

# The expanded Integrated Management of Childhood Illness (IMCI) paradigm

Expanding access to Paediatric HIV care and Treatment in Ethiopia: Challenges and prospects

25-27 January 2006

Addis Ababa

Tigest Ketsela, RA/CAH

WHO/AFRO





# Outline of Presentation

---

- Levels of child care and the problems at each level
- HIV and IMCI development
- Rationale for including HIV/AIDS assessment and care into IMCI guidelines
- Objectives of inclusion of HIV care into IMCI guidelines
- HIV complementary course
- Challenges

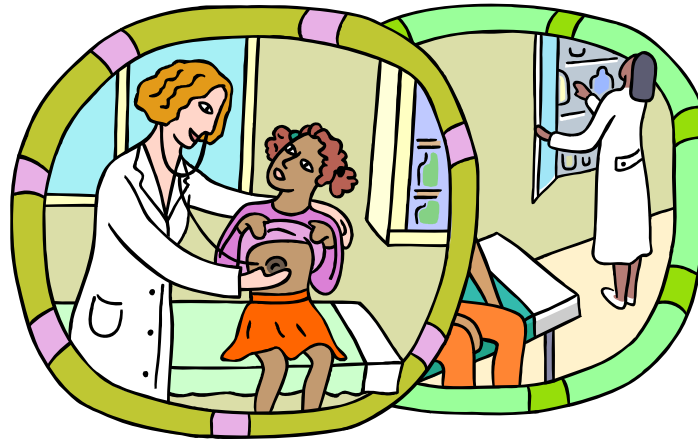
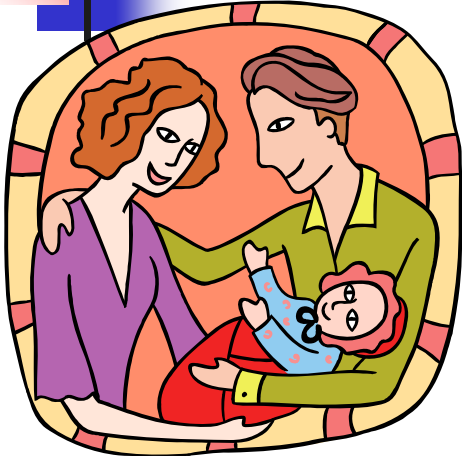


# Where is care for Children Provided?

Home

1<sup>st</sup> level health facility

Specialized hospital



Number of children seen

Specialised Care

Equipment, supplies, Case management skills

*Continuum of care from home to referral facility*



# Main problems with child care

## Health worker skills:

- incomplete examinations and counselling
- poor communication between health workers and parents
- irrational use of drugs

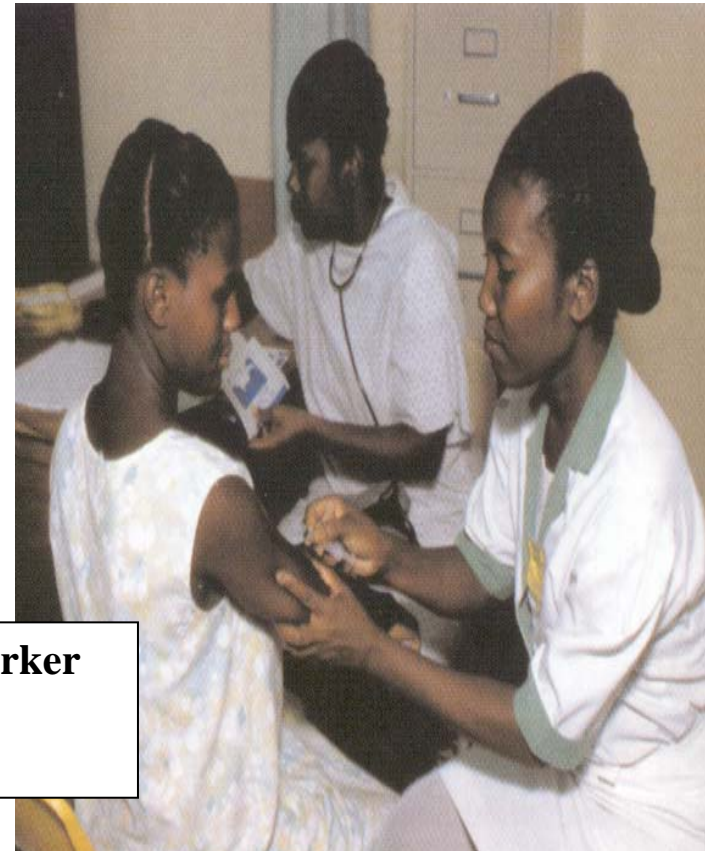
## Health system issues:

