



Defining Evidence-Based Care  
in Global Health

WHO/UNICEF

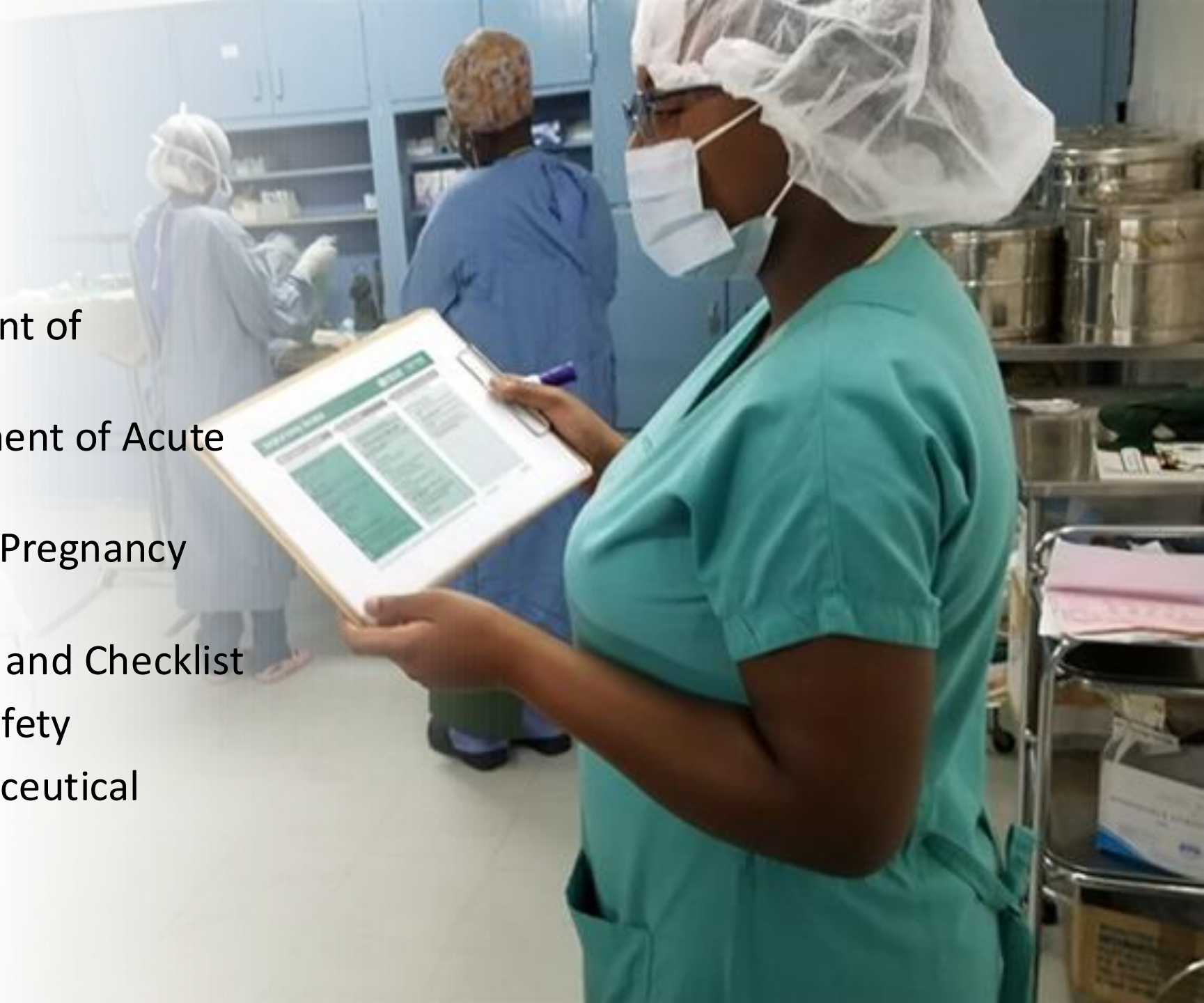
Guidelines For Care

2026 HHC

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- IMCI Integrated Management of Childhood Illness
- IMAM Integrated Management of Acute Malnutrition
- Integrated Management of Pregnancy and Childbirth (IMPAC)
- WHO Safe Surgery Program and Checklist
- WHO Alliance for Patient Safety
- WHO Standards for Pharmaceutical Safety & Pharmacovigilance





## SDG 3: Ensure healthy lives and promote well-being for all at all ages

- 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
- 3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

## SDG 3: Ensure healthy lives and promote well-being for all at all ages

- 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases.
- 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.



