

Somali National Treatment Guidelines in line with the Essential Package of Health Services



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**Primary
Health Unit
STGs**

November 2015

Somali Health Authorities
World Health Organisation

Somali National Treatment Guidelines
in line with the
Essential Package of Health Services



Primary Health Unit STGs
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List of abbreviations

ANC	Antenatal care
ARI	Acute respiratory illness
AS+SP	Artesunate + sulfadoxine-pyrimethamine
CHW	Community health worker
CSB	Corn soya blend
DOT	Directly Observed Therapy
EPHS	Essential Package of Health Services
H	Hospital
HC	Health centre
iCCM	Integrated community care management
IMCI	Integrated Management of Childhood Illnesses
MAM	Moderate acute malnutrition
MMN	Multiple micronutrient
MOH	Ministry of health
MUAC	Mid-upper arm circumference
ORS	Oral rehydration solution
OTP	Outpatient therapeutic programme
PHU	Primary health unit
RHO	Regional health office
RUTF	Ready-to-use therapeutic food
SAM	Severe acute malnutrition
SC	Stabilisation centre
RDT	Rapid diagnostic test
RHC	Referral health centre
SFP	Supplementary feeding programme
STG	Standard treatment guideline
STI	Sexually-transmitted infection
UNIMIX	A dry ration given as part of a SFP

Abbreviations used for treatments

kg	kilogram
ml	millilitre
per	for each
x	times (eg four times for each day = 4 x per day)

Introduction

A health system without treatment guidelines is like a transport system without rules. If drivers could drive as fast as they liked, put in any fuel, drive on any side of the road and have cars as noisy and polluting as they liked, then the number of accidents and deaths would spiral. It would become much more dangerous to pedestrians and other drivers than if drivers followed the simplest of rules, and the net effect would be more harm than good. It is the same with a health system. If clinicians prescribe whatever they like with no guidance then they are likely to cause great harm to patients, resulting in more suffering and even deaths than from the original disease for which they consulted.

Health systems need rules. And above all the use of medicines needs to be very carefully controlled. All medicines are developed by pharmaceutical companies because of their potential benefits and impact on saving millions of lives. But used in the incorrect way, these agents of humankind can exacerbate suffering and even provoke premature death.

That is why health professionals need to be very well trained in the use of medicines, treatment guidelines and diseases protocols. Ministries of health are responsible to ensure that people prescribed treatments by health professionals receive the most effective medicine for the condition with the fewest side effects. And with limited budgets and wanting to limit the bills that patients pay, health ministries have to constantly look for the most cost-efficient treatments as well as those that are the most effective.

The following introductory section looks at:

- Purpose
- scope
- concept
- format
- authority
- Principles

The purpose of the STGs

These STGs outline principles for prescribing, and list the best treatments that are currently available at affordable prices. The application of these guidelines for Somali nationals brings huge benefits to the health status and well-being of Somalis, limits potential harm that incorrect prescribing can cause and eases the task of the thousands of health professionals navigating their way through dozens of manuals and protocols. Developed as pocket guides for different levels of the Somali health system in line with the EPHS, the availability of STGs greatly simplifies the task of health professionals in prescribing and ensures that those using the health system know that they are getting the best treatments with the least chance of side effects at low cost. With STGs, the use of medicines becomes rational.

STGs bring everyone involved in medicines onto the same page. They are used by policy makers in the health ministries to set standards and regulate practices. Supply chain managers consult them to ensure affordable generic medicines are available in line with the STGs. Prescribers (health professionals) consult them to ensure all their prescribing is appropriate, evidence-based, and affordable. Dispensers (pharmacists and those authorised to dispense) check that health professionals are prescribing correctly and not duplicating medicines unnecessarily or using inappropriate or expensive medicines. Dispensers also check that prescribed medicines are in line with the formulary for that level facility. Patients benefit from the application of the STGs in knowing that they are receiving the best evidence-based, effective and affordable medicines, greatly improving the quality of treatment they receive and limiting any out of pocket expenses.

The scope of the STGs

The STGs are the authoritative medicine prescribing guide for policy makers, managers, dispensers and health professionals in territories governed by the governments of Federal Somalia, Puntland and Somaliland. This handbook covers what CHWs can treat in primary health units.

The concept and format of the STGs

These STGs are written in a format designed to be concise, clear and easy to use by CHWs in primary health units or on a home visit. They

can also be used in integrated community care management (iCCM) programmes. Unlike national treatment guidelines in some countries, the STGs have been “stripped back” to include just treatments and a few points related to the treatment indication, dosage and key important side effects and interactions. The STGs are *not* diagnostic guidelines or clinical protocols, and do not provide detailed descriptions of disease. This information can be found in other documents including training manuals, reference text books, on-line resources and disease-specific protocols. To have included this information would have made the STGs much longer and not as easy to reference during consultations. The STGs are primarily about medicines and when and how to best use them. In the future clinical protocols may be produced to accompany the STGs.

The Authority of the STGs

The STGs are developed, approved and adopted by the Ministries of Health of the Federal Government of Somalia, the Government of Puntland and the Government of Somaliland. They are the standardised treatments that should be followed at each level of the health system. Application of the STGs brings huge benefits for patient well-being, reduces the harm caused by inappropriate prescriptions and brings large cost savings for health facilities and the Somali population. Only health professionals *licenced to practice* (whether in the public or private sector) by health ministries and Somali health professional bodies are authorised to use these guidelines. The guidelines assume that the health professional at each level has been trained to use the treatment described. Each set of guidelines outlines which professionals are authorised to prescribe which treatments.

These guidelines must not be used by someone who has not been trained to give a treatment or by someone who is not authorised by the health ministry to work in a health facility.

The STGs are based on the current evidence-based prescribing practices from around the world, with cost-effectiveness taken into account. In medicine the evidence is constantly changing as new high-class research is carried out. At times health ministries may issue statements on small adjustments to be made to these STGs based on new evidence about a medicine, but with budgetary constraints the full STGs will only be updated every few years.

Principles of prescribing and dispensing

Principle	Explanation of principle
Efficacy	The best known treatment is given for the appropriately diagnosed medical condition.
Evidence-based	Treatments are selected based on their efficacy and credibility as proven by research from around the world.
Updated	As the evidence changes, health ministries may issue small adjustments to the STGs.
Cost-effective	The most effective and affordable options are chosen. Generic names are used instead of brand names.
Harm-limiting	All medicines have negative as well as positive effects. Treatments are selected that are likely to be as safe as possible, causing the fewest side-effects to patients.
Professional	Only registered health professionals are authorised by health ministries to prescribe. Prescribers and dispensers behave with the utmost professionalism in adhering to treatment guidelines and in following ethical codes of conduct. They are not influenced by medicines branding or by the advertising pressure of pharmaceutical companies.
Quality-controlled	All medicines dispensed are supplied from quality-controlled procurement and supply chains.

The STGs in line with the Essential Package of Health Services

EPHS Core programmes 1 – 6 for the Primary Health Unit

At PHU level only some of the interventions in core programmes 1 – 6 are implemented, whereas at health centre (HC) level all interventions of the core programmes are applied.

CHWs are not directly involved in treatments for family planning, ANC and deliveries but have an active role in encouraging women to attend HCs for all of these and are actively involved in *promoting* birth spacing, safe motherhood and newborn care. Likewise, CHWs do not give treatment for TB, HIV or STIs but are involved in giving targeted health education.

