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# Africa Regional Workshop on Improving Routine Data for Child Health in National Health Information Systems

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# Review of Child Health and Nutrition Data Elements in HMIS

Kate E. Gilroy, PhD, ScM

[Kate\\_Gilroy@jsi.com](mailto:Kate_Gilroy@jsi.com)

On Behalf of the MCSP Child Health  
and MMEL Teams

# Background & Purpose

## Background

- Routine measurement (HMIS)
- International guidance on child health and nutrition indicators for HMIS?

## Purpose

- Document the data elements related to child health and nutrition
- Identify common data elements/indicators and gaps at the facility and community levels
- Provide technical assistance to help countries to improve routine child health and nutrition data

# Scope of review

- Technical scope
  - **Child health**, including prevention and management of child illness
  - **Child nutrition**, including prevention and management
  - Includes service delivery and health systems (e.g. HRH, stock, supervision) indicators
  - Excludes immunization and HIV/AIDS
- Health system scope
  - **Facility-based** services
  - **Community-based** services
- Geographic Scope
  - **Afghanistan** – Bangladesh – **Burma** – **DRC** – Ethiopia – Ghana – **Haiti** – India – Indonesia – **Kenya** – Liberia – **Madagascar** – Malawi – **Mali** – **Mozambique** – **Nepal** – **Nigeria** – Pakistan – **Rwanda** – Senegal – **Tanzania** – **Uganda** – **Zambia**
  - **Zimbabwe** – Guatemala – Namibia

# Steps in review

- I. Select data elements for review
  - I. Review of international child health & nutrition indicator guidance – SDG, WHO, GAPPD, USAID, PMI, Countdown to 2015/30, iCCM, etc
2. Request, collect and catalogue forms from 26 countries\*

Facility Level	Community Level
Sick child recording form / client form	Sick child recording form / client form
Registers (OPD, well child, logistics, etc)	Register (s)
Facility summary form	CHW/community summary form
District/sub-district summary form	

3. Use standardized data abstraction template to conduct review
4. Perform quality checks on form classification and data element extraction

\*➔ Also collected child cards, supervision forms, household registers, etc from some countries ➔ not currently included in review

# What types of data elements would you want?

- For IMNCI?
- For nutrition?
- Others?

# What types of data elements would you want?

## IMCI/iCCM

Diarrhea cases	Treatment with ORS & zinc
Fast breathing pneumonia cases	Treatment with antibiotic
RDT completed; RDT result +/-	Treatment with ACT/1 <sup>st</sup> line drug
Referral in (facility)	Referral out (CHW/facility)

## Nutrition

Breastfeeding counseling	Therapeutic food (RUTF)
Feeding counseling	

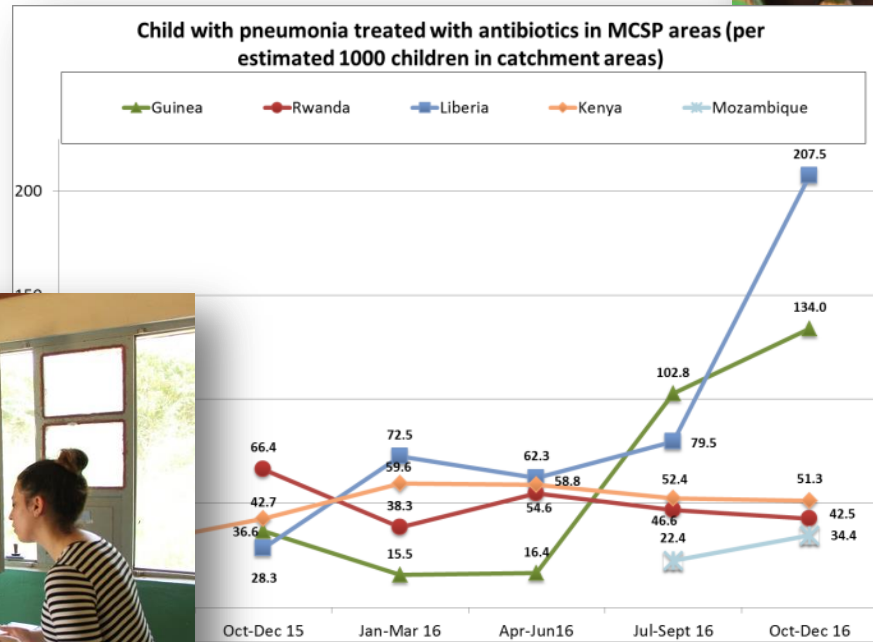
## Other

Child deaths	Stock of ORS, zinc, antibiotic, ACTS
Danger signs	Human Resources

# Group Exercise

Data element	Register/sick child form (Y/N)	Summary form (Y/N)
Diarrhea classification/case		
Diarrhea case treated with ORS		
Diarrhea case treated with zinc		
Pneumonia (fast breathing) classification/cases		
Pneumonia (fast breathing) case treated with antibiotic		





