THE REPUBLIC OF UGANDA
MINISTRY OF HEALTH

World Health Organization

USAID
FROM THE AMERICAN PEOPLE

unicef

MAKERERE UNIVERSITY

fhi360

# Scaling Up Integrated Management of Newborn and Childhood Illnesses (IMNCI) Strategy in Uganda

Concurrent Session ID C35

Child Health Task Force Conference, June 2023

# Overview

- **Welcome & Introduction** Assoc Professor Peter Waiswa
- **Scaling up IMNCI in Uganda** Ms. Agnes Namagembe
- **Panel Discussion- Q&A** Dr. Jesca Nsungwa (MOH), Dr. Bodo Bongomin (WHO), Dr. Emma Mugisa (USAID)
- **Closing Remarks** Assoc Professor Peter Waiswa

**Dr. Peter Waiswa, Moderator**
Associate Professor at Makerere University School of Public Health and leads its Center of Excellence for Maternal, Newborn, & Child Health

**Ms. Agnes Namagembe, Speaker**
MCH Specialist at FHI 360 led USAID Maternal Child Health and Nutrition Activity-Uganda.

**Dr. Jesca Nsungwa, Panelist**
Commissioner of Reproductive and Child Health Department - Ministry of Health, Uganda

**Dr. Bodo Bongomin, Panelist**
National Professional Officer of Child and Adolescent Health- WHO Uganda.

**Dr. Emmanuel Mugisa, Panelist**
Project Management Specialist for Child Health and Nutrition at USAID mission Uganda.

THE REPUBLIC OF UGANDA
MINISTRY OF HEALTH

# Uganda's Journey of Scaling Up Integrated Management of Newborn and Childhood Illnesses (IMNCI) Strategy

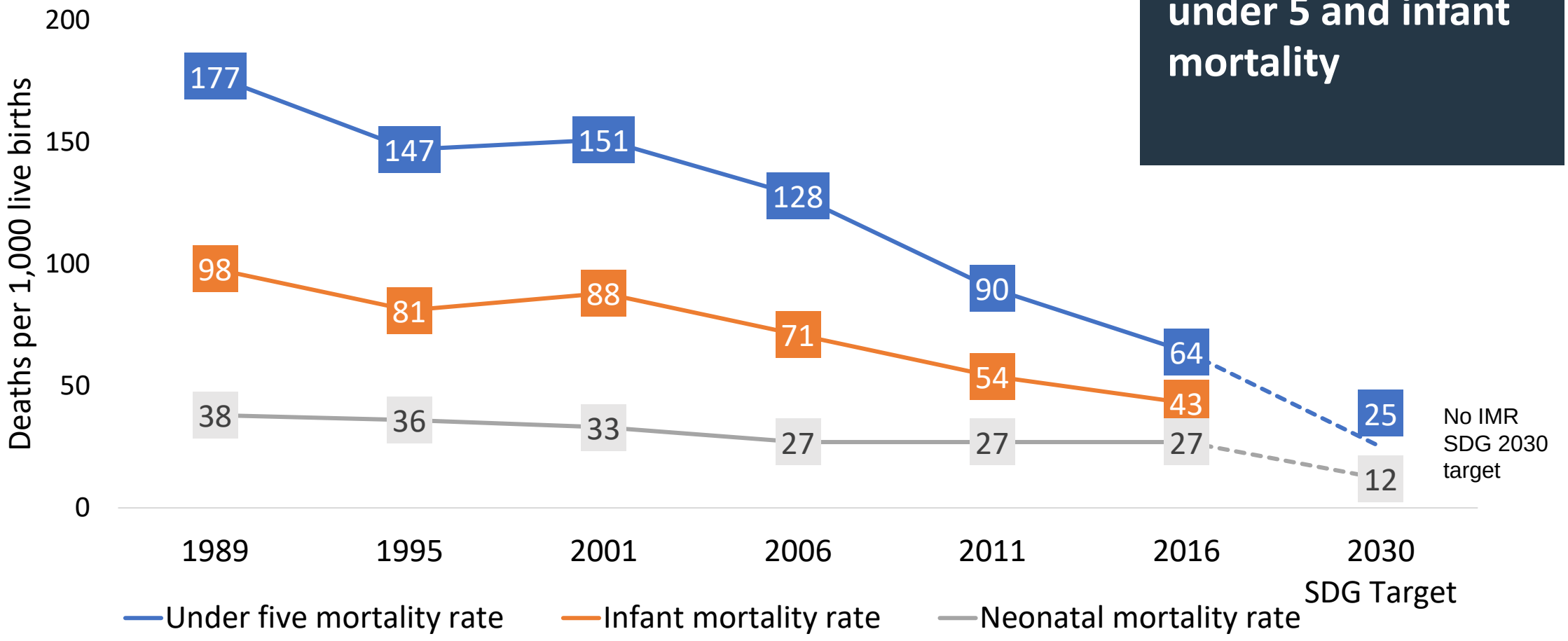
Agnes Namagembe, MCH Specialist

USAID Maternal Child Health and Nutrition Activity

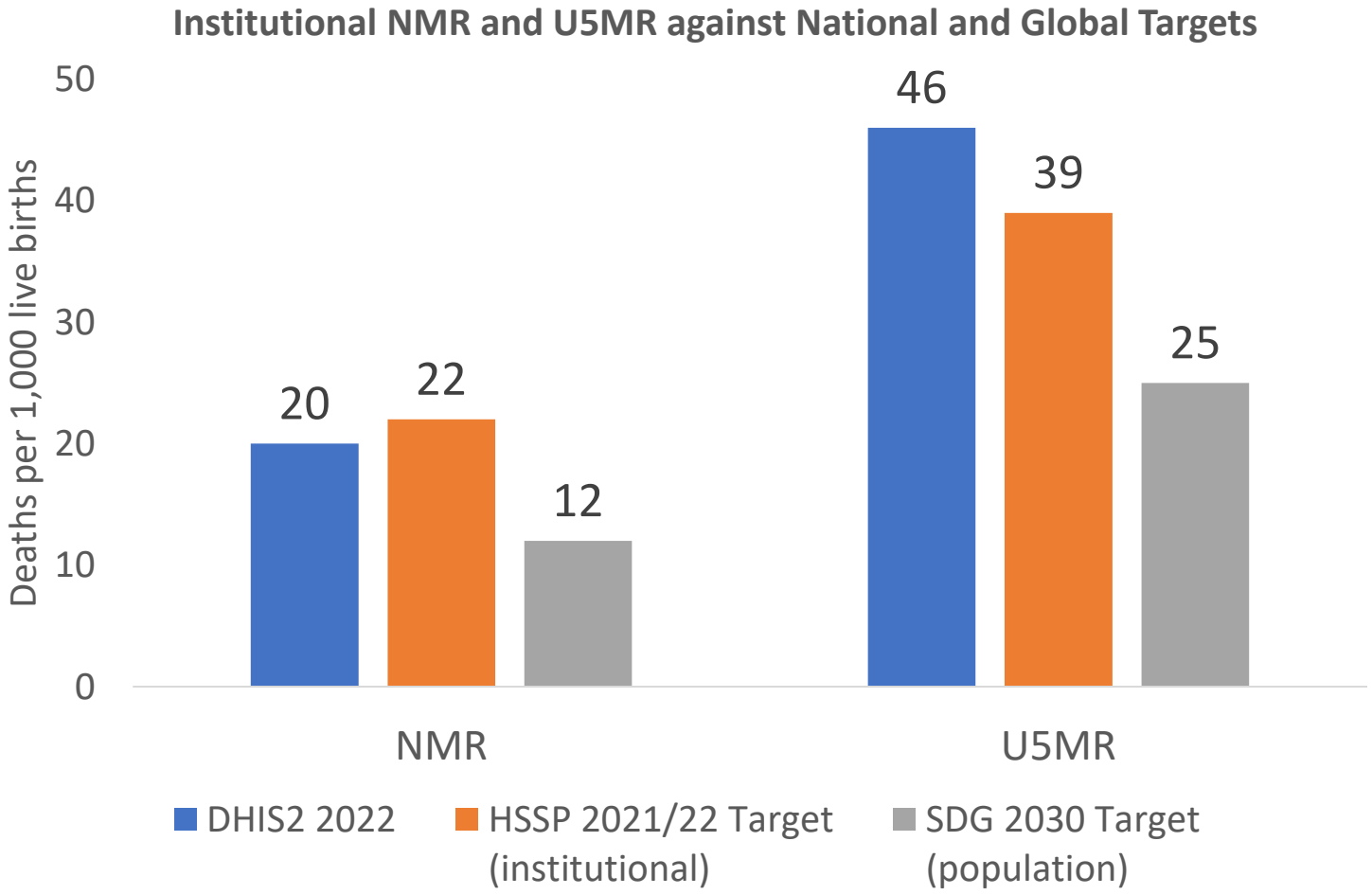
# Trends in childhood mortality from 1989 to 2016

