

# What Data Do National Health Management Information Systems (HMIS) Include? A Review of Child Health and Nutrition Data Elements

Wednesday, October 3, 2018 9:00-10:30 a.m. EDT

#### Introduction

- MCSP works at the country and global levels to improve reproductive, maternal, newborn and child health (RMNCH) and nutrition services
- Measurement and Data Use for Action and Accountability is a key MCSP learning theme
- MCSP undertook this review to better understand the content of routine HMIS across USAID-supported countries
- In Sustainable Development Goal (SDG) era, importance of routine



Photo credit: Kate Holt/MCSP. Accra, Ghana 2017

systems emphasized\* \*The Roadmap for Health Measurement and Accountability, 2015 (http://www.who.int/hrh/documents/roadmap4health\_measurent\_account/en/)

# Many initiatives and investments related to child health and nutrition and metrics in the SDG era

#### Initiatives related to child health and nutrition

- Every Woman, Every Child
- A Promised Renewed
- The Global Strategy for Women's, Children's and Adolescent's Health
- Scaling Up Nutrition Movement
- Standards for improving the quality of care for children and young adolescents in health facilities
- Every Newborn Action Plan
- Every Breath Counts
- Global Breastfeeding Collective

#### **Metrics** initiatives

- Health Data Collaborative
- WHO Global Reference List of 100 Core Health Indicators
- Countdown to 2030
- MONITOR
- Child Health Accountability Tracking group (CHAT)
- Global nutrition monitoring framework
- WHO/UNICEF Technical expert advisory group on nutrition monitoring (TEAM)



























# Webinar outline and speakers

#### Introduction

Michel Pacqué, MCSP Child Health Team lead

#### Overview

 Jeniece Alvey, Nutrition Advisor, Bureau for Global Health, Office of Maternal and Child Health and Nutrition

#### Background and Methods

 Emily Stammer, MCSP Research, Monitoring and Evaluation Advisor

#### Results and Summary

Kate Gilroy, MCSP Senior
 Measurement, Monitoring,
 Evaluation and Learning Technical
 Advisor

#### Q&A

 Dyness Kasungami, Senior Child Health Advisor



Photo credit: Karen Kasmauski/MCSP. Wandi Village, Nigeria 2018

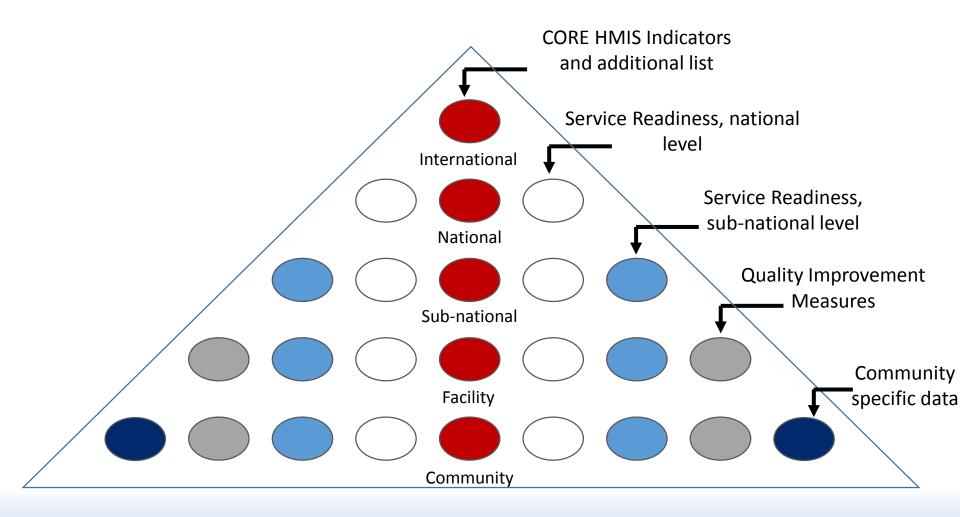
#### Overview

- USAID supports scaling-up high impact interventions for women and children and focuses efforts in 25 priority countries
- Global initiatives and agencies recognize the importance of tracking progress for child health and nutrition on a routine basis
- Global consensus on indicator guidance requires a better understanding of key data elements in existing systems
- USAID asked MCSP to undertake this work due to the program's engagement at the global level and in 26 countries



Photo credit: Kate Holt/MCSP. Buchanan, Liberia 2016

# Health Systems Data Flow and Data Needs



Source: DHIS2 training materials/UNICEF/WHO



# Background and Methods

Photo credit: Karen Kasmauski/MCSP and Jhpiego. Port de Paix, Haiti 2017

# Background

## Health Management Information Systems (HMIS)

- Collect data and provide information about service delivery on a routine basis for program management, monitoring, reporting, etc
- Country-level HMIS indicators and structures vary greatly

# International guidance on child health and nutrition indicators

- Extensive guidance on impact,
   coverage and quality\* measures
- Limited current guidance on routinely collected indicators at facility level HMIS



Photo credit: Alan Gichigi/MCSP. Kisumu, Kenya 2016.