EPHS Additional programmes 7 – 10 are not conducted at PHU or HC levels in EPHS phases I & II: all cases in these categories are referred.

Standard Treatment Guidelines for Primary Health Units

Danger signs

CHWs must **refer immediately** any child or adult with danger signs. These include the following:

Signs of severe infection

- high fever (over 40°)
- drowsiness, blue or very pale colour
- convulsions
- stiff neck

Signs of severe dehydration

- Lethargic or unconscious
- Sunken eyes
- Not able to drink or drinking poorly
- Skin pinch goes back very slowly (children and young adults only)

Signs of severe pneumonia

- very rapid or noisy breathing
- chest indrawing

Prescribing paracetamol

Paracetamol is the most common medicine used in the health system. It helps reduce fever, pain and symptoms associated with the common cold such as cough and congestion¹. For fever it is given if the temperature is over 38.5°. It is given for many of the conditions described in the STGs. Paracetamol should not be given more than every 6 hours (not more than 4 x per day). There are three preparations commonly available - syrup (120mg/ml), 500mg tablets and 100mg tablets, so it is very important that the CHW gives the right amount for each preparation.

Like all medicines, paracetamol is effective in the prescribed dosage but may be **very dangerous if this dose is exceeded**. If a patient accidentally takes too much, or a parent has accidentally given a child more than double the recommended dosage, then **refer immediately**. CHWs must follow this dosage guideline very carefully. Aspirin is also sometimes used for treating fever but must never be given to children under 12 years. The following dosage table is used whenever “Give paracetamol” is mentioned in the STGs.

¹ A medicine used for pain control is called an *analgesic* and a medicine used for fever is called an *antipyretic*.

Medicine	Age	Dose	Duration	Side effects
Paracetamol	Infants < 2 months	Do not give		Common: no common Rare: skin reaction. Very dangerous in over-dosage, refer all cases.
	Infants 2 to 6 months	60mg 4 x per day (2.5mls of 120mg/5mls syrup or ½ 100mg tablet)	2 to 5 days	
	Children 6 months to 3 years	120mg 4 x per day (5mls of 120mg/5mls syrup or 100mg tablet)	2 to 5 days	
	Children 3 years to 7 years	240mg 4 x per day (10mls of 120mg/5ml syrup or 2 x 100mg tablet or ½ x 500mg tablet)	2 to 5 days	
	Children 8 to 11 years	500mg 4 x per day (1 x 500mg tablet)	2 to 5 days	
	Children 12 to 15 years	750mg 4 x per day (1½ 500mg tablet)	2 to 5 days	
	Adults (16 years and over)	1000mg per day (2 x 500mg tablets)	2 to 5 days	

Prescribing tip: Infants: Best to give in syrup form and measure carefully with measuring spoon. Older children: can crush tablets if syrup not available

Core Programme 1.

Maternal, Reproductive, Neonatal Health

CHWs do not conduct routine antenatal clinics or deliveries. They give consistent promotional messages to encourage all pregnant women to attend 4 focussed antenatal care (FANC) visits at the health centre (HC) and to deliver at the HC. CHWs should also make women aware of testing for HIV and syphilis at ANC in promotion of PMTCT.

CHWs explain the objectives of ANC at the HC:

- Detection and treatment of problems
- Prevention of complications using safe, simple and cost-effective interventions
- Preparation for birth
- Promotion of health
- CHWs should also make women aware of testing for HIV and syphilis at ANC in promotion of PMTCT.

CHWs should **refer immediately** all cases of threatened abortion and of bleeding, excessive vomiting or abdominal pain in pregnancy or after delivery.

During pregnancy and after delivery, CHWs may be involved in giving some micronutrient medicines as continuation doses to those prescribed in the health centre:

CHWs may also be involved in outreach programmes to make people aware of the dangers of FGM and how the practice should be stopped.

Maternal nutrition

Antenatal: Ensure pregnant women take 1 multiple micronutrient tablet per day (1 MMN tab per day) throughout pregnancy. These are usually given at the ANC at HCs but CHWs may also prescribe these to pregnant women who have run out or who have not yet attended ANC while encouraging them to do so. CHWs should immediately refer any case of bleeding in pregnancy.

Postnatal: for mother Vitamin A 200,000iu single dose within 6 weeks for mothers (1 red capsule or 2 blue capsules single dose) and 1 multiple micronutrient tablet per day (1 MMN tab per day) each day for 6 months. These may have been given in the HC but if not CHWs may prescribe them, and may need to top up the MMN supply to cover the full 6 months.

Supplementary feeding for pregnant and lactating women with Moderate Acute Malnutrition (MAM) and referral for SAM

CHWs screen women with MUAC bands and refer any with MAM or SAM. At times a supplementary feeding programme (SFP) may be set up at a PHU. Full protocols, guidance and supervision will be issued by the RHO. Women enrolled in an SFP are given take-home dry rations or supplementary Plumpy®. The quantities given are monitored as part of any SFP that CHWs may be involved in, and clear instructions are given to parents on how to give supplementary Plumpy® or prepare CSB or UNIMIX at home. Women with SAM should be referred to an OTP centre.

Birth spacing

Promotion of birth spacing, use of contraception and encourage women and men to seek family planning commodities in the HC. CHWs only give family planning commodities if fully trained to do so.

STIs & HIV

CHWs are not directly involved in treating HIV and STIs but promote transmission reduction through:

- Stigma reduction by raising awareness
- HIV prevention through Behavioral Change Communication (BCC)
- Display and dissemination of educational materials;
- Provision of condoms
- Post-test clubs;
- Community mobilization;
- Promotion of abstinence; faithfulness and condom use;
- Promotion of husband engagement.

Immunisation

Promote uptake of immunisation against tetanus of pregnant women during ANC visits at HCs. Promote uptake of BCG & polio vaccine for newborns at birth (see EPI section and EPI wall chart). **CHWs do not give injections.**

Core Programme 2. Child Health

Diarrhea

Diarrhea is the presence of runny stools three times or more a day. Commonly it is caused by viruses, sometimes by bacteria or other organisms and sometimes by other illness in the body. It is a sign of disease with many causes. **The danger is that it causes dehydration and death**, so the priority of treatment is **urgently giving fluids** (rehydration). Sometimes diarrhea can be very watery (acute watery diarrhea or cholera), and sometimes diarrhea can have blood in it. Most diarrhea will get better in a few days but extra fluids always need to be given.

Treatment steps

- Give extra fluids (rehydration)
- Give zinc supplements
- Give vitamin A if prolonged diarrhea and if vitamin A not recently given.
- Continue feeding
- **Refer all severe cases**, bloody diarrhea, malnourished children and children with HIV with diarrhea.

Signs of severe dehydration

- Lethargic or unconscious
- Sunken eyes
- Not able to drink or drinking poorly
- Skin pinch goes back very slowly (children and young adults only), but should be interpreted with caution.

Treatment note: Children with diarrhea are in danger of becoming dehydrated through fluid loss in the stools. Treatment is aimed at giving extra fluids to keep the child well hydrated. Zinc supplements are also given to reduce the severity of the diarrhea. Most diarrhea does not need antibiotic treatment.

Dehydration from diarrhea is graded for treatment by IMCI as Plan A (green), B (yellow) or C (red). If there is no dehydration (A) the child can be treated by parents at home following the consultation. If there is some dehydration (B), the child is treated with ORS and observed in the PHU. If there is severe dehydration (C) the child is **immediately referred**.

