# INTEGRATED MANAGEMENT OF NEONATAL & CHILDHOOD ILLNESS

# **CHART BOOKLET**

2017







Generic Integrated Management of Neonatal & Childhood Illness was prepared by the World Health Organization's Division of Diarrhoeal and Acute Respiratory Disease Control (CDR), now the Department of Child and Adolescent Health and Development (CAH), and UNICEF through a contract with ACT International, Atlanta, Georgia, USA. This was adapted for Pakistan by the IMNCI Adaptation Group, Ministry of Health, Pakistan with the collaboration of WHO and UNICEF in 1998.

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# Government of Pakistan Ministry of National Health Services Regulations and Coordination LG&RD Complex, Sector G/5/2, Islamabad

Islamabad, the 31 August, 2018

NOTIFICATION
8-1/2017-IMNCI/DD(PIII)
The Min

F.No.8-1/2017-IMNCI/DD(PIII)

The Ministry of National Health Services, Regulations and Coordination, Government of Pakistan, Islamabad, has been pleased to approve the abridged Integrated Management of Neonatal and Childhood Illness (IMNCI) training package for facility based healthcare providers, for implementation and further dissemination to the relevant stakeholders with immediate effect.

- 2. The approved main modules of abridged IMNCI training package are as follows:
  - Assess and classify the child
  - 2. Identify and treat the child
  - 3. Counsel the mother and follow-up
  - 4. Facilitator Guide IMNCI
  - 5. Facilitator In-patient Clinical Practice Guide
  - 6. Participant Manual- IMNCI young infant
  - 7. Facilitator's Guide- IMNCI young infant
  - 8. Chart booklet
  - 9. Wall charts



Director General Health Ministry of National Health Services Regulations and Coordination

No. Even Dated

Copy of the above is forwarded for information and necessary action to:

- 1. The Secretary, Department of Health, Government of Punjab, KPK, Sindh, Baluchistan, GB, AJK
- 2. The Chief Commissioner, Islamabad Capital Territory, Islamabad
- 3. The Director General Health Services, Department of Health, Government of Punjab, KPK, Sindh, Baluchistan, AJK, GB
- 4. The Provincial Coordinator, MNCH Program, Punjab, KPK, Sindh, Baluchistan , AJK, GB, ICT
- 5. The District Health Officer, Islamabad Capital Territory, Islamabad
- 6. The Heads of Hospitals, Pediatrics and MCH Department, under the Federal Government
- 7. The President, Society of Gynecologists/Obstetricians of Pakistan, Karachi
- 8. The President , Pakistan Pediatric Association, Karachi
- 9. Chief Executive Officer, People's Primary Healthcare Initiative ( PPHI), Karachi
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- 12. Director, Health Office, USAID, Islamabad
- 13. Head of Health Section, DFID, Islamabad



# Integrated Management of Neonatal & Childhood Illness



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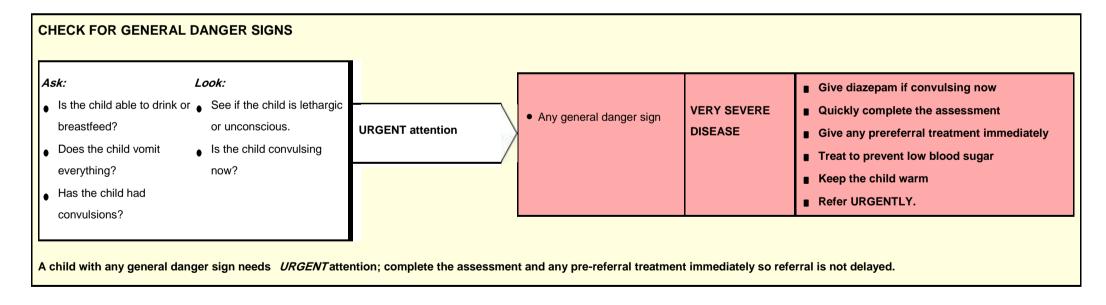
# ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ASSESS CLASSIFY IDENTIFY TREATMENT

#### ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

- Determine if this is an initial or follow-up visit for this problem
  - if follow-up visit, use the follow-up instructions on FOLLOW UP chart
  - o if initial visit, assess the child as follows:

USE ALL BOXES THAT MATCH THE CHILD'S SYMPTOMS AND PROBLEMS TO CLASSIFY THE ILLNESS



#### THEN ASK ABOUT MAIN SYMPTOMS:

# Does the child have cough or difficult breathing?

If yes, ask:	Look, listen, feel*:				
For how long?	<ul> <li>Count the breaths in one minute.</li> <li>Look for chest</li> <li>CHILD</li> <li>MUST</li> </ul>	Classify COUGH or DIFFICULT BREATHING	<ul><li>Any general danger sign or</li><li>Stridor in calm child.</li></ul>	SEVERE PNEUMONIA OR VERY SEVERE DISEASE	<ul> <li>Give first dose of an appropriate antibiot</li> <li>Refer URGENTLY to hospital**</li> </ul>
	indrawing.  Look and listen for stridor.  Look and listen for wheezing.  If wheezing with either fast breathing or chest indrawing:  Give a trial of rapid acting inhaled bronchodilator for up to three times	BREATHING	<ul> <li>Chest indrawing or</li> <li>Fast breathing.</li> </ul>	PNEUMONIA	<ul> <li>Give oral Amoxicillin for 5 days***</li> <li>If wheezing (or disappeared after rapidly acting bronchodilator) give an inhaled bronchodilator for 5 days****</li> <li>If coughing for more than 14 days or recurrent wheeze, refer for possible TB or asthma assessment</li> <li>Advise mother when to return immediately</li> <li>Follow-up in 3 days</li> </ul>
If the child is: 2 months up to 12 months 12 Months up to 5 years	15-20 minutes apart. Count the breaths and look for chest indrawing again, and then classify.  Fast breathing is:  50 breaths per minute or more  40 breaths per minute or more		No signs of pneumonia or very severe disease.	NO PNEUMONIA: COUGH OR COLD	<ul> <li>If wheezing (or disappeared after rapidly acting bronchodilator) give an inhaled bronchodilator for 5 days****</li> <li>Soothe the throat and relieve the cough a safe remedy</li> <li>If coughing for more than 14 days or recurrent wheezing, refer for possible TB asthma assessment</li> <li>Advise mother when to return immediately</li> <li>Follow-up in 5 days if not improving</li> </ul>

<sup>\*\*</sup> If referral is not possible, manage the child as described in the pneumonia section of the guidelines.

<sup>\*\*\*</sup>Oral Amoxicillin for 3 days could be used in patients with fast breathing but no chest indrawing.

<sup>\*\*\*\*</sup> In settings where inhaled bronchodilator is not available, oral salbutamol may be tried but not recommended for treatment of severe acute wheeze.

Does the child have diarrhea?					
If yes, ask:  For how long?  Is there blood in the stool?  Condition. Is the child:  Lethargic or unconscious?  Restless and irritable?  Look for sunken eyes.  Offer the child fluid. Is the child:  Not able to drink or drinking poorly?  Drinking eagerly, thirsty?  Pinch the skin of the abdomen.  Does it go back:		for DEHYDRATION	Two of the following signs:  Lethargic or unconscious  Sunken eyes  Not able to drink or drinking poorly  Skin pinch goes back very slowly.	SEVERE DEHYDRATION	<ul> <li>▶ If child has no other severe classification:         Give fluid for severe dehydration (Plan C)         OR     </li> <li>If child also has another severe         classification:         <ul> <li>Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way*</li> <li>Advise the mother to continue breastfeeding</li> <li>▶ If child is 2 years or older and there is cholera in your area, give antibiotic for cholera</li> <li>▶ Give fluid, zinc supplements, and food for some dehydration (Plan B)</li> </ul> </li> </ul>
<ul><li>Very slowly (longer than 2 seconds)?</li><li>Slowly?</li></ul>	ккноеа		Two of the following signs:  Restless, irritable Sunken eyes Drinks eagerly, thirsty Skin pinch goes back slowly.	SOME DEHYDRATION	<ul> <li>If child also has a severe classification:         Refer URGENTLY to hospital with mother         giving frequent sips of ORS on the way</li> <li>Advise the mother to continue         breastfeeding</li> <li>Advise mother when to return immediately</li> <li>Follow-up in 5 days if not improving</li> </ul>
	CIASSITY DIAKKHUEA		Not enough signs to classify as some or severe dehydration.	NO DEHYDRATION	<ul> <li>Give fluid, zinc supplements, and food to treat diarrhea at home (Plan A)</li> <li>Advise mother when to return immediately</li> <li>Follow-up in 5 days if not improving</li> </ul>
* If referral is not possible manage the child as described in Module 2	CIA:	And If diarrhea	Dehydration present.	SEVERE PERSISTENT DIARRHOEA	<ul> <li>Treat dehydration before referral unless the child has another severe classification</li> <li>Refer to hospital</li> </ul>
ANNEX: Where Referral Is Not Possible		14daysor more	No Dehydration present.	PERSISTENT DIARRHOEA	<ul> <li>Advise the mother on feeding a child who has PERSISTENT DIARRHOEA</li> <li>Give multivitamins and minerals (including zinc) for 14 days</li> <li>Follow-up in 5 days</li> </ul>
		and if blood in stool	Blood in the stool	DYSENTERY	<ul> <li>Give ciprofloxacin for 3 days</li> <li>Follow-up in 3 days</li> </ul>

If yes: Decide Malaria Risk: high or low  Then ask: Look and feel:	CLASSIFY FEVER	Any general danger sign or Stiff neck.	VERY SEVERE FEBRILE DISEASE	Give first dose of artesunate or quinine for severe malaria Give first dose of an appropriate antibiotic Treat the child to prevent low blood sugar Give one dose of Paracetamol in clinic for high fever (38.5°C or above) Refer URGENTLY to hospital Give one dose of Paracetamol in clinic for high fever (38.8°C or above)
For how long?  If more than 7 days, has fever been  Look or feel for stiff neck. Look for runny nose. Look for any bacterial cause of fever**.	High or Low	Malaria test POSITIVE.	MALARIA	Give appropriate antibiotic treatment for an identified bacteri5l cause of fever     Advise mother when to return immediately     Follow-up in 3 days if fever persists     If fever is present every day for more than 7 days, refer for assessment
present every day?  Has the child had measles within the last 3 months?  Look for signs of MEASLES:  Generalized rash and  One of these:  cough, runny nose, or red eyes.	malaria Risk	<ul><li>Malaria test NEGATIVE</li><li>Other cause of fever PRESENT.</li></ul>	FEVER: NO MALARIA	Give recommended first line oral antimalarial     Give one dose of Paracetamol in clinic for high fever (38.8°C or above)     Give appropriate antibiotic treatment for an identified bacterial cause of fever     Advise mother when to return immediately     Follow-up in 3 days if fever persists     If fever is present every day for more than 7 days, refer for assessment
Do a malaria test***: If NO severe classification In all fever cases if High malaria risk. In Low malaria risk if no obvious cause of fever present. Decide Dengue Rik: High or Low	No Malaria Risk and No travel to malaria Risk	<ul><li>Any general danger sign or</li><li>Stiff neck.</li></ul>	VERY SEVERE FEBRILE DISEASE	<ul> <li>Give first dose of an appropriate antibiotic.</li> <li>Treat the child to prevent low blood sugar.</li> <li>Give one dose of Paracetamol in clinic for high fever (38.5°C or above).</li> <li>Refer URGENTLY to hospital.</li> </ul>
Then Ask for:  Headache Myalgia Rash Retro-orbital pain/ ocular pain	area	<ul><li>No general danger signs</li><li>No stiff neck.</li></ul>	FEVER	<ul> <li>Give one dose of Paracetamol in clinic for high fever (38.5°C &amp; or above)</li> <li>Give appropriate antibiotic treatment for any identified bacterial cause of fever</li> <li>Advise mother when to return immediately</li> <li>Follow-up in 2 days if fever persists</li> <li>If fever is present every day for more than 7 days, refer for assessment</li> </ul>
<ul> <li>Hemorrhagic manifestations (e.g. positive tourniquet test, purpura/ ecchymosis, epistaxis, gum bleeding)</li> </ul>	Measles now or within 3 months	<ul> <li>Any general danger sign or</li> <li>Clouding of cornea or</li> <li>Deep or extensive mouth ulcers.</li> </ul>	SEVERE COMPLICATED MEASLES****	Give Vitamin A treatment     Give first dose of an appropriate antibiotic     If clouding of the cornea or pus draining from the eye, apply tetracycline eye ointment Refer URGENTLY to hospital
If the child has measles now or within the last 3 months:  Look for mouth ulcers.		Pus draining from the eye or Mouth ulcers.	MEASLES WITH EYE OR MOUTH COMPLICATIONS****	<ul> <li>Give Vitamin A treatment</li> <li>If pus draining from the eye, treat eye infection with tetracycline eye ointment</li> <li>If mouth ulcers, treat with gentian violet</li> <li>Follow-up in 3 days</li> </ul>
<ul> <li>Are they deep and extensive?</li> <li>Look for pus draining from the eye.</li> <li>Look for clouding of the cornea.</li> </ul>		Measles now or     within the last 3 months.	MEASLES	Give Vitamin A treatment
	Dengue	Bleeding from the nose or gums Bleeding in the stool or vomits Black stool or vomitus Skin petechiae Slow capillary refill ( more than 3 seconds) Persistent abdominal; pain Persistent vomiting Positive tourniquet test	SEVERE DENGUE HEMORRHAGIC FEVER	<ul> <li>If skin petechiae, peritent abdominal pain, persistent vomiting or positive tourniquet test are the only positive signs, then give ORS.</li> <li>If any other sign of bleeding is positive, give fluids rpidly as in Plan C.</li> <li>Treat the child to prevent low blood sugar.</li> <li>Refer URGENTLY to hospital.</li> <li>Do not give Aspirin.</li> </ul>
These temperatures are based on axillary temperature.	as a	No sign of Dengue hemorrhagic fever	FEVER ONLY: DENGUE HEMORRHAGIC FEVER UNLIKELY	<ul> <li>Advise mother when to return immediately.</li> <li>Follow up in 2 days if the fever persists or if the child shows signs of bleeding</li> <li>Do not give aspirin</li> </ul>

Look for local tenderness; oral sores; refusal to use a limb; hot tender swelling; red tender skin or boils; lower abdominal pain or pain on passing urine in older children.
If no malaria test available: High malaria risk - classify as MALARIA; Low malaria risk AND NO obvious cause of fever - classify as MALARIA.
Other important complications of measles - pneumonia, stridor, diarrhoea, ear infection, and acute malnutrition - are classified in other tables.

Doos th	o child	have an	oor	problem?
Does tr	ie cniia	nave an	ear	problem ?

# If yes, ask:

- Is there ear pain? Is there ear discharge? If yes, for how long?

### Look and feel:

- Look for pus draining from the ear.
- Feel for tender swelling behind the ear.