# Objectives of the review

- Document the data elements related to child health and nutrition in national HMIS
- Identify common data elements/indicators and gaps at the facility and community levels across countries
- Better target technical assistance to countries to improve routine child health and nutrition indicators and data capture, monitoring and use
- Inform any global recommendations or guidance for child health and nutrition HMIS data/indicators

# Scope of review - I

- Technical scope
  - Child health, including prevention and management of child illness
  - Child nutrition, including malnutrition prevention, screening and management
  - Excludes immunization and HIV/AIDS
  - Children aged 0-59 months of age
- Health system levels
  - Primary health centerbased services
  - Community-based services



Photo credit: Kate Holt/MCSP. Tshopo, DRC 2017

# Scope of review - 2

Afghanistan

– Kenya

- Pakistan

- Bangladesh

Liberia

- Rwanda

- Burma

Madagascar

- Tanzania

- DRC

Malawi

Uganda

- Ethiopia

Mali

Zambia

- Ghana

Mozambique

- Namibia

– Haiti

Nepal

- Zimbabwe

India

- Nigeria

Senegal & Indonesia – still under review

# Background in numbers

25 countries

228 data elements

9 languages

280+ forms reviewed

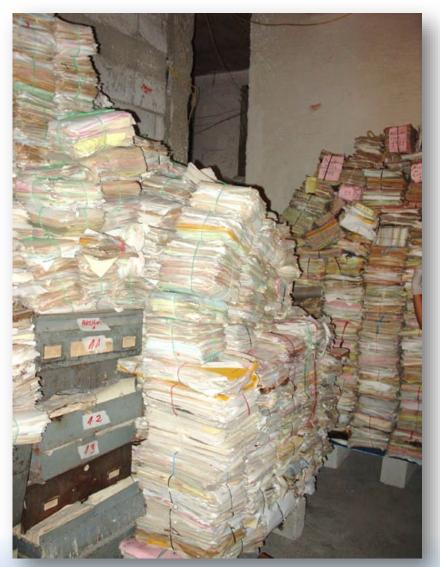


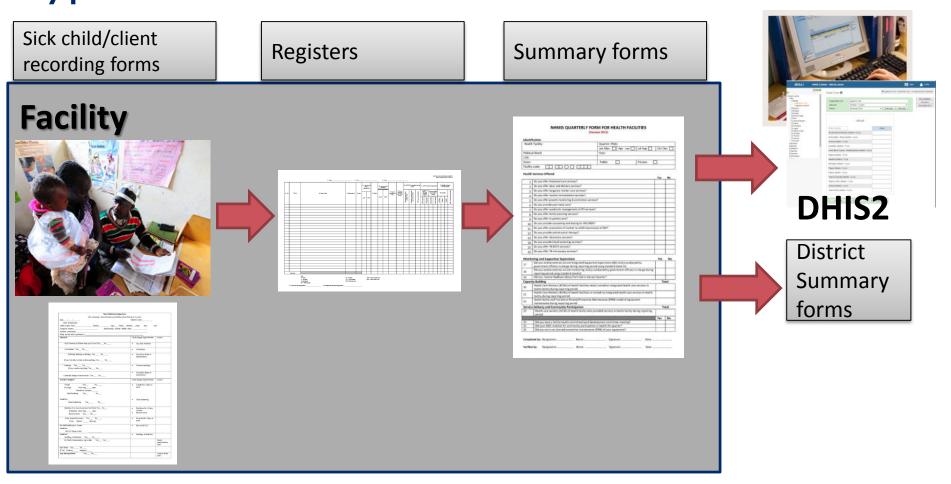
Photo credit: Daniel Hernández-Salazar, George Washington University, Guatemala