- Lack of access to health services
- availability of appropriate drugs and vaccines
- supervision / division of labour / organization of work/ referral

## Community and family practices:

- delayed care seeking
- poor knowledge of when to return to a health facility
- poor adherence to health worker advice and treatment

**Health worker  
skill very  
important**





# What is *core* about IMCI?

## OPD guidelines promote:

- **Holistic** assessment of sick children including for **nutrition and immunization** status
- **Rapid referral** of severely ill children
- **Rational use** of diagnostic tools and drugs
- Effective **communication** with caretakers and families

## Referral care guidelines promote:

- Emergency **triage** assessment & Rx
- Hospital level assessment & Rx of **common serious conditions**
- **Rational use** of dxic equipment & drugs
- **Monitoring of patient progress**
- **Supportive care**





# HIV and IMCI - Development

- ❖ IMCI trained HW - initially considered adequately trained in managing common HIV associated infections/conditions:
  - meets the needs of many children with HIV/AIDS who present with common infections
  - Prophylaxis and treatment with ART were not developed yet
- ❖ With availability of testing, infant feeding options and cotrimoxazole prophylaxis, early recognition became important
- ❖ Countries with high prevalence started to adapt IMCI materials to include HIV/AIDS.
  - South Africa, Lesotho, Swaziland, Botswana, Namibia, Zimbabwe, Zambia, Kenya, Uganda, and Ethiopia etc now 14 countries





# Rationale for including assessment for HIV in IMCI guidelines

---

- HIV prevalence increasing
- Demand from countries especially in Africa: HIV infection an important cause of morbidity and mortality in children under 5 year of age
- IMCI addresses common problems in children such as: respiratory infections, diarrhoeal disease, oral thrush, anaemia malnutrition and all having high co-morbidity with HIV



# Rationale for including HIV care including ART to IMCI (1)

- Children contribute to 15% of the pop<sup>n</sup> that require ART
- Approx. 75% of the children with symptomatic HIV / AIDS present before 2 years of age
- Despite the efforts made in the implementation of PMTCT programmes children are still at risk:
  - PMTCT programmes are still in their infancy with low coverage in most countries
  - Even where PMTCT programmes are widely offered, operational issues hinder effective implementation and hence optimal outcome



# Objectives of inclusion of HIV care including ART to IMCI (2)

- Identify children who need ART
- Manage OIs or refer when necessary
- Assess, treat, counsel, follow-up of children with common illnesses
- Prepare for chronic care: adherence support
- Prepare for ART : when to refer
- Monitor whilst on ART – side effects, when to refer





# WHO Generic HIV Algorithm

## Screening:

- **Pneumonia** now
- **Persistent diarrhea** now or in the past 3 months
- **Discharging ear** now or at any time
- **Very low weight or growth faltering** or history of loss of weight

## Assessment :

- Does the child have SEVERE PNEUMONIA or PNEUMONIA now?
- Does the child have persistent diarrhea now or in the past 3 months
  - Does the child have ear discharge now or in the past?
  - Does the child have VERY LOW WEIGHT?
  - Does the child have growth faltering or is there a history of weight loss?
  - Does the child have enlarged lymph nodes in two sites
  - Is there oral thrush?
  - Is there parotid swelling?