Precaution: Children with acute malnutrition and diarrhoea need to be managed at RHC level. Do not give ibuprofen to dehydrated children because it can damage their kidneys.

1. Give extra fluid (rehydration)

The child needs fluids. These can be given by giving breast milk, water, clear soup, home-made oral rehydration solution (ORS) or ORS sachets. Any water should be clean water (boiled and cooled or treated).

1.1 No dehydration (Plan A):

The following advice is given to parents:

Home-made ORS

You need:

- ½ teaspoon or small measure of salt (or a good pinch. The amount you can pick up between your fingertips)
- 6 teaspoons of sugar (or 2 handfuls. A handful is the amount you can hold)
- with four fingers)
- 1 litre of the cleanest water you have, boiled if possible and cooled

Procedure:

- Wash your hands with soap and water
- Mix these together in a clean jug
- Stir until the salt and sugar is dissolved
- Use in the same ways as ORS from a packet.

ORS from a packet - Give the parent 2 sachets to make up at home.

ORS exists in two different sizes of packet. One has to be diluted in 1 litre of water. The other has to be diluted in ½ litre. Check carefully which size you have and check the expiry date has not been passed.

- Wash your hands with soap and water
- Pour all the powder into a clean container e.g. jar, bottle or bowl
- Use the cleanest water you have, boiled and cooled if possible
- Pour 1 litre of water into the container for a 1 litre packet, ½ litre of water for a ½ litre packet and mix well until the powder is dissolved.

How to give ORS

- Give to the child in frequent small sips. Use a small spoon or cup
- Throw away the solution after one day and make up more in a clean container

- If the child vomits, try again 10 minutes later but give more slowly
- Give extra fluids and breastfeed infants until the diarrhoea stops.
- Show the parent how much fluid to give in addition to the usual drinks:

Up to 2 years:	50 to 100 ml after each loose stool
2 years or more:	100 to 200 ml after each loose stool

1.2 Some dehydration (Plan B):

In the PHU, give recommended amount of ORS over a 4-hour period:

Treatment with ORS over a 4 hour period

Weight	< 6 kg	6 - 10 kg	10 - 12 kg	12 - 19 kg
Age	Up to 4 months	4 months to 12 months	12 months to 2 years	2 years to 5 years
Amount in mls to give over a 4 hour period	200 - 450	450 - 800	800 - 960	960 - 1600

Use the child'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 child's weight (in kg) times 75.

If the child wants more ORS than shown, give more. For infants under 6 months who are not breastfed, also give 100 - 200 ml clean water during this period.

Show the parent how to give ORS:

- Give frequent small sips from a cup.
- If the child vomits, wait 10 minutes. Then continue, but more slowly.
- Continue breastfeeding whenever the child wants.

After 2 to 4 hours:

- Reassess the child and classify the child for dehydration. Select the appropriate plan to continue treatment. If there is no improvement, refer.
- If improving, begin feeding the child in clinic.

1.3 Severe dehydration (Plan C)

Give ORS and refer immediately

2. Give zinc supplements

Medicine	Age	Dose	Duration	Side effects
Zinc	Infants < 6 months	10mg (½ 20mg tablet) per day	14 days	Rare: Nausea, sore mouth/ throat, indigestion
	Children > 6 months	One 20mg tablet per day	14 days	
	Adults	One 20mg tablet per day	14 days	

Prescribing tip: Infants: Tablets can be dissolved in ORS or breast milk. Older children can chew whole; or tablets can be crushed and dissolved in a spoon of water

Advice: give zinc for 14 days even when the child is better

3. Give Vitamin A

if prolonged diarrhea. Give vitamin A 50,000 IU for infants 2 – 6 months; 100,000 units for infants 6 – 11 months and 200,000 units for children > 1 year (for dose see Micronutrients in STGs).

4. Continue feeding

Infants who are sick need to continue breast feeding and eating. For infants over 6 months and children parents may need to crush food or make porridge or soups and give with a cup and spoon.

5. Refer all cases with severe dehydration (Red on IMCI scale), severe diarrhea, bloody diarrhea and all malnourished children with diarrhea.

Give ORS & zinc and refer immediately.

Acute Respiratory illness

ARI is an infection in either the upper airway or lower airway. The diseases for which initial treatment may be given in the PHU are the following:

Upper airway: common cold, tonsillitis, ear infection

Lower airway: pneumonia.

Both common cold and tonsillitis may present with a sore throat and cough. Ear infection may present with earache. It is common for a person to have a common cold with an ear infection. Both common cold and pneumonia can present with cough. But only pneumonia or other dangerous diseases present with fast breathing.

Common cold and cough

The common cold is caused by many different viruses. Symptoms include runny or blocked nose, sneezing, sore throat, cough, mild fever, headache. Paracetamol is given to ease pain and reduce temperature and symptoms. Those affected are encouraged to drink more fluids.

Treatment steps

- Give paracetamol for symptom relief (see Prescribing paracetamol).
- Advise to drink more fluids.
- Breastfeed infants frequently and clear a blocked nose.
- Refer if fast, difficult or noisy breathing. Refer if cough continues more than 14 days.

Treatment note: Advise that there are no medicines that cure the cause; paracetamol eases symptoms. Most colds resolve in 7 to 10 days.

Tonsillitis and cough

Most throat infections are caused by viruses. Sometimes the tonsils may be enlarged, and this may be caused either by a virus or bacteria. If the tonsils are a moderately swollen with no pus then analgesia can be given alone. If the tonsils are very enlarged, very red with pus and there is fever and swollen lymph nodes then penicillin can be given. If the child is allergic to penicillin then this must not be given and the child referred to the HC.

Treatment steps

- Pain and fever control. Mild tonsillitis is treated with analgesia alone for pain and fever. For children, give paracetamol as first choice, ibuprofen as second choice for analgesia; for adults, give ibuprofen or paracetamol for pain and fever. Ibuprofen is more effective than paracetamol for pain control in tonsillitis in adults.
- Penicillin for severe tonsillitis. Penicillin can be given when the tonsils are very large and inflamed with white spots
- **Refer** if fast, difficult or noisy breathing. **Refer** if cough continues more than 14 days.

Advice: Tell the parent to bring the child back if there is no improvement or any new symptoms. Make sure the child continues to eat and drink plenty. It may help to crush food and give soups

1. Pain and fever control

Give paracetamol or ibuprofen.

Medicine	Age	Dose	Duration	Side effects
Ibuprofen	Infants < 2 months	Do not give		Common: nausea and abdominal pain Rare: allergic reaction; ulcer in stomach; damage to kidneys & liver
	Infants 2 – 1 year	50mg (2.5mls (1/2 spoon) of 100mg/5ml syrup) 3 x per day	2 – 5 days	
	Children 1 – 4 years	100mg (5mls (1 spoon) of 100mg/5ml syrup) 3 x per day	2 - 5 days	
	Children 5 – 8 years	200mg (10mls (2 spoons) of 100mg/5ml syrup) 3 x per day	2 - 5 days	
	Children 9 – 15 years	3000mg (15mls (3 spoons) of 100mg/5ml syrup) 3 x per day	2 - 5 days	
	Adults	400mg – 800mg (1 – 2 tablets) 3 x per day	2 - 5 days	

Prescribing tip: If children or adults have indigestion after taking ibuprofen then paracetamol should be given instead.