Classify EAR PROBLEM

Tender swelling behind the ear.	MASTOIDITIS	<ul> <li>Give first dose of an appropriate antibiotic</li> <li>Give first dose of paracetamol for pain</li> <li>Refer URGENTLY to hospital</li> </ul>
Pus is seen draining from the ear and discharge is reported for less than 14 days, or Ear	ACUTE EAR INFECTION	<ul> <li>Give an antibiotic for 5 days</li> <li>Give paracetamol for pain</li> <li>Dry the ear by wicking</li> <li>Follow-up in 5 days</li> </ul>
<ul> <li>pain.</li> <li>Pus is seen draining from the ear and discharge is reported for 14 days or more.</li> </ul>	CHRONIC EAR INFECTION	<ul> <li>Dry the ear by wicking</li> <li>Treat with topical quinolone eardrops for 14</li> <li>days Follow-up in 5 days</li> </ul>
No ear pain and     No pus seen draining from the ear.	NO EAR	■ No treatment

#### THEN CHECK FOR ACUTE MALNUTRITION

# CHECK FOR ACUTE MALNUTRITION LOOK AND FEEL:

Look for signs of acute malnutrition

- Look for oedema of both feet.
- Determine WFH/L\* \_\_\_ z-score.
- Measure MUAC\*\*\_\_\_\_ mm in a child 6 months or older.

If WFH/L less than -3 z-scores or MUAC less than 115 mm, then:

- Check for any medical complication present:
  - Any general danger signs
  - Any severe classification
  - Pneumonia with chest indrawing
- If no medical complications present:
  - Child is 6 months or older, offer RUTF\*\*\* to eat. Is the child:

Not able to finish RUTF portion?
Able to finish RUTF portion?

 Child is less than 6 months, assess breastfeeding:

Does the child have a breastfeeding problem?

Classify NUTRITIONAL STATUS

>	Oedema of both feet     OR     WFH/L less than -3 z-     scores OR MUAC less     than 115 mm AND any     one of the following:     Medical     complication present     or     Not able to finish RUTF     or     Breastfeeding     problem.	Pink: COMPLICATED SEVERE ACUTE MALNUTRITION	<ul> <li>Give first dose appropriate antibiotic</li> <li>Treat the child to prevent low blood sugar</li> <li>Keep the child warm</li> <li>Refer URGENTLY to hospital</li> </ul>
	<ul> <li>WFH/L less than -3 z-scores</li> <li>OR</li> <li>MUAC less than 115 mm</li> <li>AND</li> <li>Able to finish RUTF.</li> </ul>	Yellow: UNCOMPLICATED SEVERE ACUTE MALNUTRITION	<ul> <li>Give oral antibiotics for 5 days</li> <li>Give ready-to-use therapeutic food for a child aged 6 months or more</li> <li>Counsel the mother on how to feed the child.</li> <li>Assess for possible TB infection</li> <li>Advise mother when to return immediately</li> <li>Follow up in 7 days</li> </ul>
	<ul> <li>WFH/L between -3 and - 2 z-scores</li> <li>OR</li> <li>MUAC 115 up to 125 mm.</li> </ul>	Yellow: MODERATE ACUTE MALNUTRITION	<ul> <li>Assess the child's feeding and counsel the mother on the feeding recommendations</li> <li>If feeding problem, follow up in 7 days</li> <li>Assess for possible TB infection.</li> <li>Advise mother when to return immediately</li> <li>Follow-up in 30 days</li> </ul>
	WFH/L - 2 z-scores or more OR MUAC 125 mm or more.	Green: NO ACUTE MALNUTRITION	<ul> <li>If child is less than 2 years old, assess the child's feeding and counsel the mother on feeding according to the feeding recommendations</li> <li>If feeding problem, follow-up in 7 days</li> </ul>

\*WFH/L is Weight-for-Height or Weight-for-Length determined by using the WHO growth standards charts.

<sup>\*\*</sup> MUAC is Mid-Upper Arm Circumference measured using MUAC tape in all children 6 months or older.

<sup>\*\*\*</sup>RUTF is Ready-to-Use Therapeutic Food for conducting the appetite test and feeding children with severe acute malanutrition.

		THEN CHECK FOR AN	AEMIA	
<ul> <li>Check for anaemia</li> <li>Look for palmar pallor. Is it:</li> <li>Severe palmar pallor*?</li> </ul>		Severe palmar pallor	SEVERE ANAEMIA	■ Refer URGENTLY to hospital
Some palmar pallor?	Classify ANAEMIA	Some pallor	ANAEMIA	<ul> <li>Give iron**</li> <li>Give mebendazole if child is 1 year or older and has not had a dose in the previous 6</li> <li>months</li> <li>Advise mother when to return immediately Follow-up in 14 days</li> </ul>
		No palmar pallor	NO ANAEMIA	If child is less than 2 years old, assess the child's feeding and counsel the mother according to the feeding recommendations  If feeding problem, follow-up in 5 days

<sup>\*</sup>Assess for sickle cell anaemia if common in your area.

<sup>\*\*</sup>If child has severe acute malnutrition and is receiving RUTF, DO NOT give iron because there is already adequate amount of iron in RUTF.

# THEN CHECK THE CHILD'S IMMUNIZATION, VITAMIN A AND DEWORMING STATUS

#### **IMMUNIZATION SCHEDULE:**

AGE	V	AC(	CINE
ΔG⊢	V	$\Delta C$	
AUL	V /	70	CIITL

Birth BCG OPV 0 Hep B 0

6 weeks Pentavalent\* 1 OPV 1 Pneumococcal 1 Rota 1

**10 weeks** Pentavalent 2 OPV 2 Pneumococcal 2 Rota 2

**14 weeks** Pentavalent 3 OPV 3 Pneumococcal 3 IPV

9 months Measles 1

**15 months** Measles 2

Note: space between two doses of multiple dose vaccines is at least 4 weeks.

Never repeat the earlier dose of vaccine irrespective of the duration.

# **Vitamin AUPPLEMENTATION**

- Give every child a dose of Vitamin A every six months from the age of 6 month.
- Record the dose in child's chart.

### **ROUTINE WORM TREATMENT**

- Give every child pyrantel pamoate every 6 months form one year of age.
- Record the dose in child's chart.

# **ASSESS OTHER PROBLEMS:**

MAKE SURE CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED after first dose of an appropriate antibiotic and other urgent treatments. Treat all children with a general danger sign to prevent low blood sugar.

<sup>\*</sup> DPT + Hep B + Hib

# TREAT THE CHILD

# CARRY OUT THE TREATMENT STEPS IDENTIFIED ON THE ASSESS AND CLASSIFY CHART

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME Follow the instructions below for every oral drug to be given at home. Also follow the instructions listed with each drug's dosage table.

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

#### FOR PNEUMONIA, ACUTE EAR INFECTION:

FIRST-LINE ANTIBIOTIC: Oral Amoxicillin

AOE WEIGHT	AMOXICILLIN* Give two times daily for 5 days		
AGE or WEIGHT	TABLET 250 mg	SYRUP 250mg/5 ml	
2 months up to 12 months (4 - <10 kg)	1	5 ml	
12 months up to 3 years (10 - <14 kg)	2	10 ml	
3 years up to 5 years (14-19 kg)	3	15 ml	

<sup>\*</sup> Amoxicillin is the recommended first-line drug of choice in the treatment of pneumonia due to its efficacy and increasing high resistance to cotrimoxazole

#### FOR DYSENTERY

FIRST-LINE ANTIBIOTIC: Oral Ciprofloxacine

AGE	CIPROFLOXACINE Give 15mg/kg two times daily for 3 days		
	250 mg tablet	500 mg tablet	
Less than 6 months	1/2	1/4	
6 months up to 5 years	1	1/2	

#### FOR: CHOLERA

FIRST-LINE ANTIBIOTIC FOR CHOLERA: Ciprofloxacine

	ERYTHROMYCIN Give four times daily for 3 days	TETRACYCLINE Give four times daily for 3 days
AGE or WEIGHT	TABLET 250 mg	TABLET 250 mg
2 years up to 5 years (10 - 19 kg)	1	1

SECOND-LINE ANTIBIOTIC FOR CHOLERA: as under:

#### TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Follow the instructions below for every oral drug to be given at home. Also follow the instructions listed with each drug's dosage table

# Give Inhaled Salbutamol for Wheezing USE OF A SPACER\*

A spacer is a way of delivering the bronchodilator drugs effectively into the lungs. No child under 5 years should be given an inhaler without a spacer. A spacer works as well as a nebulizer if correctly used.

- From salbutamol metered dose inhaler (100 microgram/puff) give 2 puffs
- Repeat up to 3 times every 15 minutes before classifying pneumonia.

#### Spacers can be made in the following way:

- Use a 500ml drink bottle or similar.
- Cut a hole in the bottle base in the same shape as the mouthpiece of the inhaler.
- This can be done using a sharp knife.
- Cut the bottle between the upper quarter and the lower 3/4 and disregard the upper quarter of the bottle.
- Cut a small V in the border of the large open part of the bottle to fit to the child's nose and be used as a mask.
- Flame the edge of the cut bottle with a candle or a lighter to soften it.
- In a small baby, a mask can be made by making a similar hole in a plastic (not polystyrene) cup.
- Alternatively, commercial spacers can be used if available.

#### To use an inhaler with a spacer:

- Remove the inhaler cap. Shake the inhaler well.
- Insert mouthpiece of the inhaler through the hole in the bottle or plastic cup
- The child should put the opening of the bottle into his mouth and breath in and out through the
  mouth.
- A carer then presses down the inhaler and sprays into the bottle while the child continues to breathnormally.
- Wait for three to four breaths and repeat.
- For younger children place the cup over the child's mouth and use as a spacer in the same way.

# Give Paracetamol for High Fever (>38.5°C or more) or Ear pain

Give paracetamol every 6 hours until high fever or ear pain is gone.

AGE or WEIGHT	PARACETAMOL		
AGE OF WEIGHT	TABLET (100 mg)	TABLET (500 mg)	
2 months up to 3 years (4 - <14 kg)	1	1/4	
3 years up to 5 years (14 - <19 kg)	1 ½	1/2	

### Give Oral Antimalarial for MALARIA

- Give the first dose of artemether-lumefantrine in the clinic and observe for one hour.
- If the child vomits within an hour repeat the dose.
- Give second dose at home after 8 hours.
- Then twice daily for further two days as shown below.
- Artemether-lumefantrine should be taken with food.

#### UNCOMPLICATED PLASMODIUM FALCIPARUM MALARIA

Artemether-Lumefantrine tablets (20 mg artemether and 120 mg lumefantrine)						
Give two times daily for 3 days						
WEIGHT (age) Day 1 Day 2 Day 3						
5 - <10 kg (2 months up to 12 months) 1 1						
10 - <14 kg (12 months up to 3 years) 1 1 1						
14 - <19 kg (3 years up to 5 years)	2	2	2			

Artisunate – Sulfadoxine-pyrimethamine tablets (50 mg artisunate and 500 mg sulphadoxine+25mg pyrimethamine) Give two times daily for 3 days						
AGE	Da	ay 1	Day 2 D			
AGE	SP	ARTISUMATE	ARTISUMATE	ARTISUMATE		
5 months up to 11 months)	1/2	1/2	1/2	1/2		
12 months up to 6 years)	1	1	1	1		

#### UNCOMPLICATED PLASMODIUM VIVAX MALARIA

WEIGHT (age)	CHLOROQUINE					
	TABLETS 150 mg base (250 mg salt)			SYRUP 50 mg base per 5 ml teaspoon full (TSF)		
	Day 1	Day 2	Day 3	Day 1	Day 2	Day 3
5 - <10 kg (2 months up to 12 months)	1/4	1/4	1/4	3/4 TSF	3/4 TSF	3/4 TSF
10 - <14 kg (12 months up to 3 years)	1	1	1	3/4 TSF	3/4 TSF	3/4 TSF

<sup>\*</sup> If a spacer is being used for the first time, it should be primed by 4-5 extra puffs from the inhaler.

#### TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Follow the instructions below for every oral drug to be given at home.

Also follow the instructions listed with each drug's dosage table

#### Give Iron\*

■ Give one dose daily for 14 days.

	IRON/FOLATE TABLET	IRON SYRUP
AGE or WEIGHT	Ferrous sulfate 200 mg + 250 mcg Folate (60 mg elemental iron)	Ferrous fumarate 100 mg per 5 ml (20 mg elemental iron per ml)
2 months up to 4 months (4 - <6 kg)		1.00 ml (< 1/4 tsp.)
4 months up to 12 months (6 - <10 kg)		1.25 ml (1/4 tsp. )
12 months up to 3 years (10 - <14 kg)	1/2 tablet	2.00 ml (<1/2 tsp.)
3 years up to 5 years (14 - 19 kg)	1/2 tablet	2.5 ml (1/2 tsp.)

<sup>\*</sup> Children with severe acute malnutrition who are receiving ready-to-use therapeutic food (RUTF) should not be given Iron

#### GIVE VITAMIN A AND MEBENDAZOLE IN CLINIC

Explain to the mother why the drug is given

Determine the dose appropriate for the child's weight (or age)

Measure the dose accurately

# Give Vitamin A Supplementation and Treatment

#### VITAMIN A SUPPLEMENTATION:

- ▶ Give first dose any time after 6 months of age to ALL CHILDREN
- ▶ Thereafter vitamin A every six months to ALL CHILDREN

#### **VITAMIN A TREATMENT:**

- Give an extra dose of Vitamin A (same dose as for supplementation) for *treatment* if the child has MEASLES or PERSISTENT DIARRHOEA. If the child has had a dose of vitamin A within the past month or is on RUTF for treatment of severe acute malnutrition, DO NOT GIVE VITAMIN A.
- Always record the dose of Vitamin A given on the child's card.

AGE or WEIGHT	
6 up to 12 months	100 000 IU
One year and older	200 000 IU

# Give Pyrantel Pamoate

- ▶ FOR TREATMENT OF ANEMIA AND STOOL POSITIVE FOR WORMS
  - If the child is 2 years of age or older, and has not had a dose in the previous 6 months OR
  - If the child is 4 months of age or older and has evidence of worm infestation
- > GIVE PYRANTEL PAMOATE AS A SINGLE DOSE IN CLINIC

AGE or WEIGHT	TABLET ( 125 mg)	TABLET ( 220 mg)
4 months up to 9 moths (6 - <8 kg)	1/2	1/4
9 months up to 1 year (8 - <10 kg)	3/4	1/2
1 year up to 3 years (10 - <14 kg)	1	1/2
3 years up to 5 years (14 - 19 kg)	1 ½	3/4

# Give Multivitamin / Mineral supplement

▶ For persistent diarrhea give 5 ml (one tea spoon full) once a day for 2 weeks

#### TEACH THE MOTHER TO TREAT LOCAL INFECTIONS AT HOME

- Explain to the mother what the treatment is and why it should be given.
- Describe the treatment steps listed in the appropriate box.
- Watch the mother as she does the first treatment in the clinic (except for remedy for cough or sore throat).
- Tell her how often to do the treatment at home.
- If needed for treatment at home, give mother the tube of tetracycline ointment or a small bottle of gentian violet.
- Check the mothers understanding before she leaves the clinic.