(Uganda Demographic and Health Survey)

**Steady reduction in under 5 and infant mortality**



# Mortality burden remains high*




- Malaria and pneumonia are the leading causes of U5 deaths
- Fall in diarrhea, severe malnutrition, and pediatric HIV

**Limitation – institutional data does not account for community deaths*

Ref: MPDSR report 21/22, RMNCAH sharpened plan 2022

# Expanding Integrated Management of Childhood Illnesses (IMCI)

1995 IMCI selected as key strategy

2002 Incorporated home-based treatment of **fever**

2003 Incorporated **HIV/AIDS** management

2018 Updated the **newborn care** component

2021 Incorporated management of **possible severe bacterial infections** (PSBI) where referral is not possible

Nsungwa-Sabiiti J et al. (2004) Implementation of a National Integrated Management of Childhood Illness (IMCI) Program in Uganda. *Journal of Health and Population in Developing Countries.*

# Scaling up IMCI by modifying the training delivery model

Lesson 1

# Challenges affecting scale-up

- **1996: Original IMCI training**
  - Health workers were brought to a centralized location for **11 days** of **off-site training**

- **Challenges**
  - **Costly** (safari day allowance per health worker, venue, trainer fees)
  - Highly **disruptive of routine healthcare delivery**
  - **Difficult to sustain capacity** with high staff transfers and turnovers

# Strategies to address training challenges

- **2008: WHO released the first IMCI Computer-based Adaptation and Training Tool (ICATT)**
  - Piloted 3 approaches: classroom-based with individual computers, projector, and distance learning

- **2015-2017**: Uganda rolled out IMCI ICATT
  - **IMCI Impact Study and IMCI ICATT Evaluation** by WHO and UNICEF set a basis for country to adopt abridged models of training
  - 2017: Uganda benchmarked IMCI distance learning implementation in Tanzania

- **2018: MOH developed and piloted two modified approaches** to capacity building in IMCI with partner support
  - **Short Interrupted Course (SIC)**
  - **Distance Learning Course (DL)**

***Targeted cadres for training:***
Pediatricians, medical officer, clinical officer, nurses, and midwives

# Uganda's IMCI Training Evolution

| | |
|---|---|
| 1996 | **IMCI 11-day training strategy** developed and piloted in 2 districts |
| 1998 | Rolled out national IMCI trainings – 11-day trainings by Makerere pediatricians |
| 1999 | IMCI incorporated into **medical students' pre-service training** |
| 2000 | IMCI incorporated into **supervision system** and **nursing students' pre-service training** |
| 2015-2017 | Rolled out IMCI **Computer-based Adaptation and Training Tool** (ICATT) |
| 2018 | IMNCI **short interrupted course** (SIC) and **distance learning** (DL) **courses** piloted in two districts each |
| 2019-date | Scaling up using modified courses |



Nsungwa-Sabiiti J et al. (2004) Implementation of a National Integrated Management of Childhood Illness (IMCI) Program in Uganda. *Journal of Health and Population in Developing Countries.*

# IMCI Computer-based Adaptation and Training Tool

**IMCI Computer-based Adaptation and Training Tool (ICATT)**

Support person sets up computers at health facilities and orient learners on how to access ICATT modules on the computer

Learners undergo 2 weeks of self-study using the computer

**Venue**: onsite at health facility

**Number of days**: 14 days

**Trainer:** no, self-study

**Key inputs:** computer, electricity

Reach

- ✓ 123 health workers
- ✓ 15 / 146 districts

**Pros:**

- Cheaper (no safari day allowance, venue, trainers needed)
- Not disruptive to service delivery (self-paced, outside of clinic hours)

