# Rationale

The WHO/UNICEF "generic" IMCI (Integrated Management of Childhood Illness) guidelines were originally designed to address the most common causes of mortality in children age 1 week up to five years old<sup>1</sup>, especially in countries with an infant mortality higher than 40 per 1000 live births.

In these situations, there is often a substantial incidence of communicable diseases in children under-5 taken to primary health care facilities, and risk factors such as malnutrition and low birth weight are common.

The generic version of the guidelines therefore concentrates on the outpatient management of the following conditions:

- Acute respiratory infections, including pneumonia
- Diarrhoeal diseases, including dehydration, bloody and persistent diarrhoea
- Meningitis and sepsis
- Malaria
- Measles
- Ear infection
- Malnutrition
- Anaemia

WHO has also developed a version for high HIV settings.

The generic guidelines need to be adapted in countries, to take into consideration local epidemiology, existing policies, drug resistance patterns, essential drugs availability, feasibility of implementation through the existing health system, and local terminology used in communities to refer to common illness entities. Recommendations on foods and fluids also need to be adapted.

WHO has developed tools to guide the adaptation process.

The guidelines need also to be periodically reviewed and updated. For this purpose, WHO has published a technical update for further adaptations.

<sup>1</sup> The guidelines currently cover the period from birth up to age 5 years.

Links

Generic version of the IMCI guidelines (2008 version)

Generic version of the IMCI guidelines for high HIV settings (2008 version)

<u>Technical updates of the IMCI guidelines – Evidence and recommendations for further</u> <u>adaptations (2005)</u>

IMCI adaptation guide

<u>Top</u>

# **Principles**

The adaptation of the IMCI (Integrated Management of Childhood Illness) guidelines should rely as much as possible on evidence and be guided by a number of public health principles.

The generic guidelines are meant to target the leading causes of mortality and (severe) morbidity in children below five years of age, who are a particularly vulnerable age group. The guidelines therefore intentionally cover only priority public health conditions rather than all paediatric conditions.

In the same way, country adaptations must follow a number of principles, which are described below.

The ultimate product of the adaptation process should be guidelines that are safe and effective when used at primary health care level.

Leading causes of mortality and morbidity

Sensitive and specific clinical signs

Minimum number of clinical signs

Requiring simple skills

Possible to teach and learn

Minimum number of essential drugs

Best care possible for severe cases

## Leading causes of mortality and morbidity

Including leading causes of mortality and (severe) morbidity in the WHO guidelines has been a key guiding principle.

The inclusion of other conditions than those covered in the WHO generic version must be based on a solid justification, including the expected advantages from a public health perspective.

For example, the argumentation in favour of including the management of streptococcal pharyngitis in some countries has been the need for a rationalisation of drug use for children presenting with sore throat and the expectation that the availability of standard guidelines would help reduce health care costs for both the health system and the users.

There are conditions that are not a major cause of mortality but are included because they are a preventable cause of long-term or life-long disabilities (e.g., ear infections, which may result in hearing problems).

The number of conditions must be limited, so that they can be covered properly in a quality short training course such as IMCI.

At the end of the examination of the child, the guidelines remind the health provider to look for any "other problems" not specifically listed in the chart and to manage these problems according to the pre-service training they have received.

### <u>top</u>

## Sensitive and specific clinical signs

The signs and symptoms selected in the algorithm must be <u>sensitive</u> and <u>specific</u>. The concern is to avoid missing cases which have the condition while at the same time avoid over-treatment and over-referral of cases which do not have the condition.

The guidelines in most cases rely just on clinical signs, as laboratory, X-ray or other diagnostic facilities are most often unavailable at primary health care level in developing countries.

In principle, new clinical decision rules should first be validated in clinical settings before being

included and integrated in the guidelines, rather than be only derived from expert opinion (see " <u>Research</u>

").

## <u>top</u>

## Minimum number of clinical signs

The guidelines must be practical to be used reliably by primary health care providers and must then include a limited number of clinical signs that can be learnt during a short training course.

It should be emphasised that the guidelines are action-oriented: rather than leading to specific diagnoses, the guidelines aim at assisting the health provider in identifying ("classifying") conditions in three main groups, those which require:

urgent referral

treatment or

counselling on home care.

Any additional signs which do not improve the performance of the guidelines should not be included.

### top

## **Requiring simple skills**

The guidelines should require simple skills to be used.

The guidelines are meant to be used by a wide range of health providers working at primary health care level. Their skills vary and guidelines requiring simple skills are more likely to be used properly than those relying on more complex skills.