# Soothe the Throat, Relieve the Cough with a Safe Remedy

- Safe remedies to recommend:
  - Breast milk for a breastfed infant.
- Harmful remedies to discourage:

# Treat Eye Infection with Tetracycline Eye Ointment

- Clean both eyes 4 times daily.
  - · Wash hands.
  - . Use clean cloth and water to gently wipe away pus.
- Then apply tetracycline eye ointment in both eyes 4 times daily.
  - Squirt a small amount of ointment on the inside of the lower lid.
  - · Wash hands again.
- Treat until there is no pus discharge.
- Do not put anything else in the eye.

# Clear the Ear by Dry Wicking and Give Eardrops\*

- Dry the ear at least 3 times daily.
  - Roll clean absorbent cloth or soft, strong tissue paper into a wick.
  - · Place the wick in the child's ear.
  - · Remove the wick when wet.
  - Replace the wick with a clean one and repeat these steps until the ear is dry.
  - . Instill quinolone eardrops after dry wicking three times daily for two weeks.
- \* Quinolone eardrops may include ciprofloxacin, norfloxacin, or ofloxacin.

# Treat for Mouth Ulcers with Gentian Violet (GV)

- Treat for mouth ulcers twice daily.
  - · Wash hands.
  - Wash the child's mouth with clean soft cloth wrapped around the finger and wet with salt water.
  - Paint the mouth with half-strength gentian violet (0.25% dilution).
  - · Wash hands again.
  - Continue using GV for 48 hours after the ulcers have been cured.
  - · Give paracetamol for pain relief.

# Treat Thrush with Nystatin

#### Treat thrush four times daily for 7 days

- Wash hands
- Wet a clean soft cloth with salt water and use it to wash the child's mouth
- Instill nystatin 1ml four times a day
- Avoid feeding for 20 minutes after medication
- If breastfed check mother's breasts for thrush. If present treat with nystatin
- Advise mother to wash breasts after feeds. If bottle fed advise change to cup and spoon
- Give paracetamol if needed for pain

#### GIVE THESE TREATMENTS IN THE CLINIC ONLY

- . Explain to the mother why the drug is given.
- . Determine the dose appropriate for the child's weight (or age).
- . Use a sterile needle and sterile syringe when giving an injection.
- Measure the dose accurately.
- · Give the drug as an intramuscular injection.
- . If child cannot be referred, follow the instructions provided.

#### Give Intramuscular Antibiotics

#### GIVE TO CHILDREN BEING REFERRED URGENTLY

Give Ampicillin (50 mg/kg) and Gentamicin (7.5 mg/kg).

#### **AMPICILLIN**

- Dilute 500mg vial with 2.1ml of sterile water (500mg/2.5ml).
- IF REFERRAL IS NOT POSSIBLE OR DELAYED, repeat the ampicillin injection every 6 hours.
- Where there is a strong suspicion of meningitis, the dose of ampicillin can be increased 4 times.

#### GENTAMICIN

7.5 mg/kg/day once daily

AGE or WEIGHT	AMPICILLIN 500 mg vial	GENTAMICIN 2ml/40 mg/ml vial	
2 up to 4 months (4 - <6 kg)	1 m	0.5-1.0 ml	
4 up to 12 months (6 - <10 kg)	2 ml	1.1-1.8 ml	
12 months up to 3 years (10 - <14 kg)	3 ml	1.9-2.7 ml	
3 years up to 5 years (14 - 19 kg)	5 m	2.8-3.5 ml	

# Give Diazepam to Stop Convulsions

- Turn the child to his/her side and clear the airway. Avoid putting things in the mouth.
- Give 0.5mg/kg diazepam injection solution per rectum using a small syringe without a needle (like a tuberculin syringe) or using a catheter.
- · Check for low blood sugar, then treat or prevent.
- Give oxygen and REFER
- . If convulsions have not stopped after 10 minutes repeat diazepam dose

AGE or WEIGHT	DIAZEPAM 10mg/2mls
2 months up to 6 months (5 - 7 kg)	0.5 ml
6 months up to 12months (7 - <10 kg)	1.0 ml
12 months up to 3 years (10 - <14 kg)	1.5 ml
3 years up to 5 years (14-19 kg)	2.0 ml

## Give Artesunate Suppositories or Intramuscular Artesunate or Quinine for Severe Malaria

#### FOR CHILDREN BEING REFERRED WITH VERY SEVERE FEBRILE DISEASE:

- Check which pre-referral treatment is available in your clinic (rectal artesunate suppositories, artesunate injection or quinine).
- · Artesunate suppository: Insert first dose of the suppository and refer child urgently
- Intramuscular artesunate or quinine: Give first dose and refer child urgently to hospital.

#### IF REFERRAL IS NOT POSSIBLE:

- For artesunate injection:
  - · Give first dose of artesunate intramuscular injection
  - . Repeat dose after 12 hrs and daily until the child can take orally
  - . Give full dose of oral antimiarial as soon as the child is able to take orally.

#### For artesunate suppository:

- · Give first dose of suppository
- . Repeat the same dose of suppository every 24 hours until the child can take oral antimalarial.
- . Give full dose of oral antimalarial as soon as the child is able to take orally
- For auinine:
  - · Give first dose of intramuscular quinine.
  - . The child should remain lying down for one hour.
  - Repeat the quinine injection at 4 and 8 hours later, and then every 12 hours until the child is able
    to take an oral antimalarial. Do not continue quinine injections for more than 1 week.

If low risk of malaria, do not give quinine to a child less than 4 months of age.

		TESUNATE SITORY	INTRAMUSCULAR ARTESUNATE	INTRAMUSCULAR QUININE	
AGE or WEIGHT	50 mg suppositories Dosage 10 mg/kg	200 mg suppositories Dosage 10 mg/kg	60 mg vial (20mg/ml) 2.4 mg/kg	150 mg/ml* (in 2 ml ampoules)	300 mg/ml* (in 2 ml ampoules)
2 months up to 4 months (4 - <6 kg)	1		1/2 ml	0.4 ml	0.2 ml
4 months up to 12 months (6 - <10 kg)	2		1 ml	0.6 ml	0.3 ml
12 months up to 2 years (10 - <12 kg)	2	-	1.5 ml	0.8 ml	0.4 ml
2 years up to 3 years (12 - <14 kg)	3	1	1.5 ml	1.0 ml	0.5 ml
3 years up to 5 years (14 - 19 kg)	3	1	2 ml	1.2 ml	0.6 ml

<sup>\*</sup> quinine salt

### GIVE THESE TREATMENTS IN THE CLINIC ONLY

# Treat the Child to Prevent Low Blood Sugar

- If the child is able to breastfeed:
  - Ask the mother to breastfeed the child.
- If the child is not able to breastfeed but is able to swallow:
  - Give expressed breast milk or a breast-milk substitute.
  - If neither of these is available, give sugar water\*.
  - Give 30 50 ml of milk or sugar water\* before departure.
- If the child is not able to swallow:
  - Give 50 ml of milk or sugar water\* by nasogastric tube.
  - If no nasogastric tube available, give 1 teaspoon of sugar moistened with 1-2 drops of water sublingually and repeat doses every 20 minutes to prevent relapse.
  - \* <u>To make sugar water:</u> Dissolve 4 level teaspoons of sugar (20 grams) in a 200-ml cup of clean water.

# GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

#### PLAN A: TREAT DIARRHOEA AT HOME

Counsel the mother on the 3 Rules of Home Treatment: Give Extra Fluids, Continue Feeding, When to Return

- 1. GIVE EXTRA FLUID (as much as the child will take)
  - > TELL THE MOTHER:
    - Breastfeed frequently and for longer at each feed.
    - If the child is exclusively breastfed, give ORS or clean water in addition to breastmilk.
    - If the child is not exclusively breastfed, give one or more of the following: ORS, food-based fluids (such as soup, rice water and yoghurt drinks) or clean water.

#### It is especially important to give ORS at home when:

- the young infant has been treated with Plan B or Plan C during this visit.
- the young infant cannot return to a clinic if the diarrhea gets worse.

TEACH THE MOTHER HOW TO MIX AND GIVE ORS.
GIVE THE MOTHER 2 PACKETS OF ORS TO USE AT HOME.

# SHOW THE MOTHER HOW MUCH FLUID TO GIVE IN ADDITION TO THE USUAL FLUID INTAKE:

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

#### Tell the mother to:

- Give frequent small sips from a cup.
- If the infant vomits, wait 10 minutes. Then continue, but more slowly.
- Continue giving extra fluid until the diarrhea stops.
- 1. GIVE EXTRA FLUID
- 2. **CONTINUE FEEDING**
- 3. WHEN TO RETURN

See COUNSIL THE MOTHER chart

#### PLAN B: TREAT SOME DEHYDRATION WITH ORS

In the clinic, give recommended amount of ORS over 4-hour period DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS

AGE *	Up to 4 months	4 months up to 12 months	12 months up to 2 years	2 years up to 5 years
WEIGHT	<6 kg	6 - < 10 kg	10 - ¸12 kg	12-19 kg
In ml	200 – 400	400 – 700	700 – 900	900 - 1400

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

- If the child wants more ORS than shown, give more.
- For young infants who are not breastfed, also give 100 200 ml clean water during this period if you use standard ORS. This is not needed if you use new low osmolarity ORS.

#### SHOW THE MOTHER HOW TO GIVE ORS SOLUTION.

- 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 4 HOURS:**

- Reassess the child and classify the child for dehydration.
- Select the appropriate plan to continue treatment.
- Begin feeding the child in clinic.

#### IF THE MOTHER MUST LEAVE BEFORE COMPLETING TREATMENT:

- Show her how to prepare ORS solution at home.
- Show her how much ORS to give to finish 4-hour treatment at home.

Give her enough ORS packets to complete rehydration. Also give her 2 packets as recommended in **Plan A**.

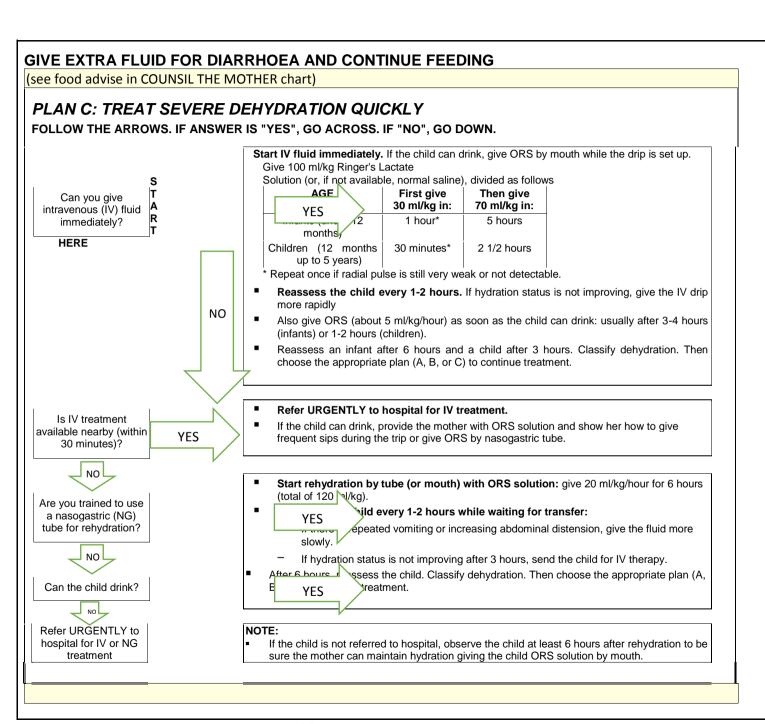
Explain 3 Rules of Home Treatment:

- 4. GIVE EXTRA FLUID
- 5. **CONTINUE FEEDING**
- 6. WHEN TO RETURN

See Plan A for recommended fluids

And

See COUNSIL THE MOTHER chart



# GIVE VITAMIN A SUPPLEMENTAION AS NEEDED

**GIVE MEBENDAZOLE AS NEEDED** 

**IMMUNIZE EVERY CHILD AS NEEDED** 

# **GIVE READY-TO-USE THERAPEUTIC FOOD**

# Give Ready-to-Use Therapeutic Food for SEVERE ACUTE MALNUTRITION

- Wash hands before giving the ready-to-use therapeutic food (RUTF).
- Sit with the child on the lap and gently offer the ready-to-use therapeutic food.
- Encourage the child to eat the RUTF without forced feeding.
- Give small regular meals of RUTF and encourage child to often eat 5-6 meals per day
- If still breastfeeding, continue by offering breast milk first before every RUTF feed.
- Give only the RUTF for at least two weeks, if breastfeeding continue to breast and gradually introduce foods recommended for the age (See Feeding recommendations in COUNSEL THE MOTHER chart).
- When introducing recommended foods, ensure that the child completes his daily ration of RUTF before giving other foods. Offer plenty of clean water, to drink from a cup, when the child is eating the ready-to-use therapeutic food.

#### Recommended Amounts of Ready-to-Use Therapeutic Food

CHILD'S WEIGHT (kg)	Packets per day (92 g Packets Containing 500 kcal)	Packets per Week Supply	
4.0-4.9 kg	2.0	14	
5.0-6.9 kg	2.5	18	
7.0-8.4 kg	3.0	21	
8.5-9.4 kg	3.5	25	
9.5-10.4 kg	4.0	28	
10.5-11.9 kg	4.5	32	
>12.0 kg	5.0	35	

#### GIVE FOLLOW-UP CARE FOR ACUTE CONDITIONS

- Care for the child who returns for follow-up using all the boxes that match the child's previous classifications.
- . If the child has any new problem, assess, classify and treat the new problem as on the ASSESS AND CLASSIFY chart.

#### PNFIIMONIA

#### After 3 days:

Check the child for general danger signs. Assess the child for cough or difficult breathing.

- . Is the child breathing slower?
- Is there a chest indrawing?
- Is there less fever?
- Is the child eating better?

See ASSESS & CLASSIFY chart.

#### Treatment:

- If any general danger sign or stridor, refer URGENTLY to hospital.
- . If chest indrawing and/or breathing rate, fever and eating are the same or worse, refer URGENTLY to hospital.
- If breathing slower, no chest indrawing, less fever, and eating better, complete the 5 days of antibiotic.

#### PERSISTENT DIARRHOEA

#### After 5 days:

- · Has the diarrhoea stopped?
- · How many loose stools is the child having per day?

#### Treatment:

- If the diarrhoea has not stopped (child is still having 3 or more loose stools per day), do a full reassessment of the child. Treat for dehydration if present. Then refer to hospital.
- If the diarrhoea has stopped (child having less than 3 loose stools per day), tell the mother to follow the usual feeding recommendations for the child's age.

#### DYSENTERY

#### After 3 days:

Assess the child for diarrhoea. > See ASSESS & CLASSIFY chart.

#### Ask:

- Are there fewer stools?
- . Is there less blood in the stool?
- Is there less fever?
- Is there less abdominal pain?
- . Is the child eating better?

#### Treatment:

- If the child is dehydrated, treat dehydration.
- . If number of stools, amount of blood in stools, fever, abdominal pain, or eating are worse or
  - · Change to second-line oral antibiotic recommended for dysentery in your area. Give it for 5 days. Advise the mother to return in 3 days. If you do not have the second line antibiotic, REFER to hospital.

- Exceptions if the child: is less than 12 months old, or
  - · was dehydrated on the first visit, or
  - . if he had measles within the last 3 months

REFER to hospital.