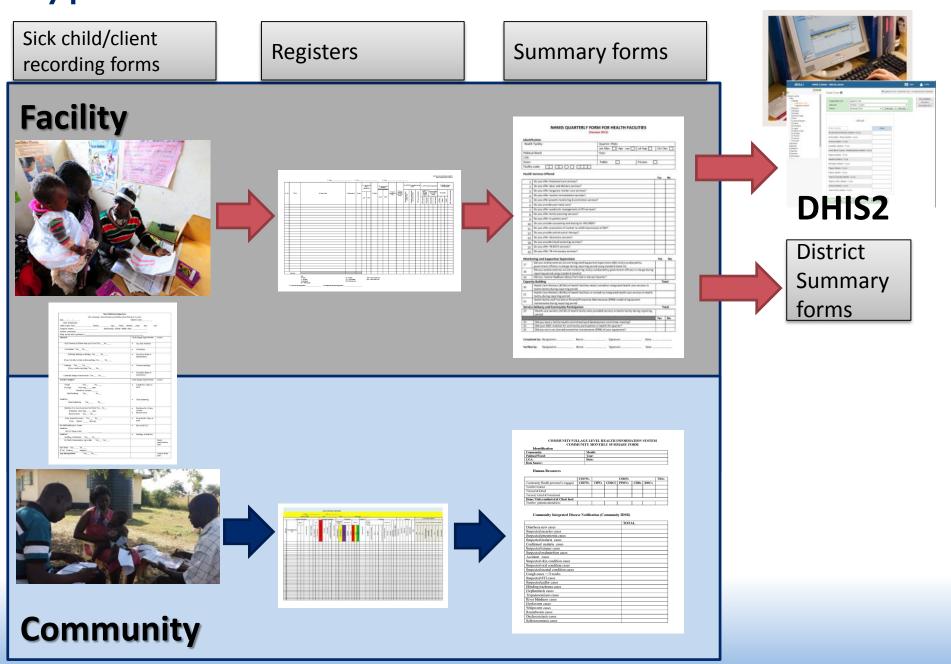
# Steps in review - I

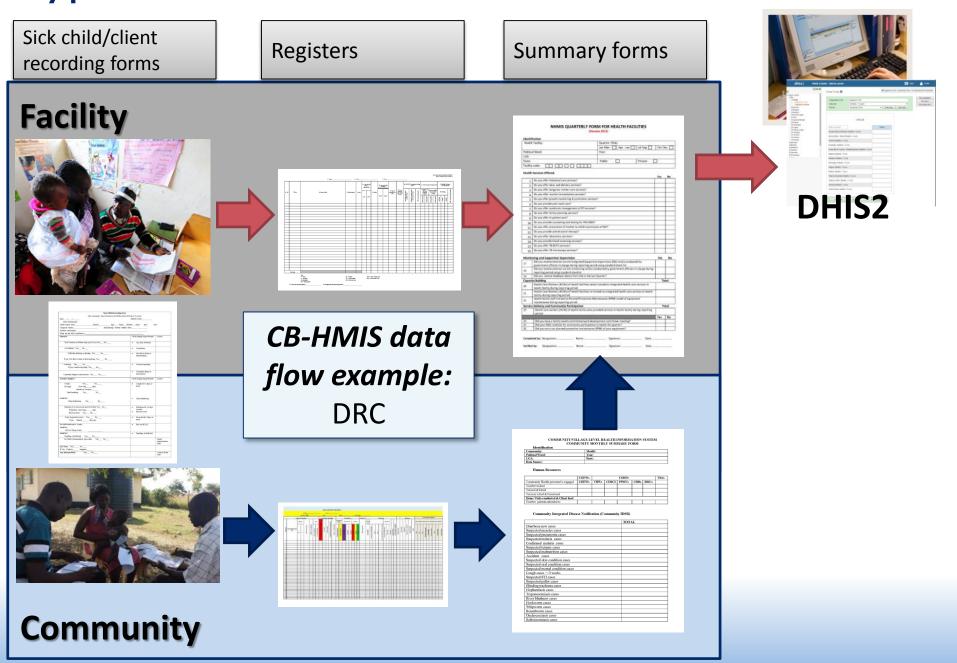
- Select data elements for review
  - Review of international child health & nutrition indicator guidance SDG,
     WHO, GAPPD, USAID, PMI, Countdown to 2015/30, iCCM, etc
  - Review of clinical guidance/algorithms (e.g. Integrated Management of Child Illness (IMCI))
  - Define list of data elements for extraction related to recommended indicators, services and algorithms
  - Internal and USAID review
- Request, collect and catalogue forms from 25 countries

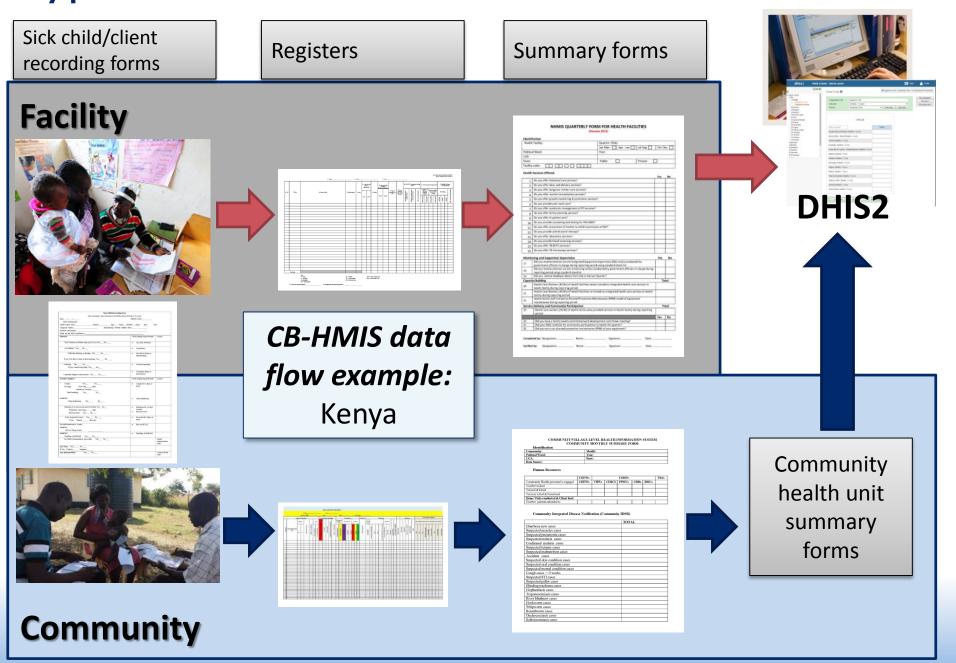
Community Level	Facility Level				
Sick child recording form / client form	Sick child recording form / client form				
Register (s)	Registers (outpatient department (OPD), well child, nutrition, logistics, etc)				
Community health worker					
(CHW)/community summary form	Facility summary form				