Advice: Give after food

Precaution: Do not give ibuprofen to dehydrated children because it can damage their kidneys

2. Penicillin for severe tonsillitis

Medicine	Age	Dose	Duration	Side effects
Penicillin V (Phenoxymethylpenicillin) 250mg tablet	Infants under one year	Do not give. Give paracetamol but refer to HC if severe symptoms		Common: none Rare: allergic rash, allergic reaction (anaphylaxis)
	Children 1 to 5 years	125mg (½ tablet) 4 x per day	10 days	
	Children 6 to 11 years	250mg (1 tablet) 4 x per day	10 days	
	Children over 12 and Adults	500mg (2 tablets) 4 x per day	10 days	

Prescribing tip: Older children: tablets can be crushed. A full 10 days is not recommended for tonsillitis to stop recurrence.

Advice: Give for the full 10 days

Precaution: Ask the parent if the child is allergic to penicillin. If the child has had a previous reaction DO NOT GIVE penicillin and **refer** to HC. Do not give ibuprofen to dehydrated children because it can damage their kidneys.

Ear infection

Middle ear infections may be caused by bacteria or viruses. They present with earache and fever, and children may rub their ears. Sometimes the ear drum may be very red and there may be pus discharge if the ear drum perforates. Usually antibiotics are not needed. If there is moderate pain and fever then analgesia can be given alone. If the child has a higher temperature and has severe earache the amoxicillin can be given.

Treatment steps

- Pain and fever control. Mild to moderate earache and fever is treated with analgesia alone for pain and fever. For children, give paracetamol as first choice, ibuprofen as second choice for analgesia; for adults, give ibuprofen or paracetamol for pain and fever. Ibuprofen is more effective than paracetamol for pain control in ear infection in adults.
- Amoxicillin for severe earache. Amoxicillin can be given when there is severe earache and fever. If the child is allergic to penicillin then this must not be given and the child referred to the HC.

- Refer if there is fast or difficult breathing, or if a child is drowsy, has a rash or is very unwell.

Treatment note: Most children with ear infection get better without antibiotics.

Advice: Tell the parent to bring the child back if there is no improvement or any new symptoms. Make sure the child continues to eat and drink plenty.

1. Pain and fever control

Give paracetamol or ibuprofen.

Medicine	Age	Dose	Duration	Side effects
Ibuprofen	Infants < 2 months	Do not give		Common: nausea and abdominal pain Rare: allergic reaction; ulcer in stomach; damage to kidneys & liver
	Infants 2 to 1 year	50mg (2.5mls (1/2 spoon) of 100mg/5ml syrup) 3 x per day	2 – 5 days	
	Children 1 to 4 years	100mg (5mls (1 spoon) of 100mg/5ml syrup) 3 x per day	2 - 5 days	
	Children 5 to 8 years	200mg (10mls (2 spoons) of 100mg/5ml syrup) 3 x per day	2 - 5 days	
	Children 9 to 15 years	300mg (15mls (3 spoons) of 100mg/5ml syrup) 3 x per day	2 - 5 days	
	Adults	400mg – 800mg (1 – 2 tablets) 3 x per day	2 - 5 days	

Prescribing tip: If children or adults have indigestion after taking ibuprofen then paracetamol should be given instead.

Advice: Give after food.

Precaution: Do not give ibuprofen to dehydrated children because it can damage their kidneys

2. Amoxicillin for severe earache

Medicine	Age	Dose	Duration	Side effects
Amoxicillin 125mg/5ml suspension or Amoxicillin 250mg tablet	Infants 2 to 11 months	250mg (10ml (2 spoons) or 1 tablet). Give first dose and refer	5 days	Common: diarrhea
	Children 1 to 5 years	250mg (10ml (2 spoon) or 1 tablet) 2 x per day	5 days	Rare: allergic rash, allergic reaction (anaphylaxis)
	Children 6 to 11 years	500mg (20ml (4 spoons) or 2 tablets) 2 x per day	5 days	
	Children over 12 and Adults	750mg (3 tablets) 2 x per day	5 days	
Prescribing tip: Older children: tablets can be crushed.				

Precaution: Ask the parent if the child is allergic to amoxicillin or penicillin. If the child has had a previous reaction DO NOT GIVE amoxicillin and refer to HC.

Pneumonia and difficult breathing

Pneumonia is an infection in the lung, in the lower airway caused mainly by bacteria. The signs of pneumonia are fast breathing and difficult breathing, chest indrawing, cough, fever, sputum. **It is a very dangerous disease.** Antibiotics are needed for pneumonia. Early pneumonia can be treated by CHWs in the PHU but if there are **any danger signs** the child or adult must be **referred immediately**. The IMCI guide should be followed.

Treatment steps

- Assess a person for fast breathing, danger signs and a child for chest indrawing and danger signs. Decide if a child is in IMCI phase Red, Yellow or Green.
- If a person has severe pneumonia (IMCI red) then give one dose of amoxicillin and **refer immediately**. If a person is wheezing then **refer** immediately.
- If a person has pneumonia without severe signs then treat with amoxicillin. Give paracetamol if fever $> 38.5^{\circ}$ and do an RDT.
- Give Vitamin A 50,000 IU for infants 2 – 6 months; 100,000 units for infants 6 – 11 months and 200,000 units for children > 1 year (for dose see Micronutrients in STGs).

- If a person with pneumonia or child is not improving then the parents should bring them back or go straight to the HC day or night. If they still have signs of pneumonia after 3 days then **refer**.

Treatment note: Any child or adult with pneumonia should be watched closely. The CHW will want to see the person with pneumonia regularly, may want to visit them at home or get them to come back regularly. If there is any worsening of the condition the CHW must refer immediately.

Advice: Advise the parents take the child to the HC day or night if the child is not improving and the breathing is getting faster.

IMCI guide for Cough and difficult breathing

Red: Any danger sign. **Danger signs** include: Very fast breathing. Noisy breathing (not coming from the nose). Chest indrawing. Blue colour to the lips and tongue. Drowsiness. Convulsion. Inability to eat or drink.

This may be severe pneumonia. A first dose of amoxicillin should be given and the child is **referred immediately**.

Yellow: Fast breathing. May have cough and fever. May have mild chest indrawing.

This may be pneumonia. Amoxicillin should be given and the child closely monitored.

Green: Cough and cold. No fast breathing. The child does not have pneumonia and should be treated as for the common cold guidelines. If the child has earache or sore throat then the guidelines for ear infection and tonsillitis should also be followed.

If the child is:	Fast breathing is:
2 months up to 12 months	50 breaths per minute or more
12 Months up to 5 years	40 breaths per minute or more
Older children and adults	30 breaths per minute or more

IMCI pathway for cough and difficult breathing:

The treatment dose for pneumonia

Medicine	Age	Dose	Duration	Side effects
Amoxicillin 125mg/5ml or Amoxicillin 250mg tablet	Infants 2 to 11 months	250mg (10ml (2 spoons) or 1 tablet). Give first dose and refer		Common: diarrhea
	Children 1 to 5 years	500mg (20ml (4 spoons) or 2 tablet) 2 x per day	5 days	Rare: allergic rash, allergic reaction (anaphylaxis)
	Children 6 to 11 years	750mg (30ml (6 spoons) or 3 tablets) 2 x per day	5 days	
	Children over 12 and Adults	1g (4 tablets) 2 x per day	5 days	
Prescribing tip: Older children: tablets can be crushed.				