 If fewer stools, less blood in the stools, less fever, less abdominal pain, and eating better. continue giving ciprofloxacin until finished.

Ensure that mother understands the oral rehydration method fully and that she also understands the need for an extra meal each day for a week.

## MALARIA

#### If fever persists after 3 days:

Do a full reassessment of the child. > See ASSESS & CLASSIFY chart.

DO NOT REPEAT the Rapid Diagnostic Test if it was positive on the initial visit.

#### Treatment:

- If the child has any general danger sign or stiff neck, treat as VERY SEVERE FEBRILE DISEASE.
- If the child has any othercause of fever other than malarla, provide appropriate treatment.
- If there is no other apparent cause of fever.
  - · If fever has been present for 7 days, refer for assessment.
  - · Do microscopy to look for malaria parasites. If parasites are present and the child has finished a full course of the first line antimalarial, give the second-line antimalarial, if available, or refer the child to a hospital.
  - If there is no other apparent cause of fever and you do not have a microscopy to check for parasites, refer the child to a hospital.

### GIVE FOLLOW-UP CARE FOR ACUTE CONDITIONS

### FEVER: NO MALARIA

#### If fever persists after 3 days:

Do a full reassessment of the child. > See ASSESS & CLASSIFY chart.

Repeat the malaria test.

#### Treatment:

- If the child has any general danger sign or stiff neck, treat as VERY SEVERE FEBRILE DISEASE.
- If a child has a *positive malaria test*, give first-line oral antimalarial. Advise the mother to return in 3 days if the fever persists.
- If the child has any other cause of fever other than malaria, provide treatment.
- If there is **no other apparent cause** of fever:
  - If the fever has been present for 7 days, refer for assessment.

# MEASLES WITH EYE OR MOUTH COMPLICATIONS, GUM OR MOUTH ULCERS. OR THRUSH

#### After 3 days:

Look for red eyes and pus draining from the eyes. Look at mouth ulcers or white patches in the mouth (thrush). Smell the mouth.

#### Treatment for eye infection:

- If pus is draining from the eye, ask the mother to describe how she has treated the eye infection. If treatment has been correct, refer to hospital. If treatment has not been correct, teach mother correct treatment.
- If the pus is gone but redness remains, continue the treatment.
- If *no pus or redness*, stop the treatment.

#### Treatment for mouth ulcers:

- If mouth ulcers are worse, or there is a very foul smell from the mouth, refer to hospital
- If mouth ulcers are the same or better, continue using half-strength gentian violet for a total of 5 days.

#### Treatment for thrush:

- If thrush is worse check that treatment is being given correctly.
- If the child has problems with swallowing, refer to hospital.
- If thrush is the same or better, and the child is feeding well, continue nystatine for a total of 7 days. | 23

#### **FAR INFECTION**

#### After 5 days:

Reassess for ear problem. > See ASSESS & CLASSIFY chart.

Measure the child's temperature.

#### Treatment:

- If there is tender swelling behind the ear or high fever (38.5°C or above), refer URGENTLY to
- Acute ear infection:
  - If ear pain or discharge persists, treat with 5 more days of the same antibiotic. Continue wicking to dry the ear. Follow-up in 5 days.
  - If no ear pain or discharge, praise the mother for her careful treatment. If she has not yet finished the 5 days of antibiotic, tell her to use all of it before stopping.
- Chronic ear infection:
  - Check that the mother is wicking the ear correctly and giving quinolone drops tree times a day. Encourage her to continue.

### FEEDING PROBLEM

#### After 7 days:

Reassess feeding. > See guestions in the COUNSEL THE MOTHER chart. Ask about any feeding problems found on the initial visit.

- Counsel the mother about any new or continuing feeding problems. If you counsel the mother to make significant changes in feeding, ask her to bring the child back again.
- If the child is classified as MODERATE ACUTE MALNUTRITION, ask the mother to return 30 days after the initial visit to measure the child's WFH/L, MUAC.

## **ANAEMIA**

#### After 14 days:

- Give iron. Advise mother to return in 14 days for more iron.
- Continue giving iron every 14 days for 2 months.
- If the child has palmar pallor after 2 months, refer for assessment.

#### GIVE FOLLOW-UP CARE FOR ACUTE CONDITIONS

#### UNCOMPLICATED SEVERE ACUTE MALNUTRITION

#### After 14 days or during regular follow up:

Do a full reassessment of the child. > See ASSESS & CLASSIFY chart.

Assess child with the same measurements (WFH/L, MUAC) as on the initial visit.

Check for oedema of both feet.

Check the child's appetite by offering ready-to use therapeutic food if the child is 6 months or older.

#### Treatment:

- If the child has COMPLICATED SEVERE ACUTE MALNUTRITION(WFH/L less than -3 z-scores or MUAC is less than 115 mm or edema of both feet AND has developed a medical complication or edema, or fails the appetite test), refer URGENTLY to hospital.
- If the child has UNCOMPLICATED SEVERE ACUTE MALNUTRITION(WFH/L less than -3 z-scores or MUAC is less than 115 mm or edema of both feet but NO medical complication and passes appetite test), counsel the mother and encourage her to continue with appropriate RUTF feeding. Ask mother to return again in 14 days.
- If the child has MODERATE ACUTE MALNUTRITION (WFH/L between -3 and -2 z-scores or MUAC between 115 and 125 mm), advise the mother to continue RUTF. Counsel her to start other foods according to the age appropriate feeding recommendations (see COUNSEL THE MOTHER chart). Tell her to return again in 14 days. Continue to see child every 14 days until child's WFH/L is -2 z-scores or more, and/or MUAC is 125 mm or more.
- If the child has NO ACUTE MALNUTRITION(WFH/L is -2 z-scores or more, or MUAC is 125 mm or more), praise the mother, STOP RUTF and counsel her about the age appropriate feeding recommendations (see COUNSEL THE MOTHER chart).

#### **MODERATE ACUTE MALNUTRITION**

#### After 30 days:

Assess the child using the same measurement (WFH/L or MUAC) used on the initial visit:

- If WFH/L, weigh the child, measure height or length and determine if WFH/L.
- If MUAC, measure using MUAC tape.
- Check the child for oedema of both feet.

Reassess feeding. See questions in the COUNSEL THE MOTHER chart.

#### Treatment:

- If the child is no longer classified as MODERATE ACUTE MALNUTRITION praise the mother and encourage her to continue.
- If the child is still classified as MODERATE ACUTE MALNUTRITION counsel the mother about any feeding problem found. Ask the mother to return again in one month. Continue to see the child monthly until the child is feeding well and gaining weight regularly or his or her WFH/L is -2 z-scores or more or MUAC is 125 mm. or more.

#### Exception:

If you do not think that feeding will improve, or if the child has lost weight or his or her MUAC has diminished, refer the child.

# **COUNSEL THE MOTHER**

# **FEEDING COUNSELLING**

# **Assess Child's Appetite**

All children aged 6 months or more with SEVERE ACUTE MALNUTRITION (oedema of both feet or WFH/L less than -3 z-scores or MUAC less than 115 mm) and no medical complication should be assessed for appetite.

Appetite is assessed on the initial visit and at each follow-up visit to the health facility. Arrange a quiet corner where the child and mother can take their time to get accustomed to eating the RUTF. Usually the child eats the RUTF portion in 30 minutes.

# **Explain to the mother:**

- The purpose of assessing the child's appetite.
- What is ready-to-use-therapeutic food (RUTF).
- How to give RUTF:
  - Wash hands before giving the RUTF.
  - o Sit with the child on the lap and gently offer the child RUTF to eat.
  - o Encourage the child to eat the RUTF without feeding by force.
  - o Offer plenty of clean water to drink from a cup when the child is eating the RUTF.

# Offer appropriate amount of RUTF to the child to eat:

- After 30 minutes check if the child was able to finish or not able to finish the amount of RUTF given and decide:
  - o Child ABLE to finish at least one-third of a packet of RUTF portion (92 g) or 3 teaspoons from a pot within 30 minutes.
  - O Child NOT ABLE to eat one-third of a packet of RUTF portion (92 g) or 3 teaspoons from a pot within 30 minutes

# Assess Child's Feeding

Assess feeding if child is Less Than 2 Years Old, Has MODERATE ACUTE MALNUTRITION, ANAEMIA.

Ask questions about the child's usual

feeding and feeding during this illness. Compare the mother's answers to the *Feeding Recommendations* for the child's age.

ASK - How are you feeding your child?

If the child is receiving any breast milk, ASK:

- How many times during the day?
- Do you also breastfeed during the night?

Does the child take any other food or fluids?

- What food or fluids?
- How many times per day?
- What do you use to feed the child?

If MODERATE ACUTE MALNUTRITION or if a child with CONFIRMED HIV INFECTION fails to gain weight or loses weight between monthly measurements, ASK:

- How large are servings?
- Does the child receive his own serving?
- Who feeds the child and how?
- What foods are available in the home?

During this illness, has the child's feeding changed?

If yes, how?

## FEEDING RECOMMENDITIONS DURING ILLNESS AND HEALTH

Up to 6 Months of Age

Breast feed as often as the child wants day and night at least 8 times in 24 hours.

Breast feed at least for 10 minutes on each breast every time

Do not give other foods water.

Do not use bottles or pacifiers



6 Months up to 12 Months

Breast feed as often as the child wants

Give adequate servings of:

Khichri\*, Rice (Bhatt)\* with seasonal vegetables (Carrot, Spinach, Potatoes etc.), or Minced Meat. Rice Kheer, Suji ka Halwa or Kheer\*, Dalia\*, Vermicellis'\*, Choori\*, Mashed Potato or vegetables\*, Egg, Banana

And others Seasonal fruits (upto 9 months food should be mashed)

- 3 times per day if breastfed;
- 5 times per day if not breastfed.
- Each serving should be equivalent to 1/2-3/4 or a cup



Breast feed as often as the child wants

Give adequate servings of:

Roti, Parattha, Khichri

or Rice, Curry, Minced Meat,

Chicken ,Egg, Seasonal Vegetables, Choori, Vermicellis', and/or any foods listed for 6-12 months child

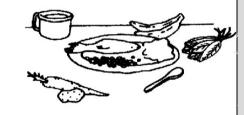
Give food at least 3 times per day AND Give also snacks 2 times per day between meals such as seasonal fruit (Banana, Apple, Mango, Orange etc.) Biscuit ,home made Pakora or Samosa, Lassi, Yoghurt ,Bread with Egg, Halwa etc.



### 2 Years and Older

Give family foods at
Least 3 meals each
day. Also, twice daily,
give nutritious food
between meals, such as
Seasonal fruit (Banana, Apple, Mango,

Seasonal fruit (Banana, Apple, Mango, Orange etc.) Biscuit ,Rusk, Chips, Pakora, Samosa, Lassi, Yoghurt ,Bread with Eggs, Halwa etc.



Wash your hands before preparing the child's food and use clean cooking utensils.

A good daily diet should be adequate in quantity and include an energy-rich food (for example, thick cereal with added oil / Ghee / Butter); meat, fish, eggs, or pulses; and fruits and vegetables

#### Feeding Recommendations For a Child Who Has PERSISTENT DIARRHOEA

If still breast feeding ,give more frequent ,longer breastfeeds ,day and night. If taking other milk:

- replace with increased breastfeeding OR
- replace with fermented milk products ,such as yoghurt OR
- replace half the milk with nutrient-rich semisolid food.

For other foods ,follow feeding recommendations for the child's age.

# **FEEDING COUNSELLING**

# Stopping Breastfeeding

STOPPING BREASTFEEDING means changing from all breast milk to no breast milk.

This should happen gradually over one month. Plan in advance for a safe transition.

#### 1. HELP MOTHER PREPARE:

- Mother should discuss and plan in advance with her family, if possible
- Express milk and give by cup
- Find a regular supply or formula or other milk
- Learn how to prepare a store milk safely at home

#### 2. HELP MOTHER MAKE TRANSITION:

- Teach mother to cup feed (See chart booklet Counsel part in Assess, classify and treat the sick young infant aged up to 2 months)
- Clean all utensils with soap and water
- Start giving formula or cow's milk once baby takes all the feeds by cup

# STOP BREASTFEEDING COMPLETELY:

Express and discard enough breast milk to keep comfortable until lactation stops

# Feeding Recommendations for a Child Who Has PERSISTENT DIARRHOEA

- If still breastfeeding, give more frequent, longer breastfeeds, day and night.
- If taking other milk:
  - o replace with increased breastfeeding OR
  - o replace with fermented milk products, such as yoghurt OR
  - o replace half the milk with nutrient-rich semisolid food.
  - o For other foods, follow feeding recommendations for the child's age.

# EXTRA FLUIDS AND MOTHER'S HEALTH

Advise the Mother to Increase Fluid During Illness

# FOR ANY SICK CHILD:

- Breastfeed more frequently and for longer at each feed. If child is taking breast-milk substitutes, increase the amount of milk given.
- Increase other fluids. For example, give soup, rice water, yoghurt drinks or clean water.

# FOR CHILD WITH DIARRHOEA:

- Giving extra fluid can be lifesaving.
- Give fluid according to Plan A or Plan B on TREAT THE CHILD chart.

# Counsel the Mother about her Own Health

- If the mother is sick, provide care for her, or refer her for help.
- If she has a breast problem (such as engorgement, sore nipples, breast infection), provide care for her or refer her for help.
- Advise her to eat well to keep up her own strength and health.
- Check the mother's immunization status and give her tetanus toxoid if needed.

Make sure she has access to:

- Family planning
- Counselling on STD and AIDS prevention.

# WHEN TO RETURN

# Advise the Mother When to Return to Health Worker

**FOLLOW-UP VISIT:** Advise the mother to come for follow-up at the earliest time listed for the child's problems.

If the child has:	Return for follow-up in:
<ul> <li>PNEUMONIA</li> <li>DYSENTERY</li> <li>MALARIA, if fever persists</li> <li>FEVER: NO MALARIA, if fever persists</li> <li>MEASLES WITH EYE OR MOUTH</li> <li>COMPLICATIONS</li> <li>MOUTH OR GUM ULCERS OR THRUSH</li> </ul>	3 days after treatment
<ul> <li>PERSISTENT DIARRHOEA</li> <li>ACUTE EAR INFECTION</li> <li>CHRONIC EAR INFECTION</li> <li>COUGH OR COLD, if not improving</li> </ul>	5 days after treatment
<ul><li>UNCOMPLICATED SEVERE ACUTE MALNUTRITION</li><li>FEEDING PROBLEM</li></ul>	14 days after treatment
<ul> <li>ANAEMIA</li> </ul>	14 days after treatment
MODERATE ACUTE MALNUTRITION	30 days after treatment

**NEXT WELL-CHILD VISIT:** Advise the mother to return for next immunization according to immunization schedule



#### WHEN TO RETURN IMMEDIATELY

Advise mother to return immediately if the child has any of these signs:			
Any sick child	<ul><li>Not able to drink or breastfeed</li><li>Becomes sicker</li><li>Develops a fever</li></ul>		
If child has COUGH OR COLD, also return if:	<ul><li>Fast breathing</li><li>Difficult breathing</li></ul>		
If child has diarrhea, also return if:	Blood in stool     Drinking poorly		

# ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT AGE UP TO 2 MONTHS

#### DO A RAPID APRAISAL OF ALL WAITING INFANTS

#### ASK THE MOTHER WHAT THE YOUNG INFANT'S PROBLEMS ARE

- Determine if this is an initial or follow-up visit for this problem.
  - If follow-up visit, use the follow-up instructions.
  - If initial visit, assess the young infant as follows:

USE ALL BOXES THAT MATCH INFANT'S SYMPTOMS AND PROBLEMS TO CLASSIFY THE ILLNESS.