# Generic IMCI HIV algorithm

Check for Suspected Symptomatic HIV Infection if in the assessment for the main symptoms or Malnutrition or Anaemia you found one or more of the following:

- **Pneumonia now**
- **Persistent Diarrhoea now OR in the past three months**
- **Discharging ear now OR at any time**
- **Very low weight for age OR growth faltering OR history of loss of weight**

## ASK

- Does the child have SEVERE PNEUMONIA or PNEUMONIA now?
- Does the child have persistent diarrhoea now or has the child had persistent diarrhoea in the past three months?
- Does the child have ear discharge now OR has the child had ear discharge at any time?
- Does the child have VERY LOWWEIGHT?
- Does the child have growth faltering OR is there a history of weight loss?

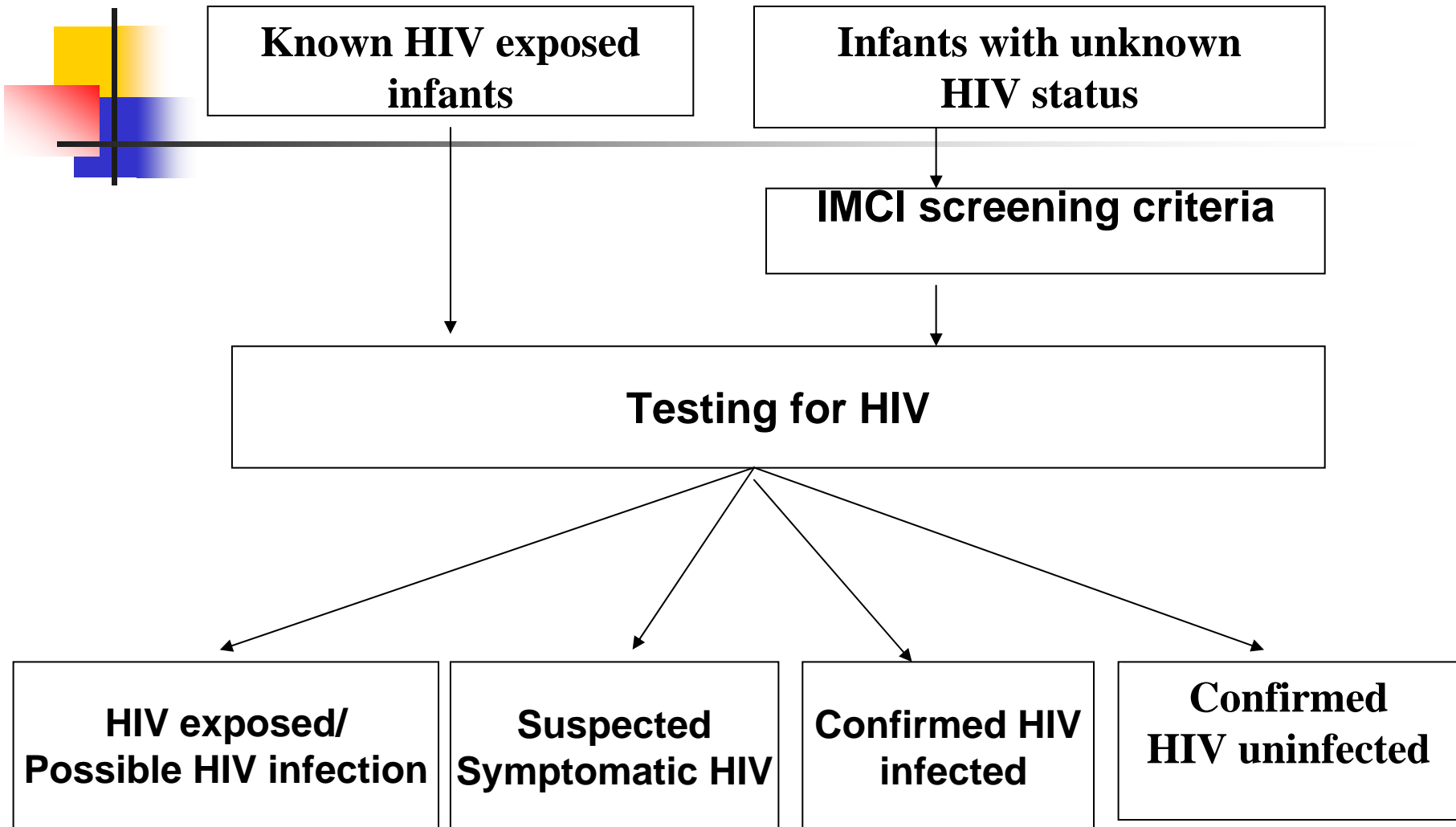
## CLASSIFY

TESTING AVAILABLE

TESTING NOT AVAILABLE

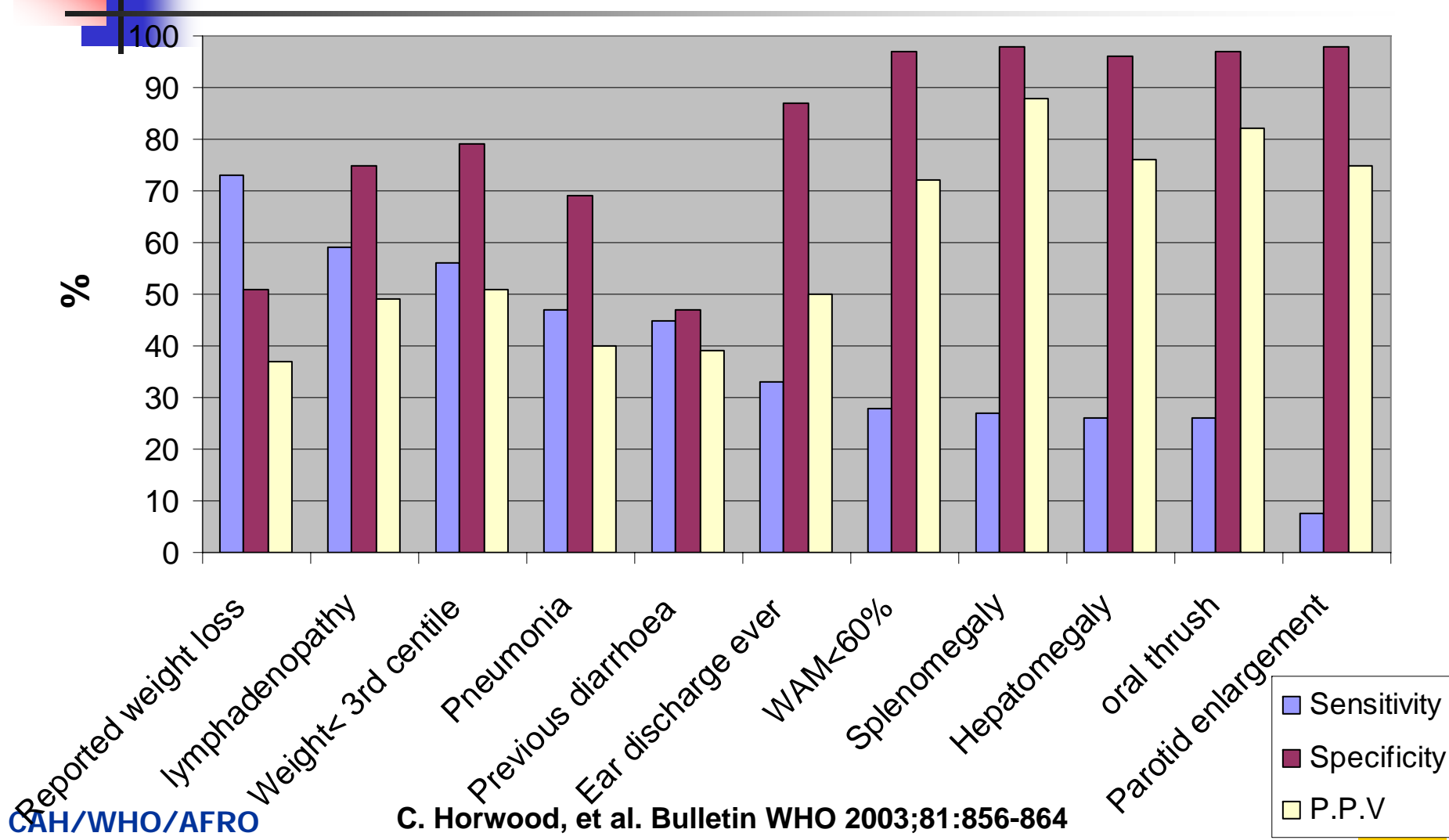