# Preliminary Findings

# Number of cases of child diarrhea

## *Diarrhea classification / # of diarrhea cases seen*

	CHW / Community			Facility	
	Sick Child Recording Form	Register	Summary Form	Register	Summary Form
DRC					
HAITI	0		Only diarrhea cases treated	Blank diagnosis	
KENYA					
LIBERIA	0	Under revision			
NIGERIA					Only diarrhea trt with ORS & zinc
MALI		Blank diagnosis		Blank diagnosis	
MOZAMBIQUE	0				
RWANDA			only includes diarrhea cases treated		
UGANDA	0				
ZAMBIA					
ZIMBABWE	0				

**Preliminary results**

# Number of cases of child diarrhea treated (with ORS & Zinc)

## *Diarrhea cases treated with ORS and Zinc*

	CHW / Community			Facility	
	Sick Child Recording Form	Register	Summary Form	Register	Summary Form
DRC					per nat'l norm
HAITI	0			Blank for treatment*	
KENYA					
LIBERIA	0	Under review			
NIGERIA				Blank for treatment	
MALI		Blank for treatment		Blank for treatment	
MOZAMBIQUE	0				
RWANDA			Treatment not specified	Blank for treatment	
UGANDA	0				
ZAMBIA					
ZIMBABWE	0				

*\*included in proposed sick child recording g form*

# Gaps for diarrhea indicator

*Number of cases of child diarrhea treated (with ORS & Zinc)*

## No counts for diarrhea cases seen

- Haiti - community
- Rwanda – community
- Nigeria - facility

## No counts of diarrhea cases treated with ORS/zinc

- Mali – community & facility
- Rwanda – facility
- Uganda - community
- Zambia community & facility
- Zimbabwe – facility

## Blanks for diagnosis &/or treatment in register

- Haiti - facility
- Mali – community & facility
- Nigeria - facility
- Rwanda – facility

[illegible][illegible]

# Number of cases of child pneumonia\*

## ***Pneumonia\* classification / # of pneumonia cases seen***

	CHW / Community			Facility	
	Sick Child Recording Form	Register	Summary Form	Register	Summary Form
DRC					
HAITI	o			diagnosis	ARI listed on form (unclear dx)
KENYA				Blank diagnosis	
LIBERIA	o	Under review			
NIGERIA					
MALI		Blank diagnosis		Blank diagnosis	
MOZAMBIQUE	o				
RWANDA			only includes cases treated		
UGANDA	o				
ZAMBIA				x	
ZIMBABWE	o				

*\*Pneumonia/suspected pneumonia definition also includes “fast breathing” per WHO IMCI algorithm*

# Number of cases of child pneumonia\* treated with antibiotics by trained facility worker or CHW

## Pneumonia treatment with antibiotics

	CHW / Community			Facility	
	Sick Child Recording Form	Register	Summary Form	Register	Summary Form
DRC			Trt per national norm		
HAITI	O	Not policy		Blank for treatment	
KENYA	Not Policy			Blank for treatment	
LIBERIA	O	Under r			
NIGERIA				Blank for treatment	
MALI				Blank for treatment	
MOZAMBIQUE	O				
RWANDA			Treatment not specified	Blank for treatment	
UGANDA	O				
ZAMBIA				X	
ZIMBABWE	O	Not Policy			

Preliminary results

\*Pneumonia/suspected pneumonia definition also includes "fast breathing" per WHO IMCI algorithm

# Gaps for pneumonia indicator

*Number of cases of child pneumonia treated with antibiotics by trained facility worker or CHW*

## No clear pneumonia classification

- Haiti - facility

## No counts of pneumonia cases treated with antibiotics

- Haiti - facility
- Mali – facility
- Rwanda– facility
- Zambia - facility
- Zimbabwe – facility

## Blanks for diagnosis &/or treatment in register

- Haiti - facility
- Kenya - facility
- Nigeria - facility
- Mali – community & facility
- Rwanda – facility



# What are the challenges?

- Lack of standardization across countries
- Lack of standardization across facility & community
- Treatment not captured in some summary forms
- Quality? (blanks in registers details in summary form)