# CHECK FOR POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE, PNEUMONIA AND LOCAL INFECTION

Any one

#### ASK:

#### Is the infant having difficulty in feeding?

 Has the infant had convulsions (fits)?

#### **LOOK AND FEEL:**

- Count the breaths in one minute.
   Repeat the count if 60 or more breaths per minute.
- · Look for severe chest indrawing
- Measure axillary temperature.
- Look at the young infant's movements. If infant is sleeping, ask the mother to wake him/her.
  - Does the infant move on his/her own? If the infant is not moving, gently stimulate him/her.
  - Does the infant move only when stimulated but then stops?
- Does the infant not move at all?
- Look at the umbilicus. Is it red or draining pus?
- Look for skin pustules.
- \* These thresholds are based on axillary temperature.
- \*\* If referral is refused or not possible, see page 12.

# Classify ALL YOUNG INFANTS

YOUNG

**INFANT** 

MUST

BE

CALM

or more of the following signs:	4

**SIGNS** 

- Not able to feed since birth, stopped feeding well <u>or</u> not feeding at all <u>or</u>
   Convulsions or
- Severe chest indrawing or
  Fever (38°C\* or above) or
- Low body temperature (less than 35.5°C\*)
   or
- Movement only when stimulated or no movement at all, or
- Fast breathing (60 breaths per minute or more) in infants less than 7 days old
- Fast breathing (60 breaths per minute or more) in infants 7 to 59 days old
- Umbilicus red or draining pus
   Skin pustules
- No signs of bacterial infection or very severe disease

# CLASSIFY (Urgent pre-referral treatments are in bold print)

**POSSIBLE** 

**SERIOUS** 

BACTERIAL

INFECTION OR

VERY

**SEVERE** 

DISEASE

**PNEUMONIA** 

LOCAL

INFECTION

UNLIKELY

Give first dose of intramuscular antibiotic.

IDENTIFY TREATMENT

- Treat to prevent low blood sugar.
- Refer URGENTLY to hospital.\*\*
- Teach the mother how to keep the infant warm on the way to the hospital.
- If referral is refused or not possible, further assess and classify the young infant (as on page 39) and treat accordingly.
- Advise mother to give home care for the young infant.
- Follow up on day 4 of treatment.
- Also treat per any other

Give amoxicillin for 7 days.

- Give amoxicillin for 5 days.Teach mother to treat local
- infections at home.
  Advise mother to give home care for the young infant.
- Follow up on day 3.
- SEVERE DISEASE
  OR
  INFECTION

  Advise mother to give home care for the young infant.

# THEN CHECK FOR JAUNDICE

			SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
ASK:  • When did jaundice first appear?			Any jaundice if age less than 24 hours or     Yellow palms or soles at any age	SEVERE JAUNDICE	<ul> <li>Treat to prevent low blood sugar.</li> <li>Refer URGENTLY to hospital.</li> <li>Teach the mother how to keep the infant warm on the way to the hospital.</li> </ul>
	palms and soles. Are they yellow?		<ul> <li>Jaundice appearing after 24 hours of age and</li> <li>Palms or soles not yellow</li> </ul>	JAUNDICE	<ul> <li>Advise the mother to give home care for the young infant.</li> <li>Advise mother to return immediately if palms or soles appear yellow.</li> <li>If the young infant is older than 3 weeks, refer to a hospital for assessment.</li> <li>Follow-up on day 2.</li> </ul>
			No jaundice	NO JAUNDICE	Advise the mother to give home care for the young infant.

#### THEN ASK: Does the young infant have diarrhoea\*? **IDENTIFY TREATMENT CLASSIFY** SIGNS (Urgent pre-referral treatments are in bold print) Two of the following > If infant has no other severe IF YES, LOOK AND FEEL: Classify signs: classification: **DIARRHOEA** - Follow Plan C to treat severe • Look at the young infant's general condition: Movement only when **FOR** dehydration quickly. Start IV fluid SEVERE stimulated or no immediately, or refer urgently for IV **DEHYDRATION DEHYDRATION** Infant's movements movement at all fluid. If that is not possible, start - Does the infant move on his/her own? Sunken eyes rehydration by NG tube. - Does the infant move only when stimulated Skin pinch goes back > If infant also has another severe but then stops? very slowly. - Does the infant not move at all? classification: - Refer URGENTLY to hospital with - Is the infant restless and irritable? mother giving frequent sips of ORS on the way. - Advise mother to continue • Look for sunken eyes. breastfeeding. > Teach the mother how to keep the • Pinch the skin of the abdomen. infant warm on the way to the hospital. Does it go back: - Very slowly (longer than 2 seconds)? - or slowly? Two of the following Give fluid and breast milk for some signs: dehydration (Plan B). Restless and irritable > If infant also has another severe classification: Sunken eyes SOME - Refer URGENTLY to hospital with Skin pinch goes back DEHYDRATION mother giving frequent sips of ORS slowly. on the way. - Advise mother to continue breastfeeding. Advise mother when to return immediately \* What is diarrhoea in a young infant? > Follow-up on day 3 if not improving A young infant has diarrhoea if the stools have changed from usual pattern and are many and watery (more water than fecal matter). Give fluids and breastmilk to treat for Not enough signs to NO DEHYDRATION diarrhoea at home (Plan A) classify as some or The normally frequent or semi-solid stools of a breastfed baby are > Advise mother when to return severe dehydration. not diarrhoea. immediately

# THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT FOR AGE IN BREASTFED INFANTS

			SIGNS	CLASSIFY	IDENTIFY TREATMENT
<ul><li>ASK:</li><li>Is the infant breastfed many times in 24 hour</li></ul>	- Weight less than 1.5 kg?	Classify FEEDING	• Weight < 1.5 kg, <u>or</u> • Weight < -3 Z score	VERY LOW WEIGHT	<ul> <li>Treat to prevent low blood sugar.</li> <li>Refer URGENTLY to hospital.</li> <li>Teach the mother to keep the young infant warm on the way to hospital.</li> </ul>
Does the infant usually other foods or drinks?     If yes, how often?     If yes, what do you infant?  ASSESS BREASTFEEDIN  Has the infant breastfed in the previous hour?	Look for ulcers or white patches in the mouth (thrush).  use to feed the		Not well attached to breast or  Not suckling effectively, or  Less than 8 breastfeeds in 24 hours, or  Receives other foods or drinks, or  Low weight for age, or  Thrush (ulcers or white patches in mouth)	FEEDING PROBLEM and/or LOW WEIGHT FOR AGE	<ul> <li>If not well attached or not suckling effectively, teach correct positioning and attachment.</li> <li>If not able to attach well immediately, teach the mother to express breast milk and feed by a cup</li> <li>If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding. Advise her to breastfeed as often and for as long as the infant wants, day and night.</li> <li>If receiving other foods or drinks, counsel mother about breastfeeding more, reducing other foods or drinks, and using a cup.</li> <li>If not breastfeeding at all:         <ul> <li>Refer for breastfeeding counselling and possible relactation.</li> <li>Advise about correctly preparing breast-milk substitutes and using a cup.</li> </ul> </li> <li>Advise the mother how to feed and keep the low weight infant warm at home</li> <li>If thrush, teach the mother to treat thrush at home.</li> <li>Advise mother to give home care for the young infant.</li> <li>Follow up FEEDING PROBLEM or thrush on day 3.</li> <li>Follow up LOW WEIGHT FOR AGE on day 14.</li> </ul>
not suckling effectively suckling effectively  > Clear a blocked nose if it interferes with breastfeeding.			<ul> <li>Not low weight for age and no other signs of inadequate feeding</li> </ul>	NO FEEDING PROBLEM	<ul> <li>Advise mother to give home care for the young infant.</li> <li>Praise the mother for feeding the infant well.</li> </ul>

# THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT FOR AGE IN INFANTS **RECEIVING NO BREASTMILK**

SIGNS	CLASSIFY	IDENTIFY TREATMENT
• Weight < 1.5 kg, <u>or</u> • Weight < –3 Z score	VERY LOW WEIGHT	<ul> <li>Treat to prevent low blood sugar.</li> <li>Refer URGENTLY to hospital.</li> <li>Teach the mother to keep the young infant warm on the way to the hospital.</li> </ul>
Giving inappropriate replacement feeds, or Giving insufficient replacement feeds, or Giving insufficient replacement feeds, or Milk incorrectly or unhygienically prepared, or Using a feeding bottle, or An HIV positive mother mixing breastmilk and other feeds before 6 months, or Low weight for age, or Thrush	FEEDING PROBLEM and/or LOW WEIGHT FOR AGE	<ul> <li>Counsel about feeding</li> <li>Explain the guidelines for safe replacement feeding</li> <li>Identify concerns of mother and family about feeding.</li> <li>If mother is using a bottle, teach cup feeding.</li> <li>If thrush, teach the mother to treat it at home.</li> <li>Follow-up FEEDING PROBLEM or thrush on day 3.</li> <li>Follow up LOW WEIGHT FOR AGE on day 7.</li> </ul>
Not low weight for age and no other signs of inadequate feeding	NO FEEDING PROBLEM	<ul> <li>Advise mother to continue feeding, and ensure good hygiene</li> <li>Praise the mother for feeding the infant well</li> </ul>

# THEN CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS:

**IMMUNIZATION** SCHEDULE:

AGE Birth

6 weeks

10 weeks

**VACCINES\*** 

BCG\*\* Hep B0 OPV0

DPT+HIB-1+Hep B1 OPV-1 Rotavirus-1

DPT+HIB-2+Hep B2 OPV-2 Pneumococcal conjugate vaccine (PCV) 2 Rotavirus-2

- > Give all missed doses on this visit.
- > Immunize sick infants unless being referred.
- > Advise the caretaker when to return for the next dose.

Pneumococcal conjugate vaccine (PCV) 1

# **ASSESS OTHER PROBLEMS**

<sup>\*</sup> Vaccines should be provided in line with the national immunization policy \*\* Young infants who are HIV positive or unknown HIV status with symptoms consistent with HIV should not be given BCG

## TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

# IF THE YOUNG INFANT IS CLASSIFIED AS POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE, GIVE PRE-REFERRAL TREATMENTS AND REFER URGENTLY

#### 1. Give First Doses of Intramuscular Gentamicin and Oral Amoxicillin

**Gentamicin:** Desired range is 5–7.5 mg/kg/day in once daily injection. In low birth weight infants, give 3–4 mg/kg/day in once daily injection. To prepare the injection: From a 2 ml vial containing 40 mg/ml, remove 1 ml gentamicin from the vial and add 1 ml distilled water to make the required strength of 20 mg/ml.

**Amoxicillin:** Desired range is 75 to 100 mg/kg/day divided into 2 oral doses. Give first dose pre-referral if young infant can swallow.

WEIGHT	<b>Gentamicin</b> (strength 20 mg/ml) Per dose	Amoxicillin Dispersible tablet (250 mg) Per dose	Amoxicillin Dispersible tablet (125 mg) per dose	Amoxicillin Syrup (125 mg in 5 ml) Per dose
1.5 to 2.4 kg	0.4 ml	1/2 tablet	1 tablet	5 ml
2.5 to 3.9 kg	0.8ml	1/2 tablet	1 tablet	5 ml
4.0 to 5.9 kg	1.2 ml	1 tablet	2 tablets	10 ml

## 2. Treat the Young Infant to Prevent Low Blood Sugar

- If the young infant is able to breastfeed:
  Ask the mother to breastfeed the young infant.
- ➢ If the young infant is not able to breastfeed but is able to swallow:
  Give 20–50 ml (10 ml/kg) expressed breastmilk before departure. If not possible to give expressed breastmilk, give 20–50 ml (10 ml/kg) sugar water. (To make sugar water: Dissolve 4 level teaspoons of sugar (20 grams) in a 200-ml cup of clean water.)
- ▶ If the young infant is not able to swallow:
  Give 20–50 ml (10 ml/kg) of expressed breastmilk or sugar water by nasogastric tube.

### 3. Teach the Mother How to Keep the Young Infant Warm on the Way to the Hospital

- > Provide skin to skin contact, OR
- Keep the young infant clothed or covered as much as possible all the time, especially in a cold environment. Dress the young infant with extra clothing including hat, gloves, and socks. Wrap the infant in a soft dry cloth and cover with a blanket.

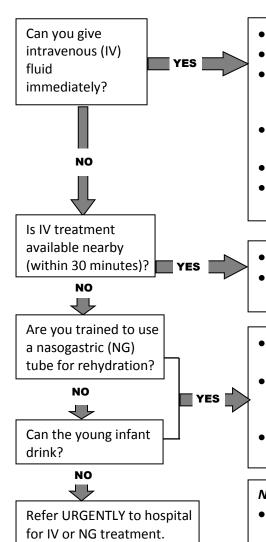
## 4. Refer Urgently

- > Write a referral note for the mother to take to the hospital.
- > If the infant also has SOME DEHYDRATION OR SEVERE DEHYDRATION and is able to drink:

Give the mother some prepared ORS and ask her to give frequent sips of ORS on the way.

Advise mother to continue breastfeeding.





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

AGE	First give 30 ml/kg in :	Then give 70 ml/kg in :	
Infants (under 12 months)	1 hour	5 hours	

- Reassess the young infant every 1–2 hours. If hydration status is not improving, give the IV drip more rapidly.
- Also give ORS (about 5 ml/kg/hour) as soon as the young infant can drink: usually after 3–4 hours.
- Reassess a young infant after 6 hours. Classify dehydration. Then choose the appropriate plan (A, B or C) to continue treatment.
- Refer URGENTLY to hospital for IV treatment.
- If the infant can drink, provide the mother with ORS solution and show her how to give frequent sips during the trip or give ORS by nasogastric tube.
- Start rehydration by tube (or mouth) with ORS solution: Give 20 ml/kg/hour for 6 hours (total of 120 ml/kg).
- Reassess the young infant every 1–2 hours while waiting for transfer:
  - If there is repeated vomiting or abdominal distension, give the fluid more slowly.
  - If the hydration status is not improving after 3 hours, send the young infant for IV therapy.
- After 6 hours reassess the young infant. Classify dehydration. Then choose the appropriate plan (A, B or C) to continue treatment.

#### NOTE:

• If the young infant is not referred to hospital, observe the young infant at least 6 hours after rehydration to be sure the mother can maintain hydration giving the young infant ORS solution by mouth.