Precaution: Ask the parent if the child is allergic to amoxicillin or penicillin. If the child has had a previous reaction DO NOT GIVE amoxicillin and refer to HC.

Give paracetamol for fever > 38.5°.

Malaria

Malaria is caused by a parasite that is injected into the body through the bite of infected anopheles mosquitos which spread the disease. The parasite destroys the red blood cells and causes fever and symptoms of malaria such as headache, chills, sweating, body pains. In children it commonly presents with vomiting and diarrhea. Malaria is a **very dangerous disease** that causes complications including anaemia, miscarriage, enlarged spleen, and convulsions and death. It is diagnosed in the PHU by a history of fever and confirmed with the Rapid Diagnostic Test, RDT. CHWs should do everything to prevent malaria in the community following the malaria prevention programme. Malaria is more common in some parts of the country and may come in seasons especially after the rain.

Treatment steps

- Make clinical diagnosis based of symptoms of fever for 2 days.
- Take temperature. If > 37.5° or history of fever then do a RDT.
- If RDT +, treat with Artesunate and Sulfadoxine-pyrimethamine (AS+SP), first dose under DOT, and follow up doses at home. Do

not treat pregnant women in early pregnancy but refer. If RDT – do not give antimalarials.

- Give one dose of primaquine by mouth on day 2 for all cases of *Plasmodium falciparum*.
- If RDT + for *P. vivax*, **refer**.
- Give paracetamol if fever above 38.5°. Other causes of acute febrile illness should also be looked for.
- Give oral fluids. Patients with fever need more fluids. Encourage mothers to provide extra breastfeeding. If there is diarrhea, assess and treat as per the diarrhea guidelines.
- Ask the patient to come back immediately in case of danger signs or after 2 days if persisting fever.
- **Refer immediately** if any danger signs of severe malaria (unable to drink, repeated vomiting, anaemia, drowsiness, yellow eyes, convulsions, unconscious, passing no urine, weak or rapid pulse, severe dehydration, bleeding, difficulty breathing, neck stiffness)
- **Refer** if not improving on the treatment given in the PHU.

Treatment note: The patient should stay in the PHU for about 30 minutes after the first dose under DOT in case he or she vomits up the medication. If so another dose should be given but counted as the first dose and observed. **Refer** if further vomiting.

Advice: Children and adults who have fever need to drink more and need food. This is hard when they don't want to eat. Parents should give children small amounts of fluid by cup and spoon more often and make food that are easy to eat (like soups and porridge). Adults are encouraged to drink more.

Precaution: Women in early pregnancy should be referred. AS+SP should also not be given to infants aged less than 2 months and to people with known allergy to AS+SP or co-trimoxazole or fansidar. All these patients should be referred, along with all people with danger signs.

Treatment with Artesunate and Sulfadoxine-pyrimethamine (AS+SP) with **AS 50mg** and **100mg**.

Body weight (kg)	Number of tablets if AS 50 mg				Number of tablets if AS 100 mg			
	Day 1		Day 2	Day 3	Day 1		Day 2	Day 3
	AS (50mg)	SP	AS (50mg)	AS (50mg)	AS (100mg)	SP	AS (100mg)	AS (100mg)
Infants < 2months	refer							
5–10 (3 m – 1 year)	½	½	½	½	¼	½	¼	¼
>10–24 (1 – 5 years)	1	1	1	1	½	1	½	½
>24–50 (5 – 12 years)	2	2	2	2	1	2	1	1
>50 (adult & > 12 years)	4	3	4	4	2	3	2	2

AS, artesunate; SP, sulfadoxine–pyrimethamine.

Side effects: Common: Rash, nausea, headache

Rare: Allergic skin reaction, vomiting, diarrhea, effects on blood

Treatment with primaquine

Give all adults with *P. falciparum* a single dose of primaquine by mouth, 15mg tablet, on day 2 of treatment with AS+SP. This treats the early form of the malaria parasite. Give children a single dose, 0.25mg/kg, primaquine by mouth.

Fever management

Fever is a temperature of over 37.5° and is a response by the body to underlying infection and disease. Fever is a positive reaction by the body in its fight against infection.

Treatment steps

- Take the temperature of all patients complaining of being unwell or with history of fever.
- **Refer** all patients with high fever (over 40°) and danger signs – including drowsiness, pallor, convulsions, signs of shock, severe dehydration, signs of meningitis.
- Do a RDT on all patients with fever over 37.5° If +ve, treat for malaria.
- Ask other questions to establish cause of fever and treat underlying cause. Other causes of fever include ARI, viral illness, UTI, hepatitis and life-threatening illnesses like measles, meningitis and typhoid fever.

- Give paracetamol. In the absence of other signs or symptoms and if the patient is otherwise well, no other treatment is needed, but they should be told to come back if not improving.
- Repeat the RDT after 3 days if fever persists. If RDT+ve, treat as per STGs. If RDT - then **refer** child to HC.

Treatment note: Do not give antibiotics if there is mild fever but no obvious cause.

Advice: Do not overdress or underdress a child with fever. Sponging a child with water may initially reduce the temperature but should not be done if it is likely to upset the child.

Febrile convulsions

Children with fever may have a febrile convulsion caused by the fever associated with an infection

Treatment steps

- Put the child on their left side.
- When recovered give paracetamol.
- Give fluids by mouth.
- Treat as per Fever Management and treat any cause of fever.
- Refer immediately if repeated convulsion, temperature > 40°, or any danger signs.

Measles

Measles is a **dangerous illness** with a **high mortality** caused by a virus in children who have not been immunised, presenting with a typical rash, conjunctivitis, sore throat, cough, mouth ulcers and ear infection, with serious complications such as diarrhea, pneumonia, malnutrition, meningitis, and blindness. Measles is a notifiable disease and is highly contagious.

Treatment steps

- If measles is suspected, **refer immediately** all cases and notify the health centre. The child will usually need to go to the RHC or Hospital. All pregnant women with measles should go to a CEmONC centre.
- During referral give supportive measures for the symptoms. These are: ORS, other fluids, zinc, paracetamol for fever and distress, gentian violet in the mouth for ulcers and tetracycline ointment for conjunctivitis. For dosage see the relevant section of these STGs.
- Give vitamin A 50,000 IU for infants 2 – 6 months; 100,000 units for infants 6 – 11 months and 200,000 units for children > 1 year (for dose see Micronutrients in STGs).

- If the child already has signs of pneumonia, give a first dose of amoxicillin during the referral.
- Send a referral note to the health centre with all the treatment already given.
- Begin all measures for control of an epidemic, guided by the health centre.

Treatment note: All children with measles should be **referred** even if they have mild illness and the RHO must be informed.

Advice: Parents must take the child to the health centre immediately and bring any other children that may have a similar illness. All children must be immunised to prevent this dangerous disease.

Precaution: Measles is **dangerous** and contagious. It is important the care and rapid **referral** of the child is a top priority.

Immunisation

CHWs do not give injections or immunise directly but may, if specifically trained, be involved in immunisation outreach campaigns and routine clinics. They may assist giving oral polio vaccine and vitamin A, but do not inject. They promote parents to bring their children for all the vaccine doses in the national programme and teach parents about the dangers of these diseases if a child is not immunised against them. Information on immunisation is available in the guide: Expanded programme of immunisation. Guide for health workers. MOH, WHO, UNICEF 2014.