## SGD 3: Ensure healthy lives and promote wellbeing for all at all ages

- 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.
- 3.6 By 2030, halve the number of global trauma deaths from injuries road traffic accidents.
- 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including family planning, information, and education, and the integration of reproductive health into national strategies and programs.





## **SDG 3: Ensure healthy lives and promote well-being for all at all ages**

- 3.8 Achieve universal health coverage, including financial risk protection; access to quality essential health-care services; and access to safe, effective, quality, and affordable essential medicines and vaccines for all.
- 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals, air, water, and soil pollution and contamination.

# Integrated Approaches

- Designed to deal with a multitude of factors contributing to morbidity and mortality.
- Strengthen healthcare worker skills
- Strengthen healthcare systems
- Improve of family and community practices
- Regionally contextualized

- IMAM Integrated Management of Acute Malnutrition
- Integrated Management of Pregnancy and Childbirth (IMPAC)
- IMCI Integrated Management of Childhood Illness





# Integrated Management of Acute Malnutrition IMAM

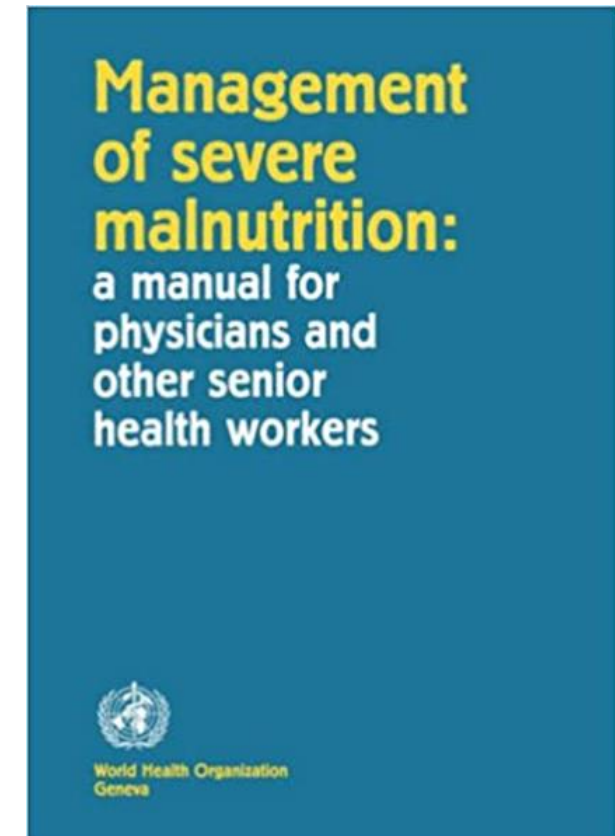
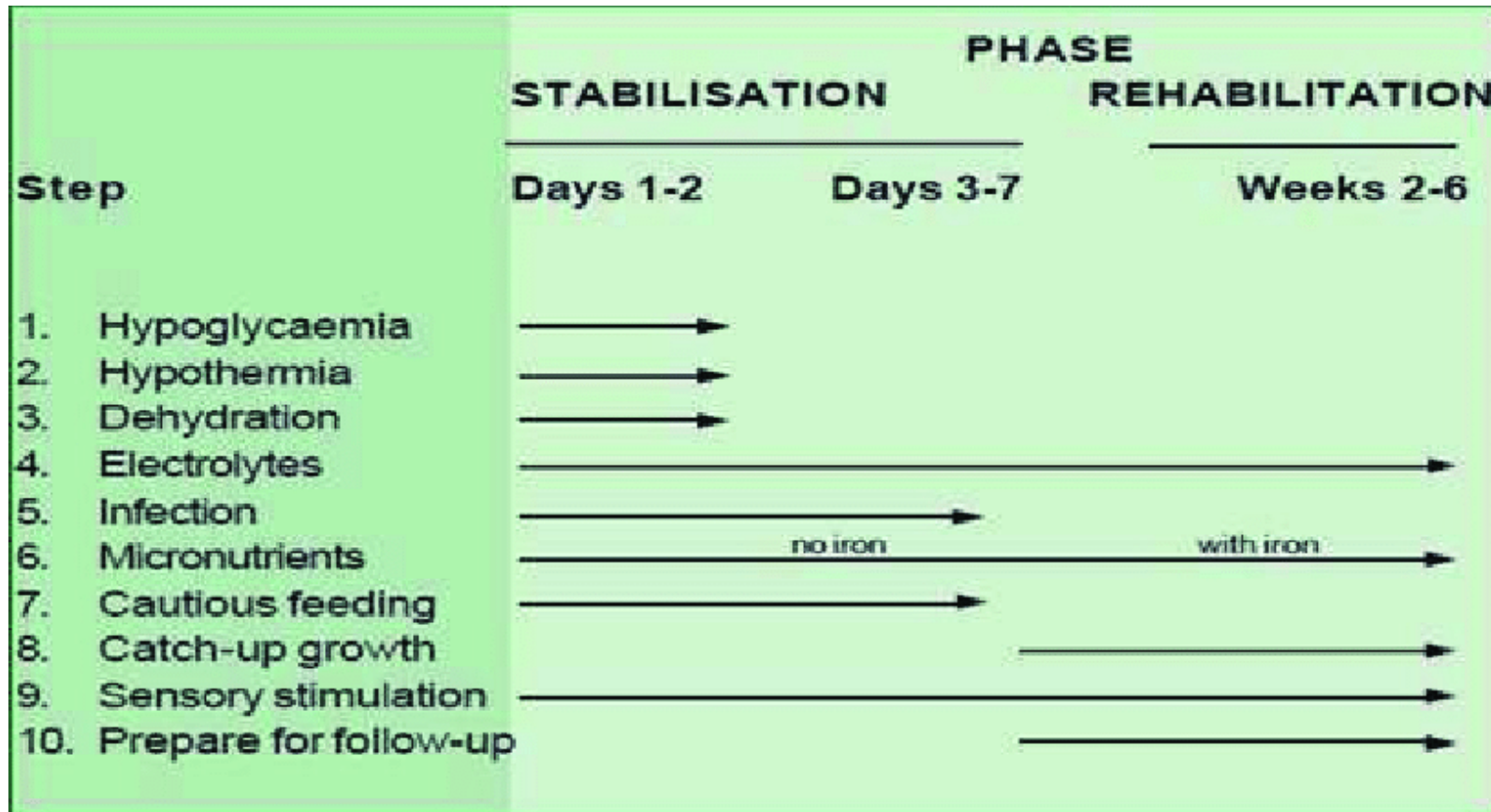
Guidelines for integrated medical care and nutritional rehabilitation for malnourished children