# WHERE REFERRAL IS REFUSED OR NOT POSSIBLE, FURTHER ASSESS AND CLASSIFY THE SICK YOUNG INFANT WITH POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE

Asses	Classify	Identify Treatment
Young infant has any one of the following:  Convulsions Unable to feed at all No movement on stimulation Unable to cry Bulging fontanelle Cyanosis	CRITICAL ILLNESS	<ul> <li>Give first dose of both ampicillin and gentamicin intramuscularly.</li> <li>Explain to the caregiver that the infant is very sick and needs urgent referral for hospital care.</li> <li>Treat to prevent low blood sugar.</li> <li>Teach the mother how to keep the young infant warm on the way to the hospital.</li> <li>Refer URGENTLY to hospital.</li> <li>If referral is still not possible, continue treatment with daily IM gentamicin and twice-daily IM ampicillin until referral is possible (up to 7 days).</li> </ul>
Young infant has any one of the following:  Not feeding well on observation Temperature 38°C or more Temperature less than 35.5° C Severe chest indrawing Movement only when stimulated	CLINICAL SEVERE INFECTION	<ul> <li>Explain to the caregiver that the infant is very sick and needs urgent referral for hospital care.</li> <li>Treat to prevent low blood sugar.</li> <li>Teach the mother how to keep the young infant warm on the way to the hospital.</li> <li>Refer URGENTLY to hospital.</li> <li>If referral still is not possible,</li> <li>Treat at outpatient clinic with daily intramuscular gentamicin*.</li> <li>Give oral amoxicillin for 7 days.</li> <li>Teach the mother how to give the oral amoxicillin twice daily.</li> <li>Advise mother to return for the next injection tomorrow.</li> <li>Treat also for any other classifications that the young infant has.</li> <li>Reassess the young infant at each visit (see Follow-up Care, p. 22).</li> </ul>
Young infant has:  • Fast breathing (60 breaths per minute or more) in infants less than 7 days old**	SEVERE PNEUMONIA	<ul> <li>Give oral amoxicillin for 7 days.</li> <li>Teach the mother how to give the oral amoxicillin twice daily.</li> <li>Treat also for any other classifications that the young infant has.</li> <li>Advise the mother to return for follow up on day 4.</li> </ul>

<sup>\*</sup>Countries may decide to treat with IM gentamicin for 7 days or 2 days. If a country chooses 2 days, then there is a mandatory follow-up visit on day 4.

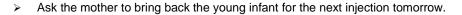
<sup>\*\*</sup>Note that a young infant 7-59 days old having fast breathing (60 breaths per minute or more) does NOT need to be referred; treat at outpatient clinic with oral amoxicillin.

# WHERE REFERRAL IS REFUSED OR NOT POSSIBLE, TREAT THE YOUNG INFANT WHO HAS CLINICAL SEVERE INFECTION WITH IM GENTAMICIN AND ORAL AMOXICILLIN

## Give Intramuscular Gentamicin to Young Infants with CLINICAL SEVERE INFECTION where Referral is Refused or Not Possible

- Desired range is 5–7.5 mg/kg/day in once daily injection. In low birth weight infants, give 3–4 mg/kg/day in once daily injection.
- Option 1: Treat for 7 days. Option 2: Treat for 2 days. Option to be decided in the process of country adaptation.
- **Preparation**: From a 2 ml vial containing 40mg/ml, remove 1 ml gentamicin from the vial and add 1 ml distilled water to make the required strength of 20 mg/ml.

	GENTAMICIN (Strength 20 mg/ml)		
WEIGHT	Amount per dose		
1.5 to 2.4 kg	0.4 ml		
2.5 to 3.9 kg	0.8 ml		
4.0 to 5.9 kg	1.2 ml		





### > Give Oral Amoxicillin where Referral is Refused or Not Possible

- To young infants with CLINICAL SEVERE INFECTION
- To young infants <u>less than 7 days old</u> with SEVERE PNEUMONIA (fast breathing alone)

	AMOXICILLIN  Desired range is 75 to 100 mg/kg/day divided into 2 daily oral doses				
	Give twice daily for 7 days				
WEIGHT	Dispersible tablet (250 mg)	Dispersible tablet (125 mg)	Syrup (125 mg in 5 ml)		
	Per dose	per dose	Per dose		
1.5 to 2.4 kg	1/2 tablet	1 tablet	5 ml		
2.5 to 3.9 kg	1/2 tablet	1 tablet	5 ml		
4.0 to 5.9 kg	1 tablet	2 tablets	10 ml		

Teach the mother how to give oral medicines at home (page 15).

# GIVE PRE-REFERRAL TREATMENT TO THE YOUNG INFANT WHO HAS CRITICAL ILLNESS AND REFER URGENTLY TO HOSPITAL

> Give First Doses of IM Gentamicin and IM Ampicillin to Young Infants with CRITICAL ILLNESS and Refer Urgently to Hospital\*

**GENTAMICIN:** Desired range is 5–7.5 mg/kg/day in once daily injection. In low birth weight infants, give 3–4 mg/kg/day in once daily injection.

• **Preparation**: From a 2 ml vial containing 40 mg/ml, remove 1 ml gentamicin from the vial and add 1 ml distilled water to make the required strength of 20 mg/ml.

**AMPICILLIN:** Desired dose is 50 mg per kg given twice daily.

• **Preparation**: To a vial of 250 mg, add 1.3 ml sterile water = 250 mg/1.5 ml.

	GENTAMICIN	AMPICILLIN
	(Strength 20 mg/ml)	(Strength 250 mg/1.5 ml)
WEIGHT	Amount per dose	Amount per dose
1.5 to 2.4 kg	0.4 ml	0.8 ml
2.5 to 3.9 kg	0.8 ml	1.2 ml
4.0 to 5.9 kg	1.2 ml	1.5 ml

<sup>\*</sup> If after additional counselling and problem solving, referral is still not possible, administer intramuscular gentamicin once daily AND intramuscular ampicillin twice daily until referral becomes possible, up to 7 days.

## TREAT THE YOUNG INFANT

#### > Teach the Mother to Give Oral Medicines at Home

Follow the instructions below to teach the mother about each oral medicine to be given at home. Also follow the instructions listed with each medicine's dosage table.

- Determine the appropriate medicines and dosage for the infant's age or weight.
- Tell the mother the reason for giving the medicine to the infant.
- Demonstrate how to measure a dose.
- Watch the mother practice measuring a dose by herself.
- Ask the mother to give the first dose to her infant.
- Explain carefully how to give the medicine, then label and package the medicine.
- If more than one medicine will be given, collect, count and package each medicine separately.
- Explain that all the tablets or syrups must be used to finish the course of treatment, even if the infant gets better.
- Check the mother's understanding before she leaves the clinic.

### > Give Oral Amoxicillin

- Local Infection: Give oral amoxicillin twice daily for 5 days
- Pneumonia (fast breathing alone) in infant 7–59 days old: Give oral amoxicillin twice daily for 7 days

	AMOXICILLIN  Desired range is 75 to 100 mg/kg/day divided into 2 daily oral doses				
WEIGHT	Dispersible Tablet Dispersible Tablet Syrup (250 mg) (125 mg) (125 mg in 5 ml) Per dose Per dose Per dose				
1.5 to 2.4 kg	1/2 tablet	1 tablet	5 ml		
2.5 to 3.9 kg	1/2 tablet	1 tablet	5 ml		
4.0 to 5.9 kg	1 tablet 2 tablets 10 ml				

## TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

### > Teach the Mother How to Treat Local Infections at Home

- > Explain how the treatment is given.
- > Watch her as she does the first treatment in the clinic.
- > Tell her to return to the clinic if the infection worsens.

#### To Treat Skin Pustules or Umbilical Infection

The mother should do the treatment twice daily for 5 days:

- Wash hands
- > Gently wash off pus and crusts with soap and water
- > Dry the area
- > Paint the skin or umbilicus/cord with full strength gentian violet (0.5%)
- Wash hands again

#### To Treat Thrush (ulcers or white patches in mouth)

The mother should do the treatment 4 times daily for 7 days:

- Wash hands
- ➤ Paint the mouth with half-strength gentian violet (0.25%) using a clean soft cloth wrapped around the finger
- ➤ Wash hands again

> Immunize Every Sick Young Infant, as needed.

## TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

## > To Treat the Young Infant with Diarrhoea, Give Extra Fluids and Continue Feeding

If the young infant has NO DEHYDRATION, use Plan A. If the young infant has SOME DEHYDRATION, use Plan B.

#### PLAN A: TREAT DIARRHOEA AT HOME

Counsel the mother on the Rules of Home Treatment for Young Infant:

- 1. Give Extra Fluids
- 2. When to Return
- 1. GIVE EXTRA FLUID (as much as the young infant will take)
  TELL THE MOTHER:
- Breastfeed frequently and for longer at each feed.
- Also give ORS or clean water in addition to breastmilk.

#### It is especially important to give ORS at home when:

- the young infant has been treated with Plan B or Plan C during this visit.
- the young infant cannot return to a clinic if the diarrhoea gets worse.

TEACH THE MOTHER HOW TO MIX AND GIVE ORS. GIVE THE MOTHER 2 PACKETS OF ORS TO USE AT HOME.

## SHOW THE MOTHER HOW MUCH FLUID TO GIVE IN ADDITION TO THE USUAL FLUID INTAKE:

Up to 2 years, 50 to 100 ml after each loose stool

#### Tell the mother to:

- Give frequent small sips from a cup.
- If the infant vomits, wait 10 minutes. Then continue, but more slowly.
- Continue giving extra fluid until the diarrhea stops.

#### 2. WHEN TO RETURN

#### PLAN B: TREAT SOME DEHYDRATION WITH ORS

In the clinic, give recommended amount of ORS over 4-hour period DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS

WEIGHT	< 6 kg	
AGE*	Up to 4 months	
ORS	200 – 450 ml	

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

- If the young infant wants more ORS than shown, give more.
- For young infants who are not breastfed, also give 100 200 ml clean water during this
  period if you use standard ORS. This is not needed if you use new low osmolarity ORS.

#### SHOW THE MOTHER HOW TO GIVE ORS SOLUTION.

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

#### **AFTER 4 HOURS:**

- Reassess the young infant and classify the infant for dehydration.
- Select the appropriate plan to continue treatment.
- Begin breastfeeding the young infant in clinic.

#### IF THE MOTHER MUST LEAVE BEFORE COMPLETING TREATMENT:

- Show her how to prepare ORS solution at home.
- Show her how much ORS to give to finish 4-hour treatment at home.
   Give her enough ORS packets to complete rehydration. Also give her 2 packets as recommended in Plan A.

Explain the Rules of Home Treatment for Young Infant:

- 1. GIVE EXTRA FLUIDS. Breastfeed frequently and for longer at each feed.
- 2. WHEN TO RETURN

## **COUNSEL THE MOTHER**

## Teach Correct Positioning and Attachment for Breastfeeding

- > Show the mother how to hold her infant
  - with the infant's head and body in line
  - with the infant approaching breast with nose opposite to the nipple
  - with the infant held close to the mother's body
  - with the infant's whole body supported, not just neck and shoulders.
- Show her how to help the infant to attach. She should:
  - touch her infant's lips with her nipple
  - wait until her infant's mouth is opening wide
  - move her infant quickly onto her breast, aiming the infant's lower lip well below the nipple.
- ➤ Look for signs of good attachment and effective suckling. If the attachment or suckling is not good, try again.

## > Teach the Mother How to Feed by a Cup

- > Put a cloth on the infant's front to protect his clothes as some milk can spill
- Hold the infant semi-upright on the lap.
- > Put a measured amount of milk in the cup.
- Hold the cup so that it rests lightly on the infant's lower lip.
- > Tip the cup so that the milk just reaches the infant's lips.
- Allow the infant to take the milk himself. DO NOT pour the milk into the infant's mouth.

### Teach the Mother How to Express Breastmilk

Ask the mother to:

- Wash her hands thoroughly.
- Make herself comfortable.
- > Hold a wide necked container under her nipple and areola.
- Place her thumb on top of the breast and the first finger on the underside of the breast so they are opposite each other (at least 4 cm from the tip of the nipple).
- Compress and release the breast tissue between her finger and thumb a few times.
- If the milk does not appear, she should re-position her thumb and finger closer to the nipple and compress and release the breast as before.
- Compress and release all the way around the breast, keeping her fingers the same distance from the nipple. Be careful not to squeeze the nipple or to rub the skin or move her thumb or finger on the skin.
- > Express one breast until the milk just drips, then express the other breast until the milk just drips.
- Alternate between breasts 5 or 6 times, for at least 20 to 30 minutes.
- Stop expressing when the milk no longer flows but drips from the start.

## **COUNSEL THE MOTHER**

## > Teach the Mother How to Keep the Low Weight Infant Warm at Home

- Keep the young infant in the same bed with the mother.
- > Keep the room warm (at least 25°C) with home heating device and make sure that there is no draught of cold air.
- Avoid bathing the low weight infant. When washing or bathing, do it in a very warm room with warm water, dry immediately and thoroughly after bathing and clothe the young infant immediately.
- > Change clothes (e.g. nappies) whenever they are wet.
- Provide skin to skin contact as much as possible, day and night. For skin to skin contact:
  - Dress the infant in a warm shirt open at the front, a nappy, hat and socks.
  - Place the infant in skin to skin contact on the mother's chest between the mother's breasts. Keep the infant's head turned to one side.
  - Cover the infant with mother's clothes (and an additional warm blanket in cold weather).
- > When not in skin to skin contact, keep the young infant clothed or covered as much as possible at all times. Dress the young infant with extra clothing including hat and socks, loosely wrap the young infant in a soft dry cloth and cover with a blanket.
- Check frequently if the hands and feet are warm. If cold, re-warm the baby using skin to skin contact.
- > Breastfeed the infant frequently (or give expressed breastmilk by cup).

## **COUNSEL THE MOTHER**

## ➤ Advise the Mother to Give Home Care for the Young Infant

- 1. EXCLUSIVELY BREASTFEED THE YOUNG INFANT (for breastfeeding mothers)
  - Give only breastfeeds to the young infant.
  - Breastfeed frequently, as often and for as long as the infant wants, day or night, during sickness and health.

#### 2. MAKE SURE THAT THE YOUNG INFANT IS KEPT WARM AT ALL TIMES

In cool weather cover the infant's head and feet and dress the infant with extra clothing.

#### 3. WHEN TO RETURN:

Follow up visit				
If the infant has:	Return for first follow-up on:			
• JAUNDICE	Day 2 of treatment			
<ul><li>DIARRHOEA</li><li>FEEDING PROBLEM</li><li>THRUSH</li><li>LOCAL INFECTION</li></ul>	Day 3 of treatment			
PNEUMONIA     SEVERE PNEUMONIA where referral is refused or not possible	Day 4 of treatment			
LOW WEIGHT FOR AGE in infant receiving no breastmilk	Day 7 of treatment			
LOW WEIGHT FOR AGE in breastfed infant	Day 14 of treatment			

#### WHEN TO RETURN IMMEDIATELY:

# Advise the caretaker to return immediately if the young infant has any of these signs:

- Breastfeeding poorly
- Reduced activity
- Becomes sicker
- > Develops a fever
- > Feels unusually cold
- Develops fast breathing
- > Develops difficult breathing
- > Palms or soles appear yellow

### > CLINICAL SEVERE INFECTION where REFERRAL WAS REFUSED OR NOT POSSIBLE

- Follow up at the next contact for injection (day 2) and on day 4 of treatment.
- > At each contact, reassess the young infant as on page 12.
- > **Refer** young infant if:
  - Infant **becomes worse** after treatment is started or
  - Any **new sign of CLINICAL SEVERE INFECTION appears** while on treatment <u>or</u>
  - Any sign of CLINICAL SEVERE INFECTION is still present after day 8 of treatment or
  - If **no improvement on day 4** after 3 full days of treatment.
- If the young infant is improving, complete the 2 days treatment with IM gentamicin. Ask the mother to continue giving the oral amoxicillin twice daily until all the tablets are finished.