• Any THREE signs	SUSPECTED SYMPTOMATIC HIV INFECTION	<ul style="list-style-type: none"> <li>➤ Start treatment for other classifications</li> <li>➤ Arrange for pre-test counselling and testing for HIV</li> <li>➤ Arrange for follow-up visit for post-test counselling</li> <li>➤ Manage for symptomatic HIV infection</li> <li>➤ Assess child's feeding and counsel as necessary</li> <li>➤ Advise the mother on home care</li> <li>➤ Follow-up in 14 days</li> </ul>
• TWO signs or fewer	SYMPTOMATIC HIV INFECTION UNLIKELY	<ul style="list-style-type: none"> <li>➤ Start treatment for other classifications</li> <li>➤ No specific action for HIV</li> </ul>
• Any FOUR signs	SUSPECTED SYMPTOMATIC HIV INFECTION	<ul style="list-style-type: none"> <li>➤ Start treatment for other classifications</li> <li>➤ Manage for symptomatic HIV infection</li> <li>➤ Assess child's feeding and counsel as necessary</li> <li>➤ Advise the mother on home care</li> <li>➤ Follow-up in 14 days</li> </ul>
• THREE signs or fewer	SYMPTOMATIC HIV INFECTION UNLIKELY	<ul style="list-style-type: none"> <li>➤ Start treatment for other classifications</li> <li>➤ No specific action for HIV</li> </ul>