# Thank You



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% of children in malaria endemic areas, aged 0-59 months with fever who were tested with RDT or microscopy

### ***Fever cases seen***

	CHW			Facility	
	Sick Child Recording Form	Register	Summary Form	Register	Summary Form
DRC					Recorded as "suspected" malaria cases"
HAITI	O		X	Blank diagnosis	
KENYA				Temperature recorded, not fever	
LIBERIA	O	Under revision?		Temperature recorded,	U5 fever treated with ACT collected
MADAGASCAR	O			"	
MALI				Blank diagnosis (tracking of specific conditions)	Suspected malaria cases (disaggregated by facility & community)
MOZAMBIQUE	O	Clinical cases malaria	Cases malaria		
NIGERIA				Blank diagnosis	
RWANDA			Recorded as "Children from 6 months to 59 months treated for fever"		
ZAMBIA			Malaria (clinical) and confirmed collected	X	No record of fever, but tracking clinical cases of malaria"
ZIMBABWE	O				No fever but, "unconfirmed (Clinical)"

**Preliminary results**

% of children in malaria endemic areas, aged 0-59 months with fever who were tested with RDT or microscopy

### ***RDT performed***

	CHW			Facility	
	Sick Child Recording Form	Register	Summary Form	Register	Summary Form
DRC				Blank lab diagnostic; RDT included on sick child form	
HAITI	0			Blank diagnosis; "suspected" and "confirmed" cases collected on sick child form	Not disaggregated by child only RDT tests
KENYA				Blank "clinical malaria" & "confirmed cases"	DHIS2
LIBERIA	0	Under revision			
MADAGASCAR	0				
MALI				blank diagnosis	
MOZAMBIQUE	0				
NIGERIA					
RWANDA					
UGANDA	0		X		
ZAMBIA		Blank diagnosis	"Clinical Malaria"	X	Lab tests done (inc. slide)
ZIMBABWE	0				

Preliminary results

% of children aged 0-59 months with fever presenting to (facility or CHW) who were tested with RDT (or microscopy) and received a positive result

## RDT +/-

	CHW			Facility	
	Sick Child Recording Form	Register	Summary Form	Register	Summary Form
DRC				Blank lab diagnostic; RDT+ note included on sick child form	
HAITI	O			Blank diagnosis; included in child recording form	Not disaggregated by child
KENYA				Blank diagnosis; "confirmed" (only positive results)"	
LIBERIA	O	Under revision		« Malaria »	
MADAGASCAR	O				
MALI				Blank diagnosis (tracking of specific conditions)	
MOZAMBIQUE	O				
NIGERIA					
RWANDA					"Malaria simple confirmed"
ZAMBIA		open: count of RDT+ s. on bottom	"Malaria Confirmed" only	X	"Confirmed malaria"
ZIMBABWE	O			Blank diagnosis	

Preliminary results

% of confirmed malaria cases in children aged 0-59 months that receive first line antimalarial treatment (ACT)

## ***ACT treatment given***

	CHW			Facility	
	Sick Child Recording Form	Register	Summary Form	Register	Summary Form
DRC			(DHIS2 summary specifies politique national and not ACT)	Blank treatment	# of malaria cases treated according to national protocol
HAITI	O				"Confirmed malaria treated"
KENYA	"If RDT +, give Artemether-Lumefantrine)			Blank treatment	DHIS2
LIBERIA	O	Under revision			
MADAGASCAR	O			Blank treatment	
MALI		Blank treatment		Blank treatment	
MOZAMBIQUE	O				
NIGERIA	Blank space for notes				
RWANDA	Recorded as "Primo: Red/Yellow"	Recorded as "Co"		Blank treatment	
ZAMBIA				X	
ZIMBABWE	O	2 treatment options listed: ACT with paracetamol based on age groups (6m-3y & 3y-5y)		Blank treatment	

**Preliminary results**

# # of children under-five referred to a higher-level health facility by CHW or primary health facility

## *Referral to higher facility*

	CHW			Facility	
	Sick Child Recording Form	Register	Summary Form	Register	Summary Form
DRC					
HAITI	o			Blank to track evolution of disease; included on sick child recording form	
KENYA					
LIBERIA	o	Under revision			
MADAGASCAR	o				
MALI					
NIGERIA	Blank space for notes			Not disaggregated by child	Not disaggregated by child
RWANDA					
ZAMBIA				x	
ZIMBABWE	o				

**Preliminary results**