### top

### Possible to teach and learn

The assessment of signs and treatment approaches should be easy to teach—and to be learnt— within the short duration of an in-service training course.

#### top

### Minimum number of essential drugs

The guidelines should rely on a minimum number of drugs that can be made available and used safely at primary health care level and that are the least expensive.

#### top

### Best care possible for severe cases

However simple the guidelines may appear, they must enable the delivery of the best possible care, especially the detection, pre-referral treatment and urgent referral of the most severe cases.

#### top

## Process

The final product of the adaptation process of the IMCI (Integrated Management of Childhood Illness) guidelines must be the result of a large consensus achieved within the professional community in the country.

## **IMCI** working group

The process therefore requires good coordination and a specific group established for this particular task, the adaptation sub-group, which reports to the main IMCI Working Group or Committee.

In some countries, this sub-group consists of several teams of experts, each working on the adaptation of specific issues. Resource persons from the country are consulted throughout the process, whether within or outside the adaptation sub-group.

In most countries in the Region, the Child and Adolescent Health and Development unit of the Regional office has provided direct technical support to the adaptation process.

## Duration

The duration of the process varies from country to country, from a few months to a year or more.

This process is however very important, playing an advocacy role and giving a sense of ownership, and is therefore key to future implementation of the IMCI strategy. This is because it brings together representatives of the Ministry of health, professional societies and academe, including medical schools, international and bilateral organizations, to generate an output by broad consensus.

## Consensus

This consensus promotes further collaboration during implementation and reinforces the foundation of the strategy in the country. For example, senior, highly respected paediatricians in countries have joined in-service IMCI training courses as facilitators, participated in follow-up visits after training and eventually played a leading role in the introduction of the IMCI approach in medical schools.

The adaptation process concerns not only the clinical guidelines, but also the feeding recommendations and the care-seeking process, by identifying local terminology used in communi¬ties to refer to illness entities and to be used in health communication initiatives.

# Adaptations in the Region by section

Main country adaptations of the generic IMCI (Integrated Management of Childhood Illness) clinical guidelines by countries in the Eastern Mediterranean Region are summarized below. Click on the hyperlinks to see the related summary table.

- A. Assessment and classification
- B. Treatment: Antibiotics
- C. Treatment: Antimalarials and other medicines
- D. Prevention: Vitamin A and D supplementation
- E. Prevention: Immunization schedule
- F. List of medicines included in the IMCI guidelines by country [xls, 44.00kb]

# **Country IMCI chart booklets**

Country adaptations of the WHO IMCI chart booklets in the Region are listed below as examples. WHO has provided technical assistance to many countries to guide the adaptation process. However, these documents are country documents and not WHO publications.

Documents which are listed below without a link are available from the Regional office.

Afghanistan English [pdf, 1.3 Mb] Dari [pdf, 730 kb] Pashto [pdf, 770 kb] Djibouti French [pdf, 889 kb], Rev. 2008 French [pdf, 374 kb] Egypt English [pdf, 5.6 Mb], Rev. 2010 English [pdf, 910 kb], Rev. 2008 English [pdf, 320 kb] Iran (Islamic Republic of) Farsi [pdf, 798 kb], (Behvarz) 2005 Farsi [pdf, 2.2 Mb], (Physicians) 2006 English [pdf, 764 kb], Irag Rev. 2006 Morocco French [pdf, 13.0 Mb], Rev. 2012 French [pdf, 13.9 Mb], (Research 12 French [pdf, 1.5 Mb], Rev. 2008 French [pdf, 2.4 Mb], Rev. 2006 French [pdf, 346 kb], Rev. 2004 Occupied Palestinian territoringlish [pdf, 1.3 Mb], 2006 Oman English [pdf, 321 kb] Pakistan English [pdf, 1.4 Mb], Rev. 2010 English [pdf, 3.5 Mb], 2000 Sudan English [pdf, 1Mb], Rev. 2008 English [pdf, 592 kb] Saudi Arabia English [pdf, 446 kb] Syrian Arab Republic Arabic [pdf, 1 Mb] Tunisia French [pdf, 259 kb] Yemen English [pdf, 7 Mb], Rev. 2008

Many of the publications posted on this web page were produced with the support of WHO, especially the first version of the IMCI chart booklet. However, they are not official publications of WHO. The designations employed and the presentation of the material in these publications do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The WHO-recommended guidelines are presented in the <u>WHO standard IMCI chart</u> <u>booklet</u>.

Saturday 26th of April 2025 11:56:08 AM