# TRIAGING INFANTS FOR HIV



# Validation of IMCI algorithms

## A study from South Africa



# Validation of IMCI algorithms: Comparison of Paediatrician's Assessment with IMCI

	IMCI Algorithm (%)	Paediatrician Assessment (%)
Sensitivity	56	72
Specificity	84	90
Positive Predictive value	60	75
Negative predictive value	83	89
Accuracy	77	85

C. Horwood, et al. Bulletin WHO 2003;81:856-864





# Value of adapted IMCI algorithm

---

## Suspected symptomatic/exposed

- Treatment opportunistic and other infections
- Counseling and voluntary testing=> staging=> ART for those eligible
- Cotrimoxazole prophylaxis
- Advice on nutrition

## Follow up care and support

- On going counseling and support
- Replenishment of drugs for CXT prophylaxis
- Identification, management/referral for ARV & side effects





## IMCI-HIV materials

---

- HIV aspects incorporated within the generic IMCI chart booklet
- Draft adaptation guide- available
- Three-day participant manual and facilitator guide field-tested once (Addis Ababa).
- In patient and outpatient patient recording forms, monitoring forms, follow up visit and exit interview forms developed.
- Under development:
  - patient education guide
  - psychosocial support guide





# IMCI HIV modules

---





# MODULE 1: Recap IMCI and technical updates

---

- Recap by going through the whole IMCI algorithm
  - **4 case studies and video**
- Recap using drills, for each main symptom, indicating relationship to Symptomatic HIV Infection, and written exercises
- Introduction to recent IMCI technical updates



## **MODULE 2: Assess, Classify and Manage HIV infection**

- Basic information on HIV virus and HIV transmission
- IMCI algorithm to assess and Classify for HIV
- Testing for HIV in children
- Assess and treat OI
- PCP (Cotrimoxazole) prophylaxis



# MODULE 3: Counsel the mother

- How to effectively communicate with the HIV positive mother
- Feeding options and the processes involved in counseling the HIV positive mother:
  - explaining the advantages and disadvantages of each feeding option
- How to counsel the mother about taking her child for an HIV test



*Small children must be kept warm*



# MODULE 4: Follow-up and chronic care of the HIV exposed/ infected

- Follow up children born to HIV positive women and children with suspected symptomatic HIV or confirmed HIV infection
- Principles of good chronic care
- The WHO pediatric clinical staging
- Adherence counseling
- Recommended 1<sup>st</sup> line ARV regimens for children, the possible side effects of ARVs



# Training course

Target audience: First-level HW (Doctors, nurses, clinical officers, community HW)