#### > PNEUMONIA or SEVERE PNEUMONIA

- > Follow up on day 4 of treatment.
- Reassess the young infant for POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE, PNEUMONIA AND LOCAL INFECTION as on page 2.
- > **Refer** young infant if:
  - Infant becomes worse after treatment is started or
  - Any new sign of VERY SEVERE DISEASE appears while on treatment
- > If the young infant is improving, ask the mother to continue giving the oral amoxicillin twice daily until all the tablets are finished.
- Ask the mother to bring the young infant back in 4 more days.
- > Young infants with fast breathing alone should be checked as often as possible but it is mandatory to do so on day 4 of treatment.

#### > LOCAL INFECTION

On day 3 of treatment:

- Look at the umbilicus. Is it red or draining pus?
- Look for skin pustules.

#### Treatment:

- > If umbilical *pus or redness remains same or is worse*, refer to hospital. If *pus and redness are improved*, tell the mother to continue giving the 5 days of antibiotic and continue treating the local infection at home.
- > If skin pustules are *same or worse*, refer to hospital. If *improved*, tell the mother to continue giving the 5 days of antibiotic and continue treating the local infection at home.

#### > JAUNDICE

On day 2: LOOK for jaundice. Are palms or soles yellow?

- > If palms or soles are yellow, refer to hospital.
- > If palms or soles are not yellow, but jaundice **has not decreased**, advise the mother about home care and ask her to return for follow up again tomorrow.
- ➤ If jaundice has **started decreasing**, reassure the mother and ask her to continue home care. Ask her to return for follow up at 3 weeks of age.

After 3 weeks of age: If jaundice continues beyond 3 weeks age, refer the young infant to hospital for further assessment.

#### > DIARRHOEA

On day 3, ASK: Has the diarrhea stopped?

- > If the diarrhea has **not stopped**, assess and treat the young infant for diarrhea (see page 4)
- > If the diarrhea has **stopped**, tell the mother to continue exclusive breastfeeding.

#### > FEEDING PROBLEM

On day 3:

Reassess feeding. Use "Then Check for Feeding Problem or Low Weight for Age" above (page 6 or 7). Ask about any feeding problems found on the initial visit.

- > Counsel the mother about any new or continuing feeding problems. If you counsel the mother to make significant changes in feeding, ask her to bring the young infant back again.
- If the young infant is low weight for age, ask the mother to return 14 days after the initial visit to measure the young infant's weight gain.

#### Exception:

If you do not think that feeding will improve, or if the young infant has *lost weight*, refer to HOSPITAL.

#### > LOW WEIGHT FOR AGE

On day 14 (or on day 7 if the infant is receiving no breastmilk):

Weigh the young infant and determine if the infant is still low weight for age.

Reassess feeding. Use "Then Check for Feeding Problem or Low Weight for Age" on page 6 or 7.

- > If the infant is *no longer low weight for age*, praise the mother and encourage her to continue.
- > If the infant is *still low weight for age, but is feeding well*, praise the mother. Ask her to have her infant weighed again within a month or when she returns for immunization.
- ➢ If the infant is still low weight for age and still has a feeding problem, counsel the mother about the feeding problem. Ask the mother to return again in 14 days (or when she returns for immunization, if this is within 14 days). Continue to see the young infant every few weeks until the infant is feeding well and gaining weight regularly or is no longer low weight for age.

#### Exception:

If you do not think that feeding will improve, or if the young infant has *lost weight*, refer to hospital.

#### > THRUSH

On day 3 of treatment:

Look for ulcers or white patches in the mouth (thrush).

Reassess feeding. Use "Then Check for Feeding Problem or Low Weight for Age" (page 6 or 7).

- > If *thrush is worse*, or the infant has *problems with attachment or suckling*, refer to hospital.
- If *thrush is the same or better*, and if the infant is *feeding well*, continue half-strength gentian violet for a total of 7 days.

## **Annex: IDENTIFY SKIN PROBLEM**

IF SKIN IS ITCHING	SIGNS	CLASSIFY AS:	TREATMENT	UNIQUE FEATURES IN HIV
	Itching rash with small papules and scratch marks. Dark spots with pale centres	PAPULAR ITCHING RASH (PRURIGO)	Treat itching:  Calamine lotion Antihistamine oral If not improves 1% hydrocortisone Can be early sign of HIV and needs assessment for HIV	Is a clinical stage 2 defining case
	An itchy circular lesion with a raised edge and fine scaly area in the centre with loss of hair. May also be found on body or web on feet	RINGWORM (TINEA)	Whitfield ointment or other antifungal cream if few patches  If extensive refer, if not give:  Ketoconazole for 2 up to 12 months(6-10 kg) 40mg per  day for 12 months up to 5 years give 60 mg per  day or give griseofulvin 10mg/kg/day  if in hair shave hair treat itching as above	Extensive: There is a high incidence of co existing nail infection which has to be treated adequately to prevent recurrence of tinea infections of skin.  Fungal nail infection is a clinical stage 2 defining disease
	Rash and excoriations on torso; burrows in web space and wrists. face spared	SCABIES	Treat itching as above manage with anti scabies: 25% topical Benzyl Benzoate at night, repeat for 3 days after washing and or 1% lindane cream or lotion once wash off after 12 hours	In HIV positive individuals scabies may manifest as crust scabies.  Crusted scabies presents as extensive areas of crusting mainly on the scalp, face back and feet. Patients may not complain of itching. The scales will teeming with mites

IF SKIN HAS BLISTERS/SORES/PUSTULES	SIGNS	CLASSIFY AS:	TREATMENT	UNIQUE FEATURES IN HIV
	Vesicles over body. Vesicles appear progressively over days and form scabs after they rupture	CHIKEN POX	Treat itching as above Refer URGENTLY if pneumonia or jaundice appear	Presentation atypical only if child is immunocompromised Duration of disease longer Complications more frequent Chronic infection with continued appearance of new lesions for >1 month; typical vesicles evolve into nonhealing ulcers that become necrotic, crusted, and hyperkeratotic.
	Vesicles in one area on one side of body with intense pain or scars plus shooting pain. Herpes zoster is uncommon in children except where they are immuno-compromised, for example if infected with HIV	HERPES ZOSTER	Keep lesions clean and dry. Use local antiseptic If eye involved give acyclovir 20 mg /kg 4 times daily for 5 days Give pain relief Follow-up in 7 days	Duration of disease longer Haemorrhagic vesicles, necrotic ulceration Rarely recurrent, disseminated or multi-dermatomal  Is a Clinical stage 2 defining disease
	Red, tender, warm crusts or small lesions	IMPETIGO OR FOLLICULITIS	Clean sores with antiseptic Drain pus if fluctuant Start cloxacillin if size >4cm or red streaks or tender nodes or multiple abscesses for 5 days ( 25-50 mg/kg every 6 hours) Refer URGENTLY if child has fever and / or if infection extends to the muscle.	

NON-ITCHY	SIGNS	CLASSIFY AS:	TREATMENT	UNIQUE FEATURES IN HIV
	Skin coloured pearly white papules with a central umblication. It is most commonly seen on the face and trunk in children.	MOLLUSCUM CONTAGIOSUM	Leave them alone unless superinfected Use of phenol: Pricking each lesion with a needle or sharpened orange	Incidence is higher Giant molluscum (>1cm in size), or coalescent Pouble or triple lesions may be seen More than 100 lesions may be seen. Lesions often chronic and difficult to eradicate Extensive molluscum contagiosum is a Clinical stage 2 defining disease
	The common wart appears as papules or nodules with a rough (verrucous) surface	WARTS	Treatment: Topical salicylic acid preparations ( eg. Duofilm) Liquid nitrogen cryotherapy. Electrocautery	Lesions more numerous and recalcitrant to therapy Extensive viral warts is a Clinical stage 2 defining disease
	Greasy scales and redness on central face, body folds	SEBBHORREA	Ketoconazole shampoo If severe, refer or provide tropical steroids For seborrheic dermatitis: 1% hydrocortisone cream X 2 daily If severe, refer	Seborrheic dermatitis may be severe in HIV infection. Secondary infection may be common

DRUG AND ALLERGIC REACTIONS	SIGNS	CLASSIFY AS:	TREATMENT	UNIQUE FEATURES IN HIV
S Constant Mento	Generalized red, wide spread with small bumps or blisters; or one or more dark skin areas (fixed drug reactions)	FIXED DRUG REACTIONS	Stop medications give oral antihistamines, if pealing rash refer	Could be a sign of reactions to ARVs
	Wet, oozing sores or excoriated, thick patches	ECZEMA	Soak sores with clean water to remove crusts(no soap) Dry skin gently Short time use of topical steroid cream not on face. Treat itching	
	Severe reaction due to cotrimoxazole or NVP involving the skin as well as the eyes and the mouth. Might cause difficulty in breathing	STEVEN JOHNSON SYNDROME	Stop medication refer urgently	The most lethal reaction to NVP, Cotrimoxazole or even Efavirens

IMNCI Case Recording Form: MANAGEMENT OF THE SICK YOUNG INFANT BIRTH UP TO AGE 2 MONTHS						
ID No						
Name:	Age:	Sex:	Weight (Kg):	Height/L	ength (cm)_	
Temperature:°C						
ASK: What are the infant's problems?				Initial visit?	Follow-up	Visit?
ASSESS (Circle all signs present)						CLASSIFY
CHECK FOR POSSIBLE VERY SEVERE DISEASE and LC	CAL INFECTION	ı				
- Is the infant having difficulty feeding?	Rep	peat if (≥ 60)	minutebre elevated			
- Has the infant had convulsions?	at young infan Does the Does the Does the	erature $\geq 38^{\circ}$ ( t's movemer infant move infant move infant not moteus). Is it red	C) or body tempera ats. on his/her own? only when stimulat	ture below 35.5°C	· Look	
CHECK FOR JAUNDICE - When did the jaundice appear first?	· Is skin yellow · Are the palm		llow?			
DOES THE YOUNG INFANT HAVE DIARRHOEA? Yes No If yes, ASK: For how long? Days	Do Do Is t Look for sunk Pinch the skin	es the infant les the infant the infant res en eyes. I of the abdo	general condition. move only when so not move at all? tless and irritable? men. Does it go bac han 2 seconds)?		Slowly?	
THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT STATES THE INFORMATION OF LOW WEIGHT STA	nes	- Very Lo N	ow weight for age_ OT low weight for	(< 1.5 kg or < -3 Z s	,	
If the infant has any difficulty feeding, is feeding < 8 AND has no indications to refer urgently to hospita  Has the infant breastfed in the previous hour?  If infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeed for 4 minutes  If the infant was fed during the last hour, ask the mother if she can wait and tell you when the infant is willing to feed again.	al: ASSESS BREA - Is the infant - More areola - Mouth wide - Lower lip tu - Chin touchi Good attachn	astreeding: able to attace a seen above e open Yes urned outwar ng breast Y nent Po	h? To check attach than below the mo No d Yes N res N nor attachment	ment, look for:	 t at all	
	Suckling effec		ot suckling effective	ely not sucklii	ng at all	
CHECK THE YOUNG INFANT'S IMMUNIZATION STAT	US: Circle imm	unizations ne	eded today.			Return for next immunization on:
BCG Hep B-0 OPV-0 Pen	itavalent-1	OPV-1	Rotavirus-1	PCV-1		
ASSESS OTHER PROBLEMS:						
COUNSEL THE MOTHER ABOUT HER OWN HEALTH						<u> </u>

## TREAT Remember to refer any child who has a danger sign and no other severe classification

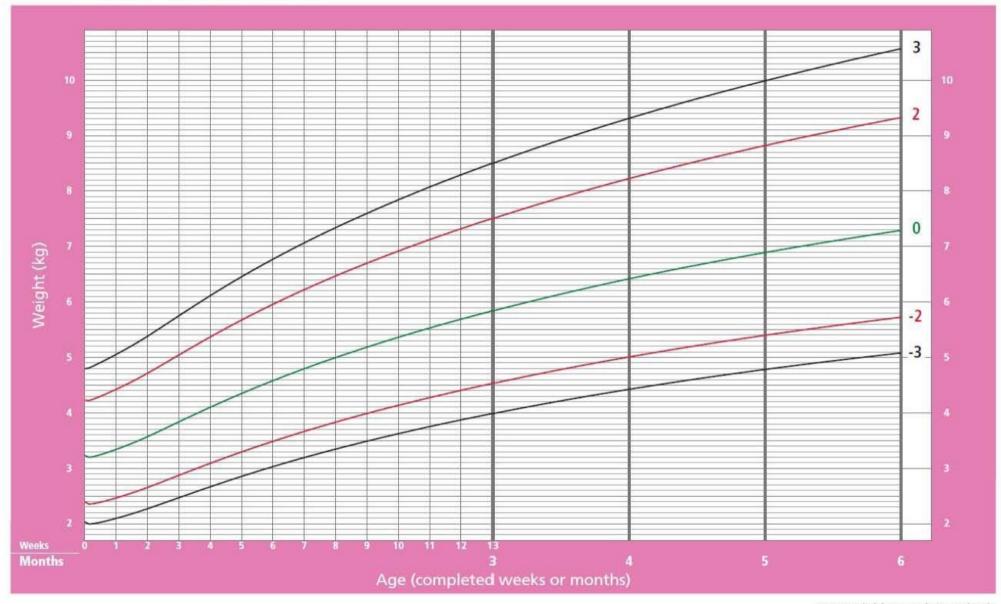
IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS				
ID No   Name Age (months) Weigi	nt(Kg) Temperature <sup>O</sup> C <sup>O</sup> F. Height/Length(cm)			
ASK What are the child's problems?				
ASSESS (Circle all signs present) CHECK FOR GENERAL DANGER SIGNS	CLASSIFY			
LETHARGIC OR UNCONSCIOUS CONVULSING NOW				
NOT ABLE TO DRINK OR BREASTFEED VOMITS EVERYTHING CONVULSIONS ANY GENERAL DA	ANGER SIGN PRESENT YES NO			
	when selecting classification)			
For how long? Days Count the breaths in one minute. (child must be c	alm) breaths per minute.			
Look and listen for wheeze				
DOES THE CHILD HAVE DIARRHOEA? YES NO Look at the child's gen For how long? Days Lethargic or unconscice	eral condition. Is the child: us			
Is there blood in the stools? YESNO Restless or irritable	the child.			
Pinch the skin of the abdomen. Does it go back:  Very slowly (longer than 2 seconds)  Offer the child fluid. Is  Not able to drink or dr				
Slowly Drinking eagerly, thirs	γ?			
DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES	NO			
For how long? Days Look or feel for stiff neck.  If more than 7 days, has fever been present every day? Look for runny nose				
Look for signs of MEASLES  Has child had measles within the last 3 months  Generalized rash AND				
One of these: cough, runny r				
Decide malaria risk HighLowNo Look for any other causes of Malaria transmission in the area = YES NO Look for signs and symptoms	fever of DENGUE FEVER; if suspected do tourniquet			
Transmission season = YESNO test				
In non or low endemic areas (if yes, use the relevant treat travel history within the last 15-days to an area	tment instructions)			
where malaria transmission occurs =YESNO Do a malaria test, if No general				
High malaria risk or No obviou Malaria risk: Test POSITIVE? P. falciporium				
If the child has measles now or within the last 3 months: Look for mouth ulcers	If YES are they deep and extensive?			
Look for pus draining f Look for clouding of co	rnea			
DOES THE CHILD HAVE AN EAR PROBLEM? YESNO Look for pus draining Is there severe ear pain? Feel for tender swelli				
Is there ear discharge? If Yes, for how long? Days				
THEN CHECK FOR ACUTE MALNUTRITION AND Look for oedema of both feet ANAEMIA Determine WFH/L z-score:				
Less than -3 Between -3 and -2				
Child 6 months or older measure Look for palmar pallor:	MUACmm			
Severe palmar pallor Some pal				
If child has MUAC less than 115 mm or WFH/L less than -3 z-score Is there any medical complication? Pneum				
Child 6 months or older, Offer RU				
Not able to finish? Able to f Child less than 6 months Is there				
CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS  BCG OPV-I OPV-II OPV-III Measles-I	Mancles II*			
BCG OPV-I OPV-II OPV-III Measles-I OPV0 *Pentavalent-I *Pentavalent-III *Pentavalent-III	Measles-II Vitamin A Return for next immunization on:			
Pneumococcal – I				
	Mebendazole (DATE)			
*Pentavalent: DPT+HepB+Hib Alf the child is seen b/w 12-15 months of age, **2nd dose of measles can be given if one month passed since the Measles 1st dose is	given			
ASSESS THE CHILD'S FEEDING if the child is less than 2 years old, has MODERATE ACUTE MAD Do you breastfeed your child? YESNO If YES how many times in 24 hours?ti				
Does the child take any other foods or fluids? YES NO	FEEDING PROBLEMS			
If YES what foods or fluids? How many times per day? times What do you use to feed the child?				
If MODERATE ACUTE MALNUTRITION: How large are the servings?				
Does the child receive his own serving? YESNO Who feeds the child and how?  During this illness, has the child's feeding changed? YES NO				
If YES, how?				
ASSESS OTHER PROBLEMS: ASK ABOUT MOTHER	'S OWN HEALTH? FOLLOW UP:			