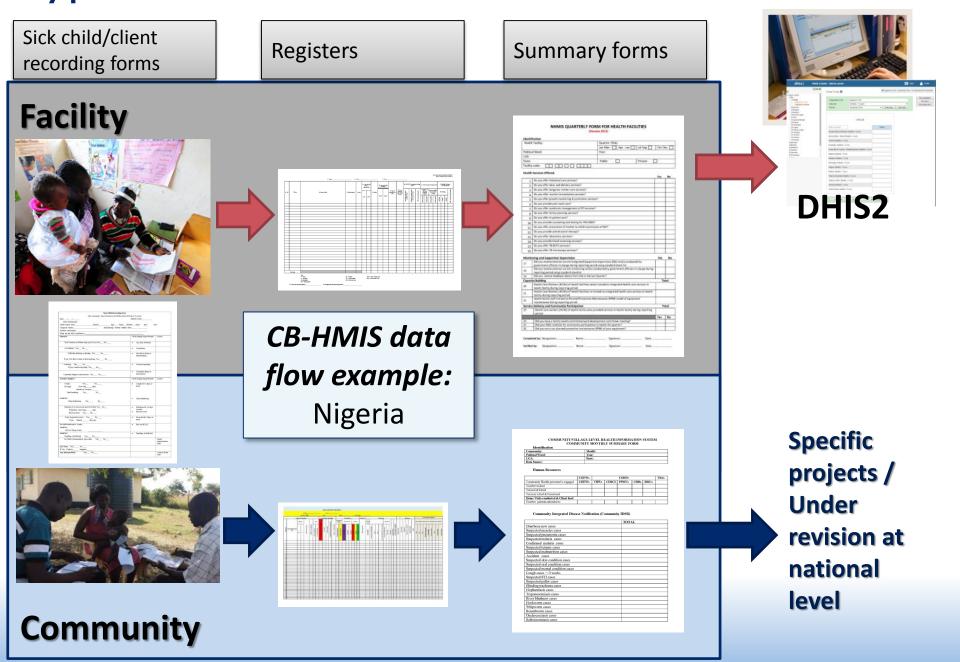
<sup>→</sup> Also collected child cards, supervision forms, household registers, etc from some countries → not currently included in review