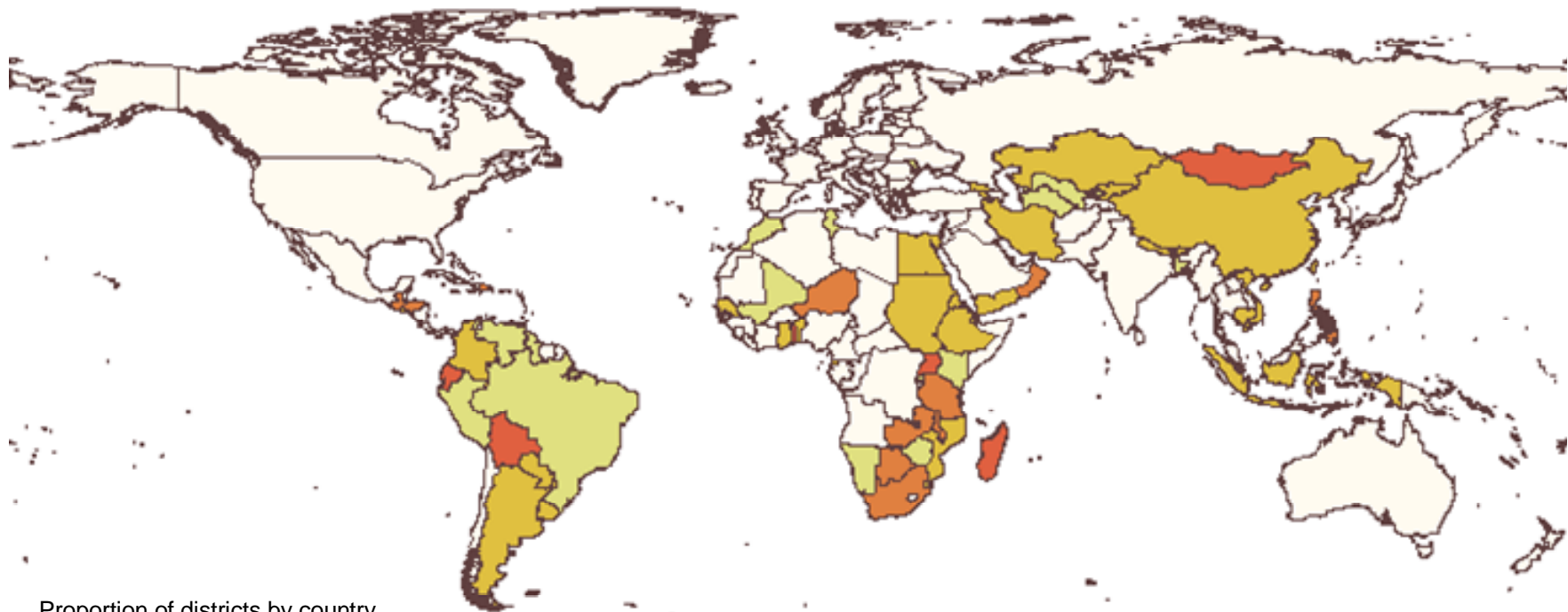
- As a stand-alone to update HW previously trained in IMCI
- As an add-on to an IMCI course
- As an add-on to an IMAI course
- ❖ A 3-day skills-based training



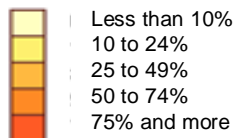
# Where are we with Implementation ?



# Estimated Coverage of IMCI Training (December 2004)



Proportion of districts by country reported to have initiated IMCI training



Sources: based on coverage data provided to WHO by 88 countries

*Disclaimer: The presentation of material on the map contained herein does 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 areas, or its authorities of its frontiers, or boundaries.*



# Main challenge to implementation

- *Keeping pace of IMCI roll out with that of IMAI/ART*





# Future Perspectives

---

- Evaluate alternate short IMCI trainings and promote their implementation in countries
- Support countries to adapt their IMCI guidelines to include HIV assessment and management
- Support the implementation of IMCI/HIV prevention and care roll-out plans of countries





---

**Mothers and children  
are our future !**

**Let us not fail them !**