CHWs play an important role in promoting uptake of immunisation. They encourage all families to bring their children for the full immunisation programme as per the schedule and to attend Child Health Days.

Somali Immunisation Schedule

	BCG	OPV	IPV	DTP-Hep B-Hib	Measles
Birth	X	X			
6 weeks		X		X	
10 weeks		X		X	
14 weeks		X	X	X	
9 months					X
Further measles booster					X

Malnutrition

CHWs provide a vital role in preventing, detecting and treating malnutrition. Comprehensive guidance² and training is given to CHWs, who are involved in the following key nutrition interventions:

Promoting good nutrition: how to teach parents about infant and young child feeding (IYCF) and exclusive breastfeeding, and how to give micronutrient supplements. The CHW is also trained with a check list for home visits of children who may be malnourished and to give key nutritional messages on prevention and treatment.

Detecting malnutrition: CHWs are routinely and actively detecting acute malnutrition by measuring a child's mid-upper arm circumference (MUAC) using the MUAC band, by assessing the presence of swollen feet and by looking for wasting and weakness.

Treating malnutrition: CHWs refer children with severe acute malnutrition (SAM), CHWs may be involved in providing outpatient feeding programmes (OTP) and in supplementary feeding programmes (SFP) if programmes are set up in the PHU or community.

Micronutrients

Young children are given multiple micronutrients and vitamin A to help prevent chronic and acute malnutrition and anaemia, to provide the vital micronutrients they need for their growth and development and to help reduce the impact and likelihood of getting infections.

Vitamin A

Infants 6 – 11 months 100,000 IU. Give a single dose every 4 – 6 months. Give 3 drops from red capsule or 1 blue capsule.

Children 12 to 59 months (1 to 5 years) 200,000 IU. Give a single dose every 4 - 6 months. 1 red capsule or 2 blue capsules.

MMN

1 RNI each day children aged 6 – 59 months

Anaemia

Anaemia is a reduction in the amount of red blood cells. Symptoms and signs include irritability, tiredness and pallor of the conjunctivae,

² Somali guidelines for management of acute malnutrition Somali MOHs, UNICEF, 201

lips, tongue, nail beds and palms. Any suspected case of anaemia is referred to the HC. Severe anaemia can present with breathlessness and these cases must be **referred immediately**. Treatment with iron folate may be continued in the PHU once it has been started in the HC.

Many of the disease programmes in the PHU help prevent anaemia. These include micronutrient supplementation and the prevention and treatment of malaria. Deworming medication is given regularly to young children to prevent and treat all worms including the hookworms which cause anaemia. Deworming medication is usually given once to pregnant women at the HC during an ANC visit from the 2nd trimester.

Treatment steps

- **Refer** all suspect cases of anaemia. Refer immediately any case of breathlessness from anaemia.
- Continue iron folate for 3 months if anaemia diagnosed in the health centre.
- Give all young children deworming medicine.
- Reinforce all prevention measures, including handwashing, exclusive breastfeeding, IYCF and the best food for children and pregnant women.

Continuation dose of iron folate for treating anaemia if started in the HC

Medicine	Age	Dose	Duration	Side effects
Iron & folate tablets (60mg iron + 400 microgrammes folate)	Children < 2 years	½ tablet per day (30mg iron + 100 micrograms)	3 months	Common: Abdominal discomfort; constipation Rare:
	Children 2 to 12 years	1 tablet per day (60mg iron + 400 micrograms folate)	3 months	
	Adults including pregnant women	2 tablets per day (120mg + 400 folate)	3 months	

Prescribing tip: Infants: Older children:

Advice slot: Follow up at the HC to check blood levels and if further treatment need or not.

Precaution: Albendazole must not be given in early pregnancy. It is not given to women who are breastfeeding in case they are in early pregnancy.

Deworming medicine

Medicine	Age	Dose	Duration	Side effects
Albendazole tablet	Infants < 12 months	Do not give any deworming medicines.		Common: Abdominal discomfort Rare: Diarrhoea, dizziness
	Children 12 – 23 months	½ tablet (200mg) of Albendazole 400mg	Single dose	
	Children 24 months and older	1 tablet (400mg) of Albendazole 400mg	Single dose	

Prescribing tip: Children: Children over 1 year old should have deworming medicine once a year.

Advice slot:

There are 3 types of acute malnutrition:

- Moderate Acute Malnutrition (MAM)
- Severe Acute Malnutrition (SAM) without complications
- SAM with complications.

The CHW uses the MUAC to diagnose if a child or pregnant woman has no malnutrition, MAM or SAM. Note the number of mm on the MUAC band and diagnose as follows:

- < 115 mm : Severe acute malnutrition
- > 115 and < 125 mm : Moderate acute malnutrition
- > 125 mm: No malnutrition

Precaution: CHWs do not initiate care for children with MAM or SAM unless there is an established SFP or OTP and the CHW is involved in. If there are not programmes, all children with MAM and SAM are referred to the HC.

Moderate acute malnutrition (MAM)

CHWs play an active role if there is a targeted feeding programme for treating moderate acute malnutrition in children aged 6 – 59 months in a supplementary feeding programme (SFP) and in following up those discharged from an OTP. CHWs may also be part of mobilisation teams that follow up children with MAM receiving targeted feeding at community level.

Children and women enrolled in an SFP are given take-home dry rations or supplementary Plumpy®. The quantities given are monitored as part of any SFP that CHWs may be involved in, and clear instructions are given to parents on how to prepare CSB or UNIMIX at home. In

addition, children enrolled in the SFP may routinely be given vitamin A, albendazole, folate for 14 days then iron folate, and may be immunised against measles and any other EPI vaccines not previously given.

Severe acute malnutrition (SAM) without complications

Refer to OTP.

Outpatient therapeutic programme (OTP). An OTP may be set up in the PHU and CHWs may be involved in follow up in the community of children with SAM, and may be involved in distributing ready-to-use therapeutic food (RUTF), with Plumpynut® the most commonly used preparation. CHWs would be specially trained and monitored to do this if an OTP is operating. Routine medication is given routinely within an OTP, including vitamin A, amoxicillin, albendazole and measles immunisation if not recently received. Children in the OTP are all tested for malaria with RDT. Several additional medicines may also be given to children in the OTP to treat other medical problems.

Severe acute malnutrition (SAM) with complications

Refer immediately to inpatient stabilisation centre (SC).

Core Programme 3.

Communicable Disease Control (CDC)

Outbreaks

Refer all cases of measles, meningitis, cholera, dysentery and other epidemic diseases.

If an epidemic response is initiated, CHWs may be called on to assist any targeted vaccination campaign, case identification and prevention activities.

Malaria

National protocols are followed, and CHWs participate in distribution of nets. For treatment of malaria see Child Health programme 2.

Tropical diseases

Refer all cases

CHWs may be involved in distributing medicines if there are targeted programmes to prevent and treat diseases like schistosomiasis, leishmaniasis and trachoma.

Water and sanitation

Core WASH activities are conducted from the PHU and into communities. CHWs teach core hygiene messages. Minimum water, hygiene and sanitation standards are applied in all PHU activities. These are outlined in the EPHS and in separate WASH protocols. Water treatment sachets or aquatabs are distributed by CHWs as outlined in the WASH programme in each region.

Core Programme 4.