# Steps in the review - 2

Use standardized data abstraction template to conduct review

Country				Madagascar																	
Aspect	Source Indian	Source in Indicate r - 2 × 3	dica r Source Indi	▼ Data Element	Child recording form	Form/regist er Response Type		CH <b>V</b> Register ▼	Register Response	CHV Summary Form	Summary Form Response Type	Huter on CHW	Child Health Card (Patient Kept)	Recording		Register Response Type	Vhich Register ▼	Notes on disaggregation/or her in register	Facility Summary form	Facility Summary Form Response Ty	
Population/Denominator	0.			Estimated population in district	TOTAL	Tape		riegister	Type	1 Orini	Tape		Keptj	1 Olim	riegister	1 Jpe	riegister	The state of the s	TOTAL	riesponse 19	
Population/Denominator	_			Estimated population in health facility catchment area		-					Count/ Value										
Population/Denominator	CCM-neu			Estimated population in CCM target areas							COURT VIIGO										
Population/Denominator	00111110	_		Estimated population of children U5 in district		<u> </u>					<u> </u>										
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Population/Denominator				area	,												l				
Population/Denominator	CCM-neu	_		Estimated population of children U5 in CCM target areas																	_
Populationribenominator	COPPAND		_	Escinated population or children on in COM target areas																	Collectedthrow
Sick child	19401			Sign - Feyer		Cheokmark			Checkmark	×	Count/ Value						l		×	Count/ Value	cunmary farm
Sick child	IMCI	_		Sign - Cough																	
Sick child	IM01			Sign - Diarrhea	v	Checkmark			Checkmark	v	Count/ Value								v	Count/ Value	
Sick child -danger signs/referral		B4CI	_	Vomits everything	_	Checkman			CHECKING	•	COURT VALGE								-	COURT VAIGE	-
Sick child -danger signs/referral	MHO GAO			Severe complicated measles															-	Count/ Value	
Sick child -danger signs/referral	WHO ReC		_	Not able to drink/breastfeed:		Checkmark														Coulki valde	
Sick child-danger signsherena				Convulsions	× .	Checkmark					-										-
Sick child -danger signs/referral					K	Uneckmark															
Sick child danger signs/referral	WHO QuC			Severe pneumonia (Not specified)																	
Sick child-danger signs/referral	MHO 0*0			Difficulty breathing	E	Checkmark															
Sick child-danger signs/referral	WHO ReC		_	Chest in-drawing	×	Checkmark															
Sick child -danger signs/referral	MHO 6*0			Stridor/wheezing																	
Sick child -danger signs/referral	WHO QaC			Severe dehydration																	
Sick child -danger signs/referral	MHO 6*C	IM01		Severe febrile disease																	
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Sick child-danger signs/referral	WHO ReC	IMCI	_	Severe anaemia															X	Count/ Value	zummary form
Sick child -danger signs/referral				Palmar Pallor																	
Sick child -danger signs/referral	WHO Q±C	MCI		Lethargy i very weak	×	Checkmark															
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Sick child -danger signs/referral				Prereferral treatment																	
Sick child -danger signs/referral				Child referred from CHV seen at facility																	
Sick child -danger signs/referral				Counter-referral from facility																	
Sick child -danger signs/referral		-	_	Follow-up visit performed by CHV		<del>-</del>					<del>-</del>										
Malaria	WHO 109		_	Child with RDT/microscopy test (6-59m)					Checkmark		Count/ Value					Count/ Value			_	Count/ Value	-
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																	l				Melaria" and "a
Malaria	WHO 100	CCM-neu		Child with positive RDT/microscopy result (6-59m)				1	Checkmark	x .	Count/ Value				x	Count/ Value	l		x	Count/ Value	complicated M
Malaria	WHO 109	CCM-Neu		Child received 1st line antimalarial				I	Checkmark	E .	Count/ Value								E .	Count/ Value	
Malaria	IMOL			Dose, frequency & duration of antimalarial prescription																	
Malaria	IMCI	Countdown US	4in	Child U5 slept under ITN	v	Checkmark															
Malaria	USAID			Child's HH has ITN		Circoxinan			Checkmark	v	Count/ Value								v	Count/ Value	
		-				1			Command		_ Juni value										Collectedthro
Malaria	CCM-neu			Child with RDT+ treated		1			i		1					I	I		×	Count/ Value	zunmary form
Pneumonia	WHO QuC	WHO 100 Ca	estde USAID	Child classified with pneumonia				I	Checkmark	E	Count/ Value								E	Count/ Value	
Pneumonia				Elevated Respiratory rate																	
Pneumonia				Child's respiratory rate																	
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Pneumonia	WHO Q±C	mci Us	AID COM-Neu	Child with pneumonia classification prescribed antibiotic					Checkmark	x	Count/ Value	rtap							ž.	Count/ Value	Treateduithe
Pneumonia			_	No pneumonia - cough/cold only				1	Checkmark	K .	Count/ Value								X .	Count/ Value	
Pneumonia	WHO Q⊌C			Dose, frequency & duration of antibiotic prescription																	
Diarrhea	VHO 100		10	Child with diarrhea classification				I	Checkmark										×	Count/ Value	
Diarrhea	VHO 109	USAID		Duration of diarrhea																	
Diarrhea	19401			Blood in stool / Dysentary	×	Cheokmark													×	Count/ Value	
Diarrhea	USAID	CCM-Neu		Child given zinc				I .	Checkmark	E									E	Count/ Value	
Diarrhea		USAID LI	CONTINUE	Child given ORS	×	Checkmark		z .	Checkmark.	×									×	Count/ Value	
Diarrhea	USAID	CCM-neu		Child "treated" for diarrhea	_	reconnect													v	Count/ Value	
Diarrhea	IMOI		_	Child given antibiotic for dysentary		1					1									unit y dive	
	IMCI	_	_			<del>                                     </del>					<del>                                     </del>			_							
	IMCI		_	Child with diarrhea given increased fluids		Checkmark					<del> </del>										
Diarrhea	10401	Countdown	_	Child with diarrhea given continued feeding	E																
Diarrhea Diarrhea			_	Counseling to give sick child continued feeding	×	Checkmark															
Diarrhea Diarrhea Counseling/Advise	IMCI				×	Checkmark														1	
Diarrhea Diarrhea Counseling/Advise	IMCI IMCI			Counseling to give sick child increased fluids																	
Diarrhea Diarrhea Counseling/Advise Counseling/Advise	19401			Counseling caretaker on danger signs (vomit everything;																	
Diarrhea Diarrhea Counseling/Advise Counseling/Advise	19401	P4CI		Counseling caretaker on danger signs (vomit everything;	E	Checkmark															
Diarrhea Diarrhea Counseling/Advise Counseling/Advise	19401	B401		Counseling caretaker on danger signs (vomit everything: convulsions; lethargy, not able to drink)	z																
Diarrhea Diarrhea Counseling/Advise Counseling/Advise	MHO GaC	IMCI		Counseling caretaker on danger signs (vomit everything;	×																

- Perform quality checks on form classification and data element extraction
- Continue follow-up for missing forms and further extraction