**Cons:**

- Limited computer literacy
- Most sites only had 1 computer per site (limited access)
- Lack of reliable power supply
- Inadequate support material

# Distance Learning Course

Reach
- ✓ 235 health workers
- ✓ 2 /146 districts

**Distance Learning (DL) Course**

1-day offsite orientation of the IMNCI guidelines

3-4 weeks self-study and case practices

1-day offsite review and practice meeting

8-9 weeks self-study and case practices

1 –day offsite review and final synthesis

**Venue**: hybrid

- Trainer convenes learners convene at centralized, offsite location
- Learner also practices self-study and supervised case practices onsite and interactions via WhatsApp

**Number of days**: 84 days (12 weeks) total; 3/84 days offsite

**Key inputs:** printed materials and trainers

**Pros:**

- Cheaper (3 days safari day allowance vs. 11 days in the original IMCI model)
- Minimized disruption to service delivery
- Phased learning allows time to grasp, internalize and practice

**Cons:**

- Longer periods to complete course
- Lower-level cadres struggled to internalize content on their own; coupled with low reading culture

# Short Interrupted Course

Reach

- ✓ 1258 health workers
- ✓ 31/146 districts

**Short Interrupted Course (SIC)**

2 ½ days offsite orientation of the IMNCI guidelines

2 weeks self-study and case practices

1 ½ days review and final synthesis

**Venue**: hybrid

- Trainer convenes learners convene at centralized, offsite location
- Learner also practices self-study and supervised case practices onsite and interactions via WhatsApp

**Number of days**: Actual days is 18 days, but the course can run up to 28 days (4 weeks) total; 4/14 days offsite

**Key inputs:** printed materials and trainers

**Pros:**

- Cheaper (4 days safari day allowance vs. 11 days in the original IMCI model)
- Minimized disruption to service delivery
- Phased learning allows time to grasp, internalize and practice

**Cons:**

- Challenging to organize mentorship and support all health workers within two weeks self study period

Nurses at Naguru Hospital- Kampala engaged in self-study of IMNCI during the short-interrupted course

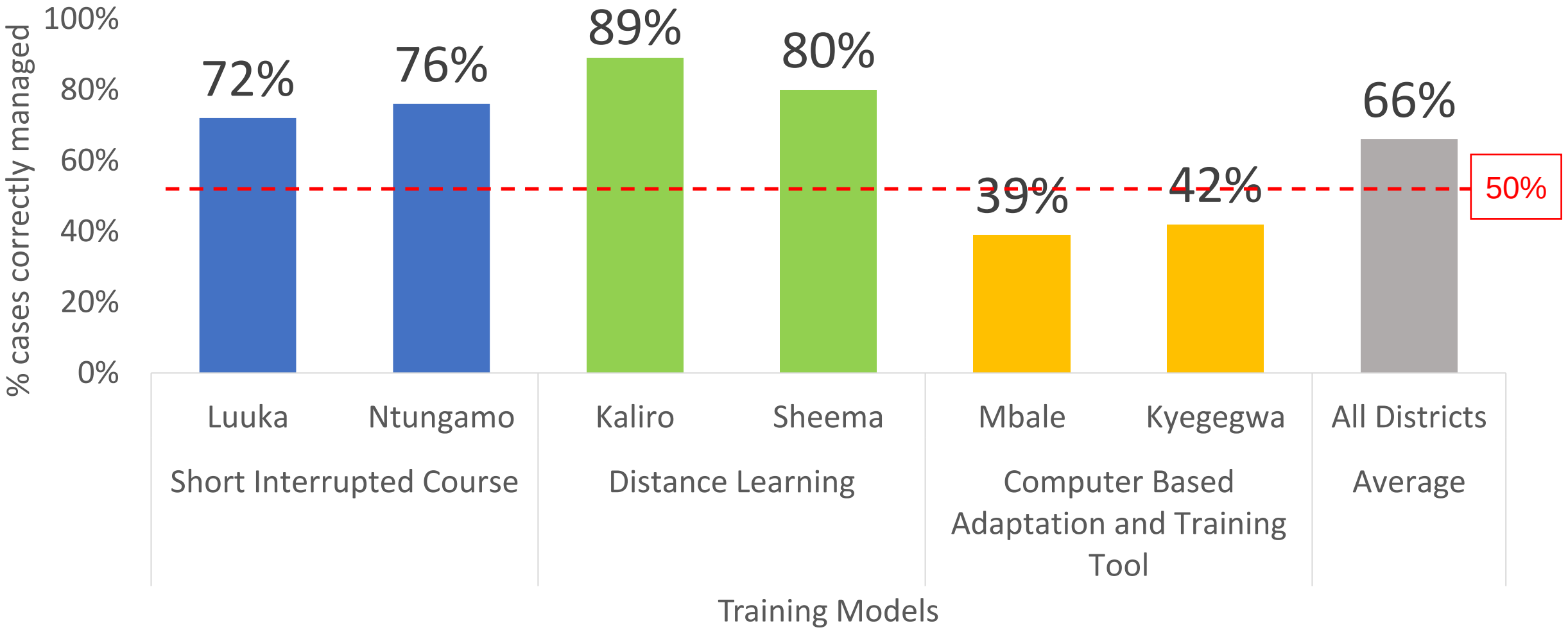
Photo Credit: **Ronald Mutumba-** USAID MCHN Activity