## TREAT Remember to refer any child who has a danger sign and no other severe classification

# **Weight-for-age GIRLS**

Birth to 6 months (z-scores)

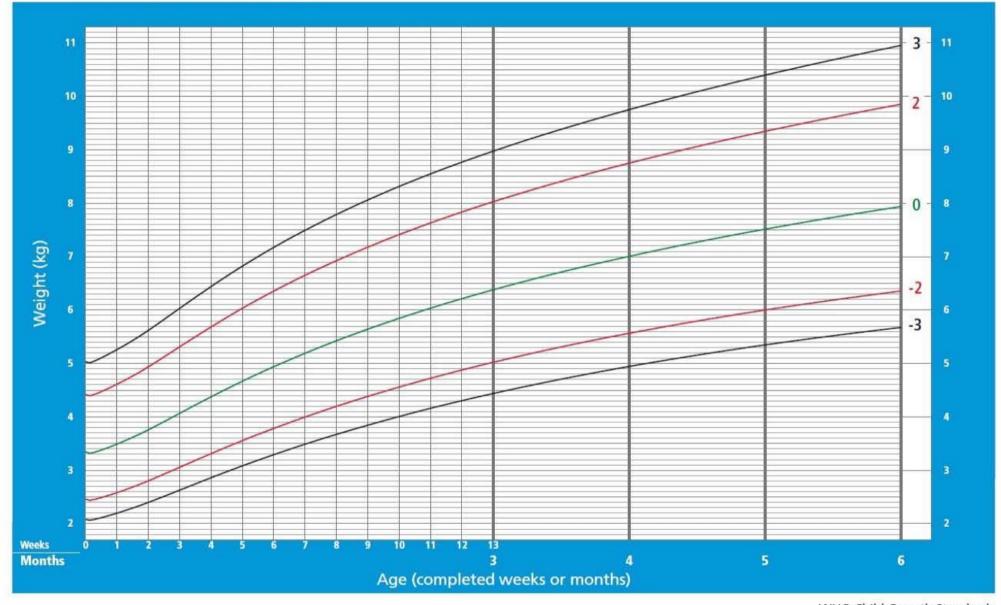




# **Weight-for-age BOYS**

Birth to 6 months (z-scores)

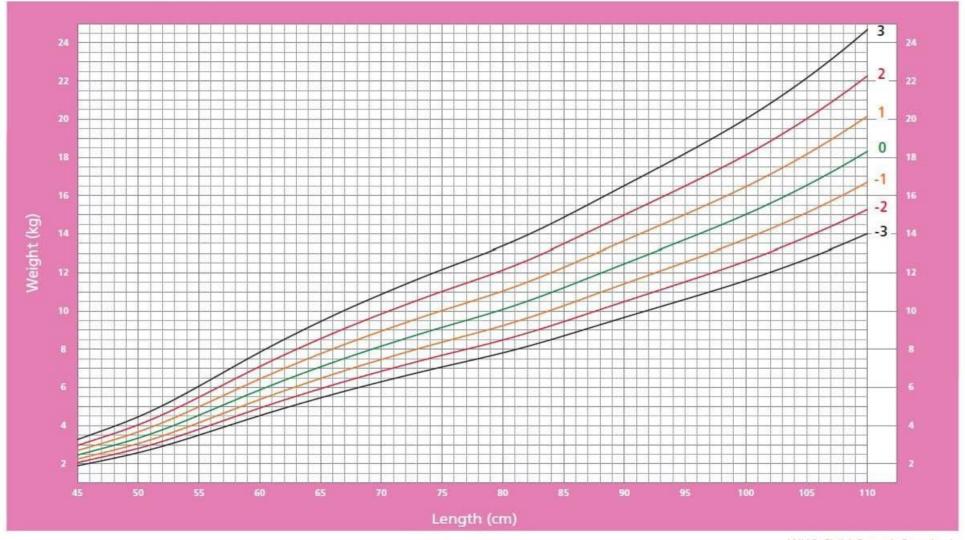




## **Weight-for-length GIRLS**

Birth to 2 years (z-scores)

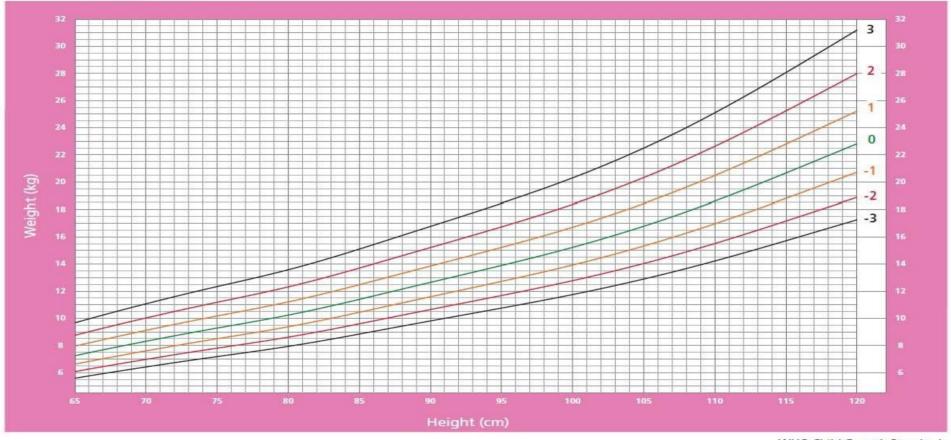




## **Weight-for-Height GIRLS**

2 to 5 years (z-scores)

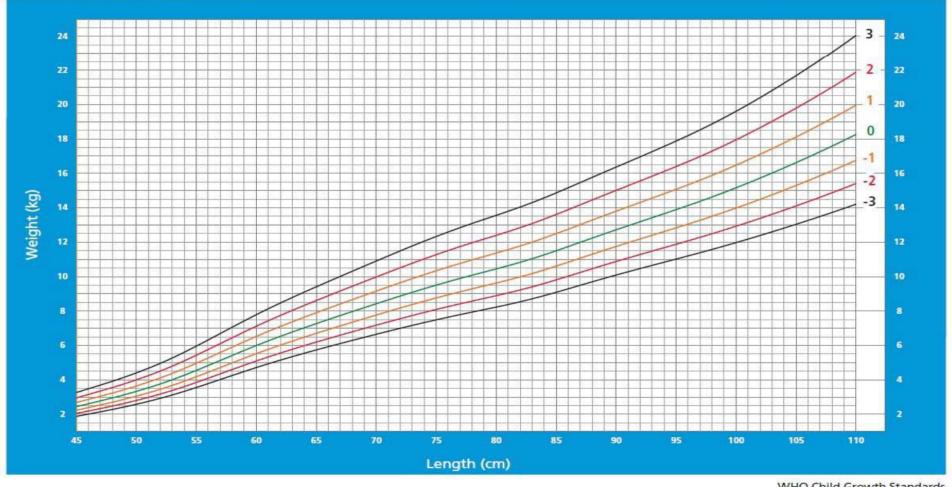




## **Weight-for-length BOYS**

Birth to 2 years (z-scores)

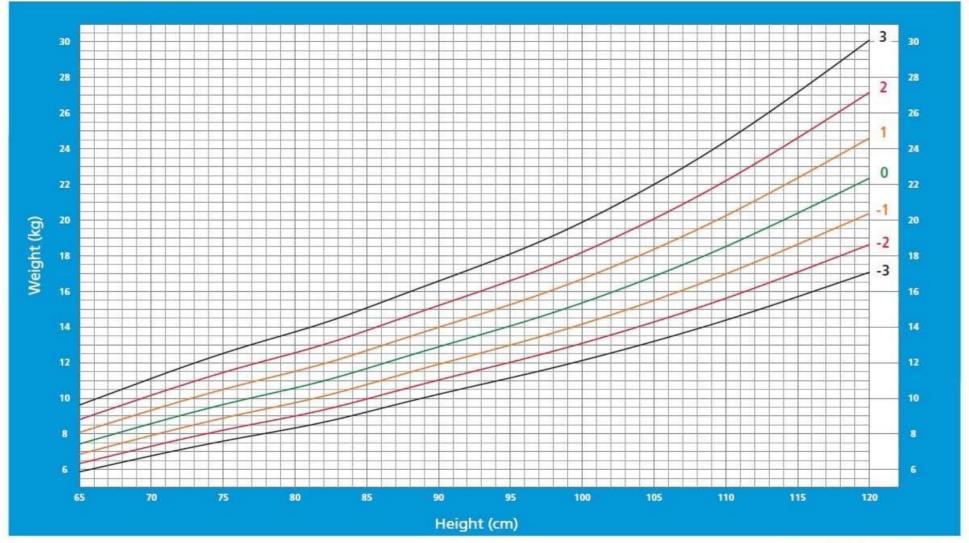


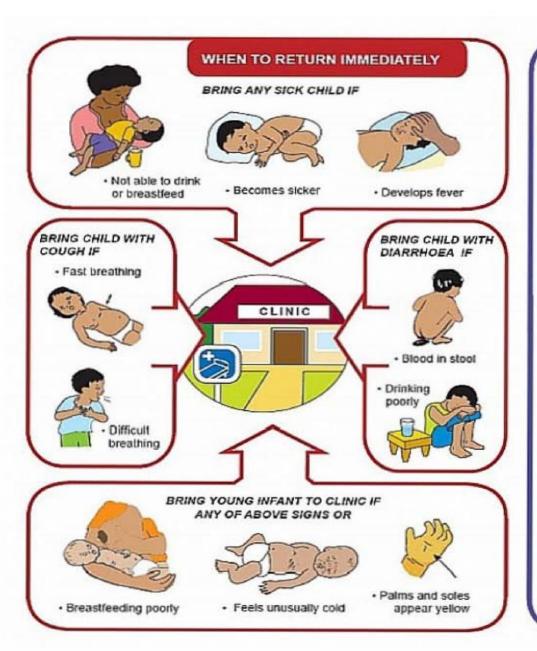


## **Weight-for-height BOYS**

World Health Organization

2 to 5 years (z-scores)





#### GIVE GOOD HOME CARE FOR YOUR CHILD

#### FOR ANY SICK CHILD:

- If child is breastfed, breastfeed more frequently and for longer at each feed.
- If child is taking breastmilk substitutes, increase the amount of milk given
- Increase other fluids. You may give soup, rice water, yoghurt drinks or clean water,

Give these fluids as much as the child will take. Give frequent small sips from a cup.

 If the child vomits, wait 10 minutes then continue – but more slowly

#### EXCLUSIVELY BREASTFEED THE YOUNG INFANT

- Give only breastfeeds to the young infant
- Breastfeed frequently, as often and for as long as the infant wants



## MAKE SURE THAT THE YOUNG INFANT IS KEPT WARM AT ALL TIMES

 In cool weather cover the infant's head and feet and dress the infant with extra clothing



#### FOR CHILD WITH DIARRHOEA:

- · Breastfeed frequently and for longer at each feed
- Give fluids:
  - □ ORS
  - Food based fluids, such as soup, rice water, yogurt drinks
  - ☐ Clean water
- Give zinc supplement, if the child aged more than 2 months and if zinc is given
- . Continue giving extra fluid until the diarrhoea stops

### PRINCIPLES OF THE INTEGRATED CLINICAL CASE MANAGEMENT

IMCI clinical guidelines are based on the following principles:

- Examining all sick children aged up to five years of age for general danger signs and all young infants for signs of very severe disease. These signs indicate severe illness and the need for immediate referral or admission to hospital.
- The children and infants are then assessed for main symptoms:
  - In older children the main symptoms include:
    - · Cough or difficulty breathing,
    - Diarrhoea,
    - · Fever, and
    - · Ear infection.
  - In young infants, the main symptoms include:
    - · Local bacterial infection,
    - · Diarrhoea, and
    - Jaundice.
- Then in addition, all sick children are routinely checked for:
  - · Nutritional and immunization status,
  - HIV status in high HIV settings, and
  - Other potential problems.

Only a limited number of clinical signs are used, selected on the basis of their sensitivity and specificity to detect disease through classification.

A combination of individual signs leads to a **child's classification** within one or more symptom groups rather than a diagnosis. The classification of illness is based on a colour-coded triage system:

- "PINK" indicates urgent hospital referral or admission,
- Would OW indicates initiation of specific outpatient treatment,
- ◆ "GREEN" indicates supportive home care.
- IMCI management procedures use a limited number of essential drugs and encourage active participation of caregivers in the treatment of their children.
- 6 An essential component of IMCI is the counselling of caregivers regarding home care:
  - Appropriate feeding and fluids,
  - When to return to the clinic immediately, and
  - ♦ When to return for follow-up