# Selected Findings

Photo credit: Karen Kasmauski/MCSP. Kogi State, Nigeria 2018

# Pneumonia: Classification/cases and treatment of children under-five

Key:
In register or sick child recording form
O In summary form

	Child classified with pneumonia/Number of pneumonia cases			nia	Pneumonia treated with antibiotic or Amox/Number of pneumonia cases treated with antibiotic or Amox						
	Con	nmunity	Faci	lity		Con	nmunity	Faci	lity		
Afghanistan		0		0			0				
Bangladesh		0		0							
Burma	*			0					•		
DRC		0		0			0		•		
Ethiopia							0		•		
Ghana		0		0			0				
Haiti		0		0							
India		0		0							
Kenya		<b>O</b> *		0			0				
Liberia		0		0					•		
Madagascar		0		0			0		0		
Malawi		0		0							
Mali		0		0							
Mozambique		0		0			0		•		
Namibia	*			0							
Nepal		0		0			0		0		
Nigeria		0		0			0		0		
Pakistan		0		0							
Rwanda				0			0				
Tanzania				0							
Uganda		0		0							
Zambia		0		0			0				
Zimbabwe	*			0							

# Eight different definitions for pneumonia

Variations	Examples
1. Suspected Pneumonia	Nigeria-c
2. Pneumonia	DRC-c&f, Liberia-f, Tanzania-f, Madagascar-c&f
3. Acute Lower Respiratory Infection (ALRI)	Mali-f
4. Acute Respiratory Infection (ARI)	Haiti-c&f, Pakistan-c, Nepal-c, Afghanistan-c
5. Fast breathing	Ghana-c, Malawi-c
6. Fast breathing/pneumonia	Liberia-c, Uganda-c
7. Cough and fast breathing	Kenya-c
8. Cough and respiratory problems	Pakistan-c

c=community f=facility c&f=community and facility

# Eight different definitions for pneumonia

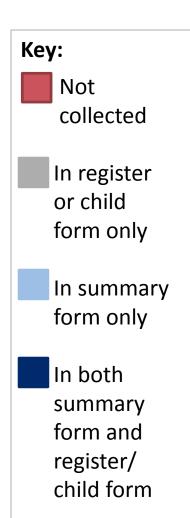
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6. Fast breathing/pneumonia	Liberia-c, Uganda-c
7. Cough and fast breathing	Kenya-c

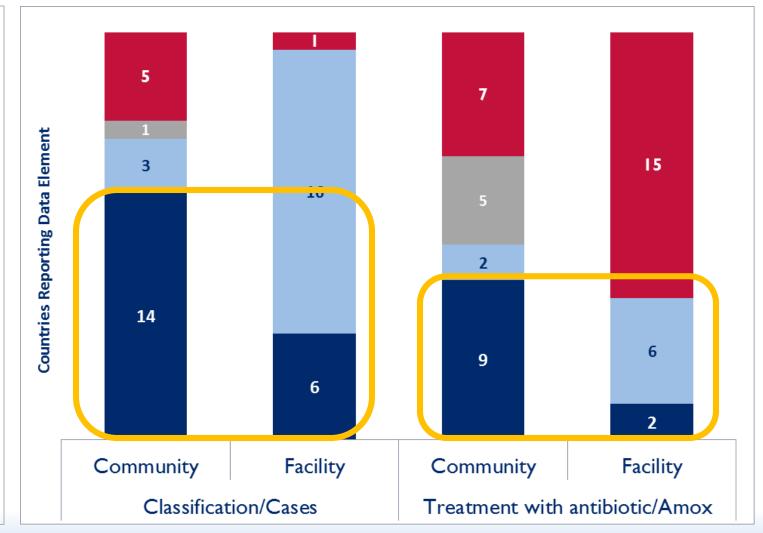
Difficult to compare pneumonia cases consistently across countries and sometimes even within countries

#### Pneumonia

How many cases of pneumonia in children U5 are seen?

How many cases of pneumonia in children U5 are treated with antibiotics?



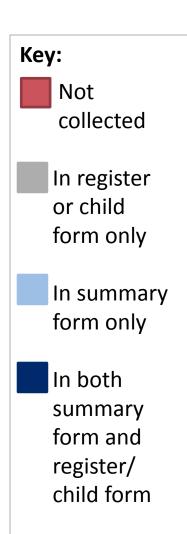


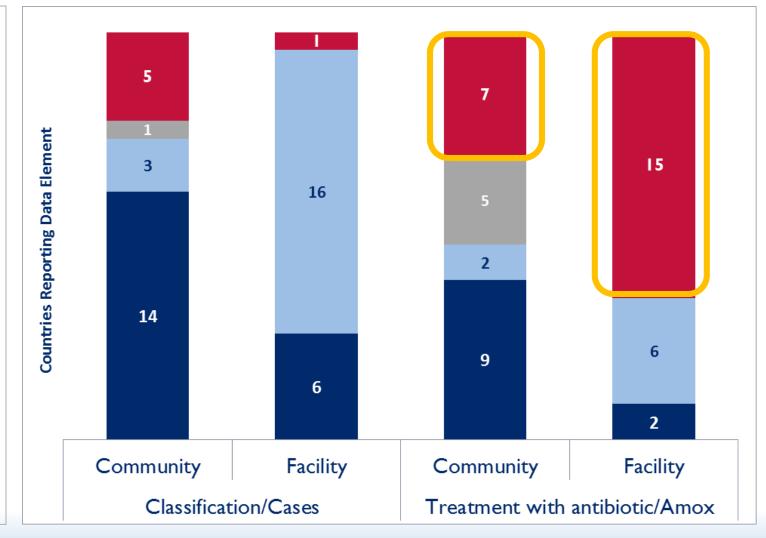
U5: Under five years of age Amox: Amoxicillin