- Medical care and treatment according to clear standards - inpatient and outpatient
- Treatment of Severe Acute Malnutrition (SAM) cases without complications
- Treatment of SAM cases with complications in Inpatient Therapeutic Care (ITC).



# WHO 10 Steps for Stabilization & Recovery

# IMAM





## Integrated Management of Pregnancy and Childbirth (IMPAC)

- Health worker skills –  
Protocols and guidelines
- Improving access to  
functional healthcare services  
and prenatal care at the  
community level
- Health system functionality –  
supply chain, transfusion  
services qualified providers





## What is IMCI Integrated Management of Childhood Illness

- IMCI is a strategy for reducing mortality and morbidity associated with major causes of childhood illness.
- It is an integrated approach to child health that focuses on the well being of the whole child



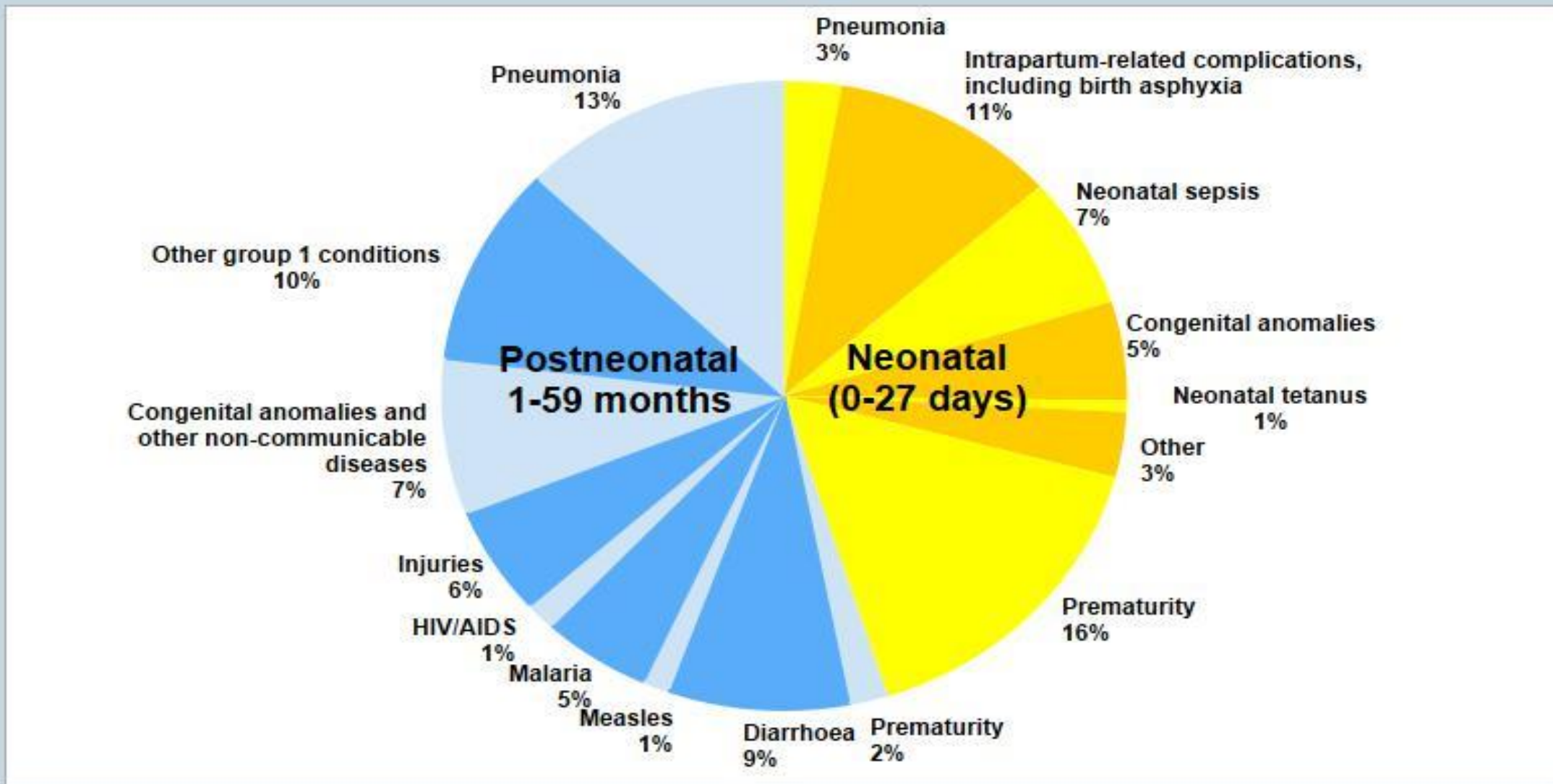
# The Goal of IMCI

Reduce the mortality and morbidity in under five children in relation to the major killers

- 1-Diarrhoeal diseases
- 2-Acute respiratory infections especially Pneumonia
- 3-Malaria
- 4-Measles
- 5-Malnutrition



# Causes of deaths among children under 5 years, 2015



Source: WHO-MCEE methods and data sources for child causes of death 2000-2015 (Global Health Estimates Technical Paper WHO/HIS/IER/GHE/2016.1)



Why is an integrated model like IMCI, better than single-condition approaches?

- Children brought for medical treatment in low- and middle-income countries are often suffering from more than one condition
- This overlap means that a single diagnosis may not be possible or appropriate and treatment may be complicated by the need to combine therapy for several conditions.





# Integrated Management of Childhood Illness

## Chart Booklet



World Health  
Organization

March 2014

### MANAGEMENT OF THE SICK CHILD AGED 2 MONTHS UP TO 5 YEARS

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Weight (kg): \_\_\_\_\_ Height/Length (cm): \_\_\_\_\_ Temperature (°C): \_\_\_\_\_  
 Ask: What are the child's problems? Initial Visit? Follow-up Visit?

