-IMCI
Patient Details
- Patient Name: Test TestTw
- Age: 77
- Type: IMCI 2M to 5Y
- Weight: 16
- Temp (C): 3

Classifications
- PNEUMONIA
- NO VISIBLE DEHYDRATION

Treatments
- **Administer Amoxycillin**
  - Dosage:
    - 20 ml po stat of Syrup (125 mg per 5 ml)
    - Or 10 ml po stat of Syrup (250 mg per 5 ml)
- **Advise the caregiver to soothe the throat, relieve the cough with a safe remedy**
- **Administer elemental Zinc**
  - Dosage:
    - 20 mg once daily of (zinc sulphate, gluconate, acetate or picolinate)
- **Follow-up in 5 days**
Thank You

• NDOH
• KZN Child Health Department and Nutrition
• Ilembe DOH
• ID department at UKZN
• ELMA
• Zoë-life
• Virtual Purple
• Health Enabled
• PEPFAR/ CDC