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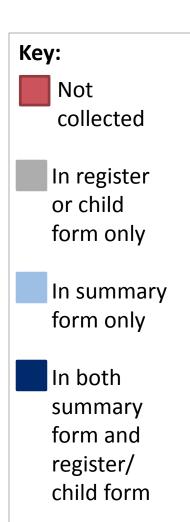


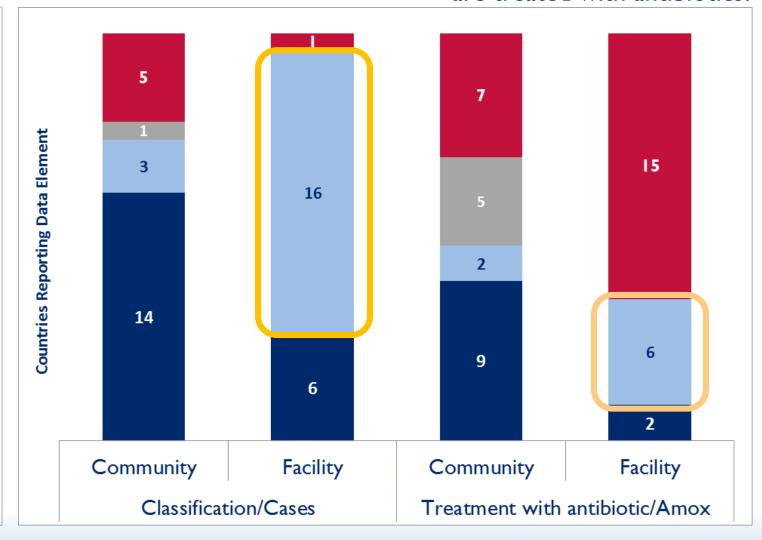
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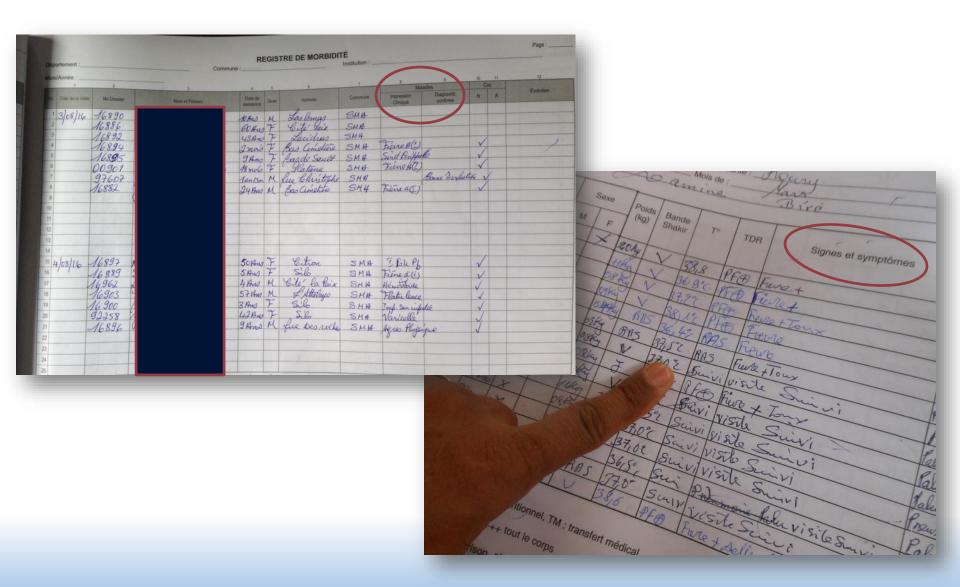
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U5: Under five years of age
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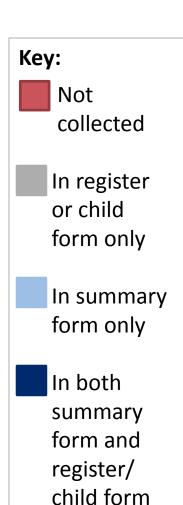
# Example: Open field in registers