ASSESS (Circle all signs present)	CLASSIFY																																			
<b>CHECK FOR GENERAL DANGER SIGN</b> <ul style="list-style-type: none"> <li>• NOT ABLE TO DRINK OR BREASTFEED</li> <li>• VOMITS EVERYTHING</li> <li>• CONVULSIONS</li> <li>• LETHARGIC OR UNCONSCIOUS</li> <li>• CONVULSING NOW</li> </ul>	General danger sign present? Yes ___ No ___ <b>Remember to use Danger sign when selecting classifications</b>																																			
<b>DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING?</b> <ul style="list-style-type: none"> <li>• For how long? ___ Days</li> <li>• Count the breaths in one minute: ___ breaths per minute. Fast breathing?</li> <li>• Look for chest indrawing</li> <li>• Look and listen for stridor</li> <li>• Look and listen for wheezing</li> </ul>	Yes ___ No ___																																			
<b>DOES THE CHILD HAVE DIARRHOEA?</b> <ul style="list-style-type: none"> <li>• For how long? ___ Days</li> <li>• Is there blood in the stool?</li> <li>• Look at the child's general condition. Is the child:                             <ul style="list-style-type: none"> <li>◦ Lethargic or unconscious? Restless and irritable?</li> </ul> </li> <li>• Look for sunken eyes.</li> <li>• Offer the child fluid. Is the child:                             <ul style="list-style-type: none"> <li>◦ Not able to drink or drinking poorly? Drinking eagerly, thirsty?</li> <li>◦ Very slowly (longer than 2 seconds)? Slowly?</li> </ul> </li> <li>• Pinch the skin of the abdomen. Does it go back:                             <ul style="list-style-type: none"> <li>◦ Very slowly (longer than 2 seconds)? Slowly?</li> </ul> </li> </ul>	Yes ___ No ___																																			
<b>DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5°C or above)</b> Decide malaria risk: High ___ Low ___ No ___ <ul style="list-style-type: none"> <li>• For how long? ___ Days</li> <li>• If more than 7 days, has fever been present every day?</li> <li>• Has child had measles within the last 3 months?</li> </ul> Do a malaria test, if NO general danger sign in all cases in high malaria risk or NO obvious cause of fever in low malaria risk: Test POSITIVE? P. falciparum P. vivax _____ NEGATIVE? _____ If the child has measles now or within the last 3 months:	Yes ___ No ___																																			
<b>DOES THE CHILD HAVE AN EAR PROBLEM?</b> <ul style="list-style-type: none"> <li>• Is there ear pain?</li> <li>• Is there ear discharge? If Yes, for how long? ___ Days</li> <li>• Look for mouth ulcers. If yes, are they deep and extensive?</li> <li>• Look for pus draining from the eye.</li> <li>• Look for clouding of the cornea.</li> </ul>	Yes ___ No ___																																			
<b>THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA</b> <ul style="list-style-type: none"> <li>• Look for pus draining from the ear</li> <li>• Feel for tender swelling behind the ear</li> <li>• Look for oedema of both feet.</li> <li>• Determine WFH/L z-score:                             <ul style="list-style-type: none"> <li>◦ Less than -3? Between -3 and -2? -2 or more ?</li> </ul> </li> <li>• Child 6 months or older measure MUAC ___ mm.</li> <li>• Look for palmar pallor.                             <ul style="list-style-type: none"> <li>◦ Severe palmar pallor? Some palmar pallor?</li> </ul> </li> </ul>	Yes ___ No ___																																			