First Aid

Life-saving support

Refer immediately any person in critical condition.

Minor wound management

For minor wounds and abrasions, CHWs may follow first line principals:

- Clean wound with antiseptic (diluted chlorhexidine)
- Cover with sterile bandage
- **Refer if bleeding**, needs suturing or if has not completed EPI programme for tetanus toxoid

Major wound management

Immediately refer any major wounds or injury.

Poisoning

Immediately refer any cases of poisoning.

Bites

- Clean wound with antiseptic (diluted chlorhexidine)
- Cover with sterile bandage
- **Refer** if needs tetanus toxoid
- **Refer** immediately all snake bites, dog bites or those of wild animals

Fractures

Immediately refer

Splint the fracture if trained to do so.

Burns

Small superficial burns without blisters:

- Put the affected area into cold water for 15 minutes
- Apply silver sulphadiazine 5%
- Apply gauze dressing
- Give paracetamol

Advice: give more fluids at home

All large and deep burns:

Refer immediately (give ORS during journey)

Core Programme 5.

Treatment of common illness

Skin diseases

Scabies

Scabies is an infestation of the skin caused by a small insect resulting in a raised very itchy rash. It is often found between the fingers and toes. The rash may be badly scratched and there may be infection from bacteria.

Treatment steps (at home)

- Wash the body with soap, drying, then apply benzyl benzoate 25% lotion on the whole body but not on the face or genitals. For young children dilute the lotion with the same quantity of water to make a 12.5% lotion.
- Apply an antiseptic, gentian violet, to any infected areas. Refer if badly infected.
- The next day benzyl benzoate is applied again without washing the child.
- A further dose may be applied on the third day after bathing the child
- If the child is very itchy and scratching a lot, give chlorphenamine (see under allergic rash for dose).
- Treat all children in the family and tell them to wash clothes and sheets at the same time.

Side effect: Benzyl benzoate may cause skin irritation and burning.

Advice: Scabies is caused by poor hygiene. Advise parents to wash children every day with soap and water and to clean clothes regularly.

Head lice

If the scalp is infested with head lice, this can be treated with good hygiene and permethrin 1% rinse of the hair and washed off after 12 hours. The hair should also be combed with a fine head lice comb.

Eczema, dermatitis and allergic rash

Eczema and dermatitis are inflammatory conditions of the skin presenting with a raised itchy rash. In children this commonly occurs behind the elbows and knees and can be on the face. Infants may have a scaly rash on their scalps.

Treatment aims to stop the skin drying and to reduce the inflammation. A calming ointment is applied frequently. This can include any emollients that are available, including paraffin based compounds. Antiseptics may be needed for infected areas. Hydrocortisone 1% may be applied once or maximum twice a day to the more inflamed areas. Chlorphenamine may be helpful for severe itching. Severe eczema or dermatitis needs referral.

An allergic rash may be in reaction to something that has been eaten, applied to the skin or a reaction to a medicine. Chlorphenamine may be needed.

Treatment steps

- Apply emollient ointment frequently as long as there is eczema.
- Apply a small amount of hydrocortisone 1% to more inflamed areas for 7 days.
- Apply gentian violet to infected areas.
- For severe itching give chlorphenamine by mouth.
- **Refer** if severe case.

Chlorphenamine for severe itch or allergic rash.

Medicine	Age	Dose	Duration	Side effects
Chlorphenamine Syrup (2mg/5ml) and Chlorphenamine Tablet (4mg)	Infants < 12 months	Do not give		Common: drowsiness
	Children 1 to 2 years	2.5mls (1mg) or ¼ tablet (1mg) 2 x per day	2 – 3 days	Rare: headache, dry mouth, abdominal discomfort
	Children 2 to 6 years	2.5mls (1mg) or ¼ tablet (1mg) 2 – 4 x per day (every 6 hours)	2 – 3 days	
	Children 6 to 12 years	5mls (2mg) or ½ tablet (2mg) 2 – 4 x per day (every 6 hours)	2 – 3 days	
	Adults and children over 12 years	1 tablet (4mg) 2 – 4 x per day (every 6 hours)	2 – 3 days	

Fungal Rash

A fungal rash presents as a raised, red, itchy rash. This rash can be in circles if it is a fungal disease called ring worm.

Treatment

Apply antifungal cream such as benzoic acid 6% and salicylic acid 3%, or clotrimazole 1% or miconazole 2% twice a day for 7 days.

Nappy rash

Infants may present with a rash around the groin or buttocks caused by irritation from urine or stools and sometimes caused by thrush.

Treatment steps

- Wash the area with soap and dry.
- Apply an emollient cream or zinc oxide 10% cream as long as the rash is present.
- If there is a red rash, apply clotrimazole 1% or miconazole 2% twice a day for 5 days.
- Any ulcerated areas need the application of gentian violet and the infant referred.
- Advise parents to change the baby cloth/ diaper as frequently as possible.

Vaginal thrush (candidiasis)

Women may present with a history of an itchy rash with white discharge from the vagina. CHWs do not examine the genitals of women, but with a clear history may give a Clotrimazole vaginal pessary, 500mg, single dose to the woman for her to insert herself into the vagina at home.

Impetigo

Impetigo is a bacterial infection of the skin presenting with oozing golden-yellow crusts. They may be red and raised.

Treatment

Wash the area with soap and water. Apply gentian violet. Refer if there are many spots or if the child is unwell.

Abscess

An abscess is a collection of pus under the skin. Very small pus swellings may discharge themselves, and can be dressed and observed (ask the patient to come back). If there is surrounding redness or the abscess is increasing, then the person must be referred.

Treatment steps

- Apply antiseptic and gauze dressing
- Give paracetamol or ibuprofen if painful
- Observe daily until abscess has discharged.
- **Refer** any larger or deep abscesses, or if presence of surrounding redness.

Ulcer

An ulcer is a chronic break in the skin that is red and may ooze pus.

Treatment steps

- Apply antiseptic (diluted chlorhexidine)
- Apply a dry gauze dressing
- Refer unless very small.

Refer all other skin diseases.

Eye diseases

Conjunctivitis

Conjunctivitis is an inflammation and often infection of the conjunctiva of the eye. Simple conjunctivitis can be treated in the PHU. Symptoms and signs include: eye discomfort, yellow discharge, red conjunctivae.

Treatment steps

- Apply tetracycline 1% eye ointment 4 x per day for 5 days.
- Give gauze to clean the side of the eyelids
- **Refer** if eye is painful, or if there is redness around the cornea, if the eye lids are puffy or if there is photophobia.
- **Refer** if the conjunctivitis does not improve in 2 days.

Advice: Review if not rapidly improving. Do not put any other product in the eye or any herbs or local medicines. If eye is painful, needs **urgent referral**.

Trachoma

Trachoma is the leading cause of preventable blindness in the country. CHWs promote the use of soap and regular washing of the hands and face, and may be involved in trachoma control programmes. People with trachoma can present with a pus discharge and may have complications. Apart from simple conjunctivitis, **refer all cases**.

Vitamin A deficiency

This can present with dry eyes, eye pain, reduced vision. If it is suspected, or if there are any changes to the cornea, give vitamin A (see Micronutrients for dose), apply tetracycline 1% ointment and refer immediately.

Stye

This is an infection of the eyelid which presents with a small swollen area and pain. A stye usually clears up by itself.

- Apply tetracycline 1% ointment
- **Refer** if the whole eye lid is swollen.