# Evaluation

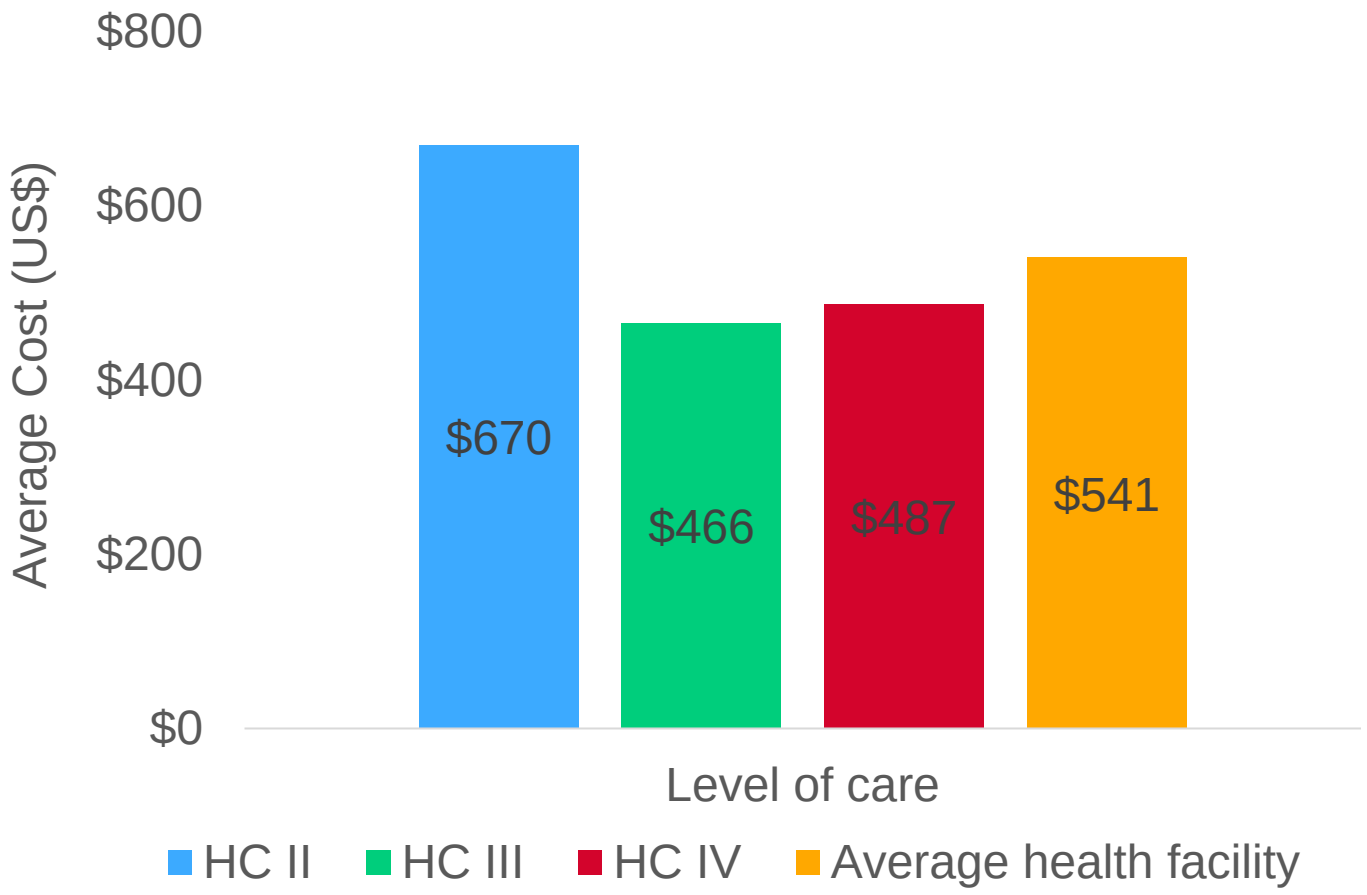
- **Objective:** to assess the process and outcome of early implementation of the modified IMNCI training delivery models in Uganda to guide decision-making on scale-up of IMNCI training