<b>If child has MUAC less than 115 mm or WFH/L less than -3 Z scores:</b>	<ul style="list-style-type: none"> <li>• Is there any medical complication: General danger sign? Any severe classification? Pneumonia with chest indrawing?</li> <li>• Child 6 months or older: Offer RUTF to eat. Is the child:                             <ul style="list-style-type: none"> <li>◦ Not able to finish? Able to finish?</li> </ul> </li> <li>• Child less than 6 months: Is there a breastfeeding problem?</li> </ul>																																			
<b>CHECK FOR HIV INFECTION</b> <ul style="list-style-type: none"> <li>• Note mother's and/or child's HIV status                             <ul style="list-style-type: none"> <li>◦ Mother's HIV test: NEGATIVE POSITIVE NOT DONE/KNOWN</li> <li>◦ Child's virological test: NEGATIVE POSITIVE NOT DONE</li> <li>◦ Child's serological test: NEGATIVE POSITIVE NOT DONE</li> </ul> </li> <li>• If mother is HIV-positive and NO positive virological test in child:                             <ul style="list-style-type: none"> <li>◦ Is the child breastfeeding now?</li> <li>◦ Was the child breastfeeding at the time of test or 6 weeks before it?</li> <li>◦ If breastfeeding: Is the mother and child on ARV prophylaxis?</li> </ul> </li> </ul>																																				
<b>CHECK THE CHILD'S IMMUNIZATION STATUS (Circle immunizations needed today)</b> <table border="0"> <tr> <td>BCG</td> <td>DPT+HIB-1</td> <td>DPT+HIB-2</td> <td>DPT+HIB-3</td> <td>Measles1</td> <td>Measles 2</td> <td>Vitamin A</td> </tr> <tr> <td>OPV-0</td> <td>OPV-1</td> <td>OPV-2</td> <td>OPV-3</td> <td></td> <td></td> <td>Mebendazole</td> </tr> <tr> <td>Hep B0</td> <td>Hep B1</td> <td>Hep B2</td> <td>Hep B3</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>RTV-1</td> <td>RTV-2</td> <td>RTV-3</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>PCV-1</td> <td>PCV-2</td> <td>PCV-3</td> <td></td> <td></td> <td></td> </tr> </table>	BCG	DPT+HIB-1	DPT+HIB-2	DPT+HIB-3	Measles1	Measles 2	Vitamin A	OPV-0	OPV-1	OPV-2	OPV-3			Mebendazole	Hep B0	Hep B1	Hep B2	Hep B3					RTV-1	RTV-2	RTV-3					PCV-1	PCV-2	PCV-3				Return for next immunization on: _____ (Date)
BCG	DPT+HIB-1	DPT+HIB-2	DPT+HIB-3	Measles1	Measles 2	Vitamin A																														
OPV-0	OPV-1	OPV-2	OPV-3			Mebendazole																														
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	RTV-1	RTV-2	RTV-3																																	
	PCV-1	PCV-2	PCV-3																																	
<b>ASSESS FEEDING if the child is less than 2 years old, has MODERATE ACUTE MALNUTRITION, ANAEMIA, or is HIV exposed or infected</b> <ul style="list-style-type: none"> <li>• Do you breastfeed your child? Yes ___ No ___                             <ul style="list-style-type: none"> <li>◦ If Yes, how many times in 24 hours? ___ times. Do you breastfeed during the night? Yes ___ No ___</li> </ul> </li> <li>• Does the child take any other foods or fluids? Yes ___ No ___                             <ul style="list-style-type: none"> <li>◦ If Yes, what food or fluids?</li> <li>◦ How many times per day? ___ times. What do you use to feed the child?</li> </ul> </li> <li>• If MODERATE ACUTE MALNUTRITION: How large are servings?                             <ul style="list-style-type: none"> <li>◦ Does the child receive his own serving? ___ Who feeds the child and how?</li> </ul> </li> <li>• During this illness, has the child's feeding changed? Yes ___ No ___                             <ul style="list-style-type: none"> <li>◦ If Yes, how?</li> </ul> </li> </ul>	FEEDING PROBLEMS																																			
<b>ASSESS OTHER PROBLEMS:</b>	Ask about mother's own health																																			

# SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

## ASSESS AND CLASSIFY THE SICK CHILD

### 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 TREAT THE CHILD chart.
  - ◊ if initial visit, assess the child as follows:

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

#### CHECK FOR GENERAL DANGER SIGNS

**Ask:**

- Is the child able to drink or breastfeed?
- Does the child vomit everything?
- Has the child had convulsions?

**Look:**

- See if the child is lethargic or unconscious.
- Is the child convulsing now?

URGENT attention

- Any general danger sign

**Pink:**

VERY SEVERE DISEASE

- Give diazepam if convulsing now
- Quickly complete the assessment
- Give any pre-referral treatment immediately
- Treat to prevent low blood sugar
- Keep the child warm
- Refer URGENTLY.

A child with any general danger sign needs **URGENT** attention; complete the assessment and any pre-referral treatment immediately so referral is not delayed.

**THEN ASK ABOUT MAIN SYMPTOMS:**

**Does the child have cough or difficult breathing?**

**If yes, ask:**

- For how long?

**Look, listen, feel\*:**

- Count the breaths in one minute.
- Look for chest indrawing.
- Look and listen for stridor.
- Look and listen for wheezing.

CHILD  
MUST BE  
CALM

**If wheezing with either fast breathing or chest indrawing:**

Give a trial of rapid acting inhaled bronchodilator for up to three times 15-20 minutes apart. Count the breaths and look for chest indrawing again, and then classify.