Other eye conditions

- **Refer immediately** acute red eye with pain
- **Refer immediately** any eye trauma. Do not attempt to remove a foreign body.
- **Refer** any visual difficulty; refer immediately especially any sudden change in vision
- **Refer** all newborns with sticky eye discharge or puffy eyelids.

Mouth, throat & teeth

Small oral ulcers (aphthous ulcers) can be treated by applying gentian violet.

Advice: make a mild saline solution at home with salt and water for the child to rinse and spit out.

Oral thrush (candidiasis)

presents commonly in infants and sometimes in older children with a white coating on the tongue. In young children this can be treated with nystatin. In adults or children over six with thrush there may be an underlying disease so they should be referred.

Nystatin for oral thrush

Medicine	Age	Dose	Duration	Side effects
Nystatin 100,000 IU/ml oral suspension	Infants < 1 month	Do not give		Common: Oral irritation
	Infants and older children	100,000 IU (1ml) 4 x per day by mouth	5 to 7 days	Rare: Nausea
	Adults	Do not treat in PHU. Refer		

Prescribing tip: 1ml is measured with the pipette, and given by parents.

Advice slot: Give after feeding. Continue giving treatment for 2 days after rash has gone

For tonsillitis see under Child Health.

Refer all other conditions of the mouth and throat

Teeth and gums

- Give paracetamol or ibuprofen for mild toothache and advise a visit to the dentist.
- Advised twice daily dental hygiene with a tooth brush and tooth paste.
- **Refer** all problems with teeth and gums.

Ear

For ear infections see under Child Health.

Ear wax

Wax occurs naturally in the ear canals and has a protective function. Do not remove wax. If the patient complains the canal is blocked, refer.

Advice: Advise people never to put cotton buds or any instrument inside the ear canal.

Refer all other ear problems, including infections of the ear canal and pus discharge.

Do not attempt to remove a foreign body from the ear but **refer**.

Nose

Nose bleeds (epistaxis)

Nose bleeds are common in children and in some adults, and can occur spontaneously or after mild trauma. Usually the bleeding comes from the lower, soft part of the nose.

Treatment

- Advise the person to sit forward and hold the soft part of the nose for 10 minutes. A parent may hold the soft part of a young child's nose. Advise them not to blow or pick their nose afterwards for the rest of the day.
- If bleeding continues, **refer immediately**.
- **Refer** all other nose problems, including infections of the nasal canal and pus discharge.
- Do not attempt to remove a foreign body from the nose but **refer**.

Gastro-intestinal

For diarrhea in children and adults see under Child Health.

For worms see Child Health, but refer all cases passing large worms.

Indigestion (dyspepsia)

For mild symptoms in adults (burning or indigestion after food) give Magnesium trisilicate compound, 1 -2 tabs as needed (max 8 a day) or alternative antacid tablet or syrup if available. But if symptoms more than 2 days, if moderate to severe symptoms, or for all children then refer.

Advice: Chew the tablets. Tablets may cause belching or mild diarrhea.

Precaution: Do not take ibuprofen, indomethacin, naproxen or diclofenac if symptoms of indigestion.

Refer all abdominal pain, jaundice, constipation, piles and all other symptoms

Urinary

Mild UTI (urinary tract infection) in women may be diagnosed and treated in the PHU. In men and children UTI may be a sign of underlying disease so all cases should be **referred**.

Treatment steps

- Test urine of women with mild UTI symptoms with dipstick
- If nitrites and/or leucocytes +ve on dipstick, give nitrofurantoin
- If symptoms persist for more than 2 days or if symptoms worsen, refer.

- **Refer** all women with moderate to severe symptoms (including high fever, abdominal pain, blood).
- **Refer** all pregnant women with UTI without treating
- **Refer** all children and men with UTI without treating.

Treatment note: The bacteria causing UTIs are resistant to many antibiotics. Sometimes amoxicillin can treat it, but the bacteria is often resistant.

Advice: Drink plenty of fluids.

Medicine	Age	Dose	Duration	Side effects
Nitrofurantoin 50mg tablets	Children	Do not give but refer		Common: Anorexia, nausea
	Adults (women)	1 tablet (50mg) 4 x per day	3 days	Rare: vomiting and diarrhea; allergic reaction
Prescribing tip: Do not give if previous allergic reaction to nitrofurantoin				
Advice slot:				

Refer all other problems of the urinary tract or genitals.

Menstrual

Menstrual disorders are problems with an older girl or woman's periods.

Refer all menstrual problems

Chest and heart

For ARI see under Child Health.

- **Immediately refer** all cases of breathing difficulties, chest pain or palpitations of the heart.
- **Refer all cases** of prolonged headache or suspected high blood pressure.
- **Refer all cases** of suspected diabetes.

Surgical

Refer all cases of swellings, tumours, hernia and abdominal pain.

Musculo-skeletal

- Give paracetamol or ibuprofen for cases of mild bone, joint, back or muscle pain.
- **Refer all cases** of pain persisting for more than 3 days or all cases with moderate or severe pain.

Neurological

Refer all cases of epilepsy, other neurological disorders and dementia.

Disability

Refer all people with physical or learning disabilities for specialist support.

CHWs may assist in providing home based care if specifically trained to do so as part of a programme for people living with disabilities.

Mental health

The CHW may provide some psychological support if specifically trained to do so. As mental health services develop in the country, CHWs may be trained to give more support and in general principles of care for people with mental health conditions.

Refer all cases of anxiety, sleep disorders, panic, depression, post-traumatic stress, self-harm, behavioural disorders, learning delays in children, psychosis, substance abuse.

Refer immediately any attempted suicide, overdose of medicines, or severe mental health symptoms or signs.

Core Programme 6. HIV, STIs & Tuberculosis

CHWs are involved in prevention of these diseases and in detecting cases of chronic cough (suspect TB). CHWs may be involved in promoting the appropriate use of condoms.

More details of prevention and control measures at PHU and community level are given in the respective guidelines.

STIs

- **Refer all cases** of genital rash, ulcer or discharge
- Give full health education in line with STI guidelines.

HIV

Standard precautions for avoiding transmission of HIV and other pathogens in health facilities.

Standard precautions of infection prevention and control must be taken routinely with all clients at all times. Standard precautions include:

- Use safe injection techniques (NB CHW do not do injections)
- Handle and clean instruments safely
- Handle and dispose sharps safely in safety box
- Use personal protective materials
- Handle and dispose of waste safely
- Manage needle-stick and other workplace exposure to HIV

Promotion of HIV-prevention messages and VCT

Give full health education in line with HIV guidelines and where appropriate, inform people on availability of voluntary counselling and testing (VCT) centres. Offer HIV testing at ANC if trained to do so as part of PMTCT.

Refer all cases of chronic illness or weight loss.

Refer all cases with symptoms of TB

- Ask if a person living with HIV has any ONE of the following currently:
- Cough for any duration
- ever for any duration
- Night sweats
- Weight loss OR failure to gain weight in pregnancy
- If so they should be referred for sputum testing for TB.

TB

- Refer all cases with symptoms of TB
- Refer all cases of persisting cough, blood in sputum, chronic illness, prolonged fever, weight loss or large lymph nodes in neck.
- Refer all cases with symptoms of TB, which include cough, blood in sputum etc etc
- Give full health education in line with TB guidelines.

Protocols, guidelines and manuals used in these STGs

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