- **Mixed Methods**
  - Desk review
  - Key informant interviews
  - Focus Group Discussion with health workers, trainers and tutors trained
  - Case observations (management of sick children)
  - Exit Interview Assessment on the quality of IMNCI services offered

# Proportion of cases correctly managed by training models compared to the national threshold



# Average cost of training and mentoring a health facility with the DL or SIC approaches by level of care




## Avg. cost of training and mentoring a health facility is $541

**Program costs:**

- Venue
- Printing
- Transport
- Per diem
- Trainers
- 2 mentorship visits

# Scale up….

- Both SIC and DL approved models for scaling up IMNCI

# Sustaining training gains through quality improvement (QI)

Lesson 2

# Quality improvement change packages

**1** **Providing appropriate care to children with cough or difficulty breathing**

- Weekly CMEs with drills on diagnosis and prescriptions
- Orientation of all clinicians on IMNCI guidelines
- Displayed algorithm at clinical areas
- Proper quantification of stock of drugs
- Duty plan: specified staff attending OPD

**2** **Correctly assessing, categorizing, and treating children with fever**

- Extracted and pinned IMNCI guidelines on management of fever at consultation rooms/triage areas
- Reviewed the client flow, and identified step for taking temperature and the other vitals
- Implemented internal data quality checks

# Additional lessons learned

- **District involvement important**: districts teams supported sustainable mentoring and supervision IMCI implementation

- **Mentorship and networking**: Post training follow-up involved case observations and use of WhatsApp groups; this has the potential to build stronger, localized networks of mentorship

- **Onsite training**: onsite advantageous compared to offsite trainings
  - ✓Health workers can practice what they have learned in a ‘real life’ setting and in a setting they are already familiar with
  - ✓It is a more sustainable model enabling district mentors and peer learners to train and cascade learning, minimal disruption of work

# Unfinished business…

We have persistent challenges...

- Irregular support supervision
- Suboptimal quality of care
- Commodity stockouts

This  requires a whole health systems approach to sustain training gains and improve child health

# Conclusion

- Modifying the training delivery to achieve critical numbers of trained health workers combined with integrated QI practices enabled the scale-up of IMNCI in Uganda

- Quality improvement helps health workers to sustain training gains

THE REPUBLIC OF UGANDA
MINISTRY OF HEALTH

unicef

World Health Organization

USAID
FROM THE AMERICAN PEOPLE

MAKERERE UNIVERSITY

fhi360

# Panel Discussion

# Tell us about the introduction of alternative IMNCI training delivery models in Uganda. What are key considerations for selecting a suitable training model?

*For Dr. Bodo Bongomin*

National Professional Officer Child, Adolescent Health and Nutrition- World Health Organization, Uganda

# Based on your experiences in Uganda, what challenges will countries likely meet and need to address when introducing alternative IMNCI training delivery models?

*For* Dr. Jesca Nsungwa

Commissioner of Reproductive and Child Health, Ministry of Health

# Given USAID's long history in supporting the roll out of IMNCI in Uganda, what are your key take aways as a development partner representative for scaling up IMNCI?

*For* Dr. Emmanuel Mugisa

Program Management Specialist for Child Health and Nutrition, USAID Uganda