**If the child is:**

2 months up to 12 months

**Fast breathing is:**

**50** breaths per minute or more

12 Months up to 5 years

**40** breaths per minute or more

**Classify  
COUGH or  
DIFFICULT  
BREATHING**

<ul style="list-style-type: none"> <li>• Any general danger sign or</li> <li>• Stridor in calm child.</li> </ul>	<p><b>Pink:</b> <b>SEVERE PNEUMONIA OR VERY SEVERE DISEASE</b></p>	<ul style="list-style-type: none"> <li>■ Give first dose of an appropriate antibiotic</li> <li>■ Refer <b>URGENTLY</b> to hospital**</li> </ul>
<ul style="list-style-type: none"> <li>• Chest indrawing or</li> <li>• Fast breathing.</li> </ul>	<p><b>Yellow:</b> <b>PNEUMONIA</b></p>	<ul style="list-style-type: none"> <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 chest indrawing in HIV exposed/infected child, give first dose of amoxicillin and refer.</li> <li>■ Soothe the throat and relieve the cough with a safe remedy</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>
<ul style="list-style-type: none"> <li>• No signs of pneumonia or very severe disease.</li> </ul>	<p><b>Green:</b> <b>COUGH OR COLD</b></p>	<ul style="list-style-type: none"> <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 with a safe remedy</li> <li>■ If coughing for more than 14 days or recurrent wheezing, refer for possible TB or asthma assessment</li> <li>■ Advise mother when to return immediately</li> <li>■ Follow-up in 5 days if not improving</li> </ul>

\*If pulse oximeter is available, determine oxygen saturation and refer if < 90%.

\*\* If referral is not possible, manage the child as described in the pneumonia section of the national referral guidelines or as in WHO Pocket Book for hospital care for children.

\*\*\*Oral Amoxicillin for 3 days could be used in patients with fast breathing but no chest indrawing in low HIV settings.

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

## SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

### ASSESS AND CLASSIFY THE SICK CHILD

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# SICK YOUNG INFANT AGE UP TO 2 MONTHS

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## GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

(See **FOOD** advice on **COUNSEL THE MOTHER** chart)

### PLAN A: TREAT DIARRHOEA AT HOME

Counsel the mother on the 4 Rules of Home Treatment:

1. Give Extra Fluid
2. Give Zinc Supplements (age 2 months up to 5 years)
3. Continue Feeding
4. 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 breast milk.
- If the child is not exclusively breastfed, give one or more of the following:  
ORS solution, 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 child has been treated with Plan B or Plan C during this visit.*
- *the child 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
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 child vomits, wait 10 minutes. Then continue, but more slowly.
- Continue giving extra fluid until the diarrhoea stops.

#### 2. **GIVE ZINC** (age 2 months up to 5 years)

##### ■ TELL THE MOTHER HOW MUCH ZINC TO GIVE (20 mg tab):

2 months up to 6 months	1/2 tablet daily for 14 days
6 months or more	1 tablet daily for 14 days

##### ■ SHOW THE MOTHER HOW TO GIVE ZINC SUPPLEMENTS

- Infants - dissolve tablet in a small amount of expressed breast milk, ORS or clean water in a cup.
- Older children - tablets can be chewed or dissolved in a small amount of water.

#### 3. **CONTINUE FEEDING** (exclusive breastfeeding if age less than 6 months)

#### 4. **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	6 - <10 kg	10 - <12 kg	12 - 19 kg
AGE*	Up to 4 months	4 months up to 12 months	12 months up to 2 years	2 years up to 5 years
In ml	200 - 450	450 - 800	800 - 960	960 - 1600

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

- If the child wants more ORS than shown, give more.
- For infants under 6 months who are not breastfed, also give 100 - 200 ml clean water during this period if you use standard ORS. This is not needed if you use new low osmolality 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 the 4 Rules of Home Treatment:
  1. **GIVE EXTRA FLUID**
  2. **GIVE ZINC** (age 2 months up to 5 years)
  3. **CONTINUE FEEDING** (exclusive breastfeeding if age less than 6 months)
  4. **WHEN TO RETURN**

# 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	VITAMIN A DOSE
6 up to 12 months	100 000 IU
One year and older	200 000 IU

## *Give Mebendazole*

- Give 500 mg mebendazole as a single dose in clinic if:
  - hookworm/whipworm are a problem in children in your area, and
  - the child is 1 years of age or older, and
  - the child has not had a dose in the previous 6 months.



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