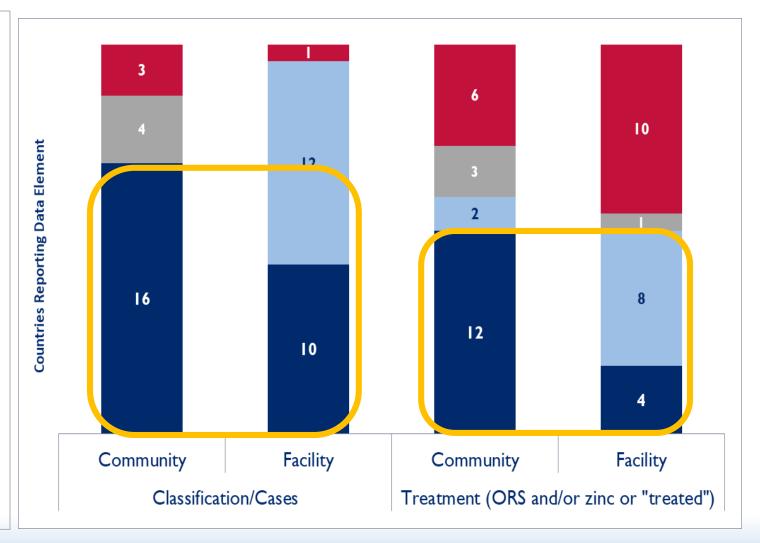


#### Diarrhea

How many cases of diarrhea in children U5 are seen?

How many cases of diarrhea in children U5 are treated?



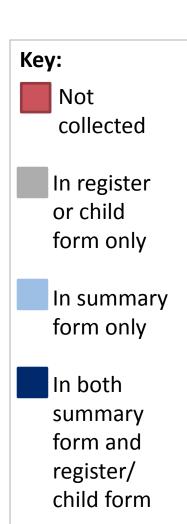


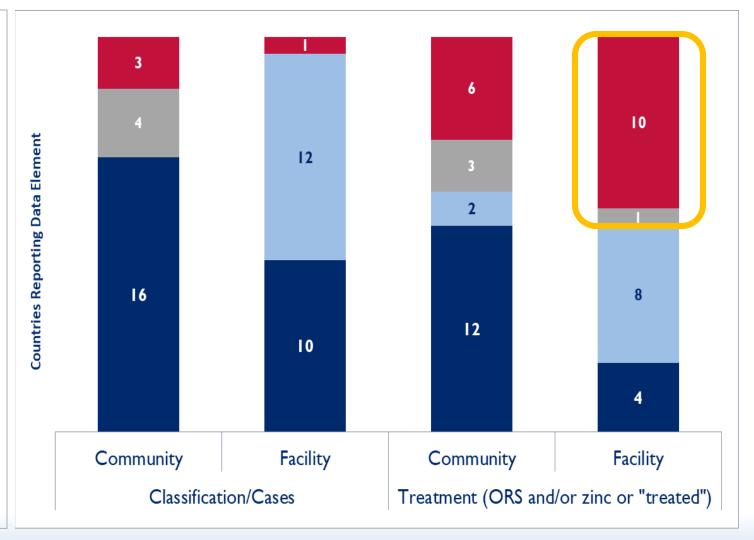
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### Diarrhea

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U5: Under five years of age ORS: Oral Rehydration Salts

## Diarrhea

# How do countries capture U5 diarrhea treatment?

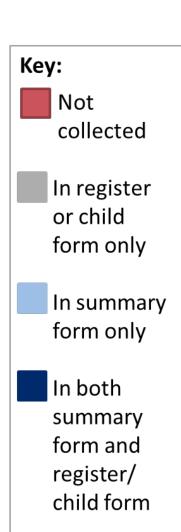
Treatment Data Element	Community	Facility						
No aggregate reporting on diarrhea treatment	9	11						
Diarrhea "treatment" categories								
ORS Disaggregated	6	5						
Zinc Disaggregated	5	3						
ORS/Zinc	2	2						
ORS & Zinc	7	5						
Diarrhea "treated"	6	4						

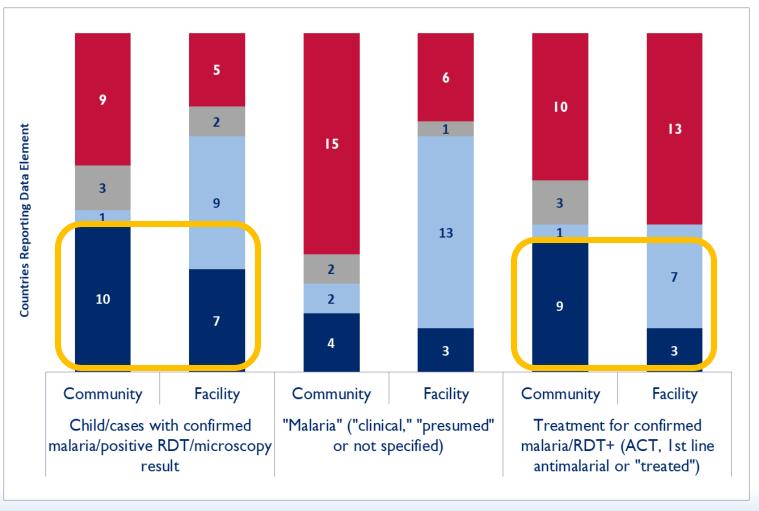
U5: Under five years of age ORS: Oral Rehydration Salts

How many U5 cases have RDT confirmed malaria?

How many U5 cases are diagnosed with clinical malaria?

How many underfive RDT+ cases are treated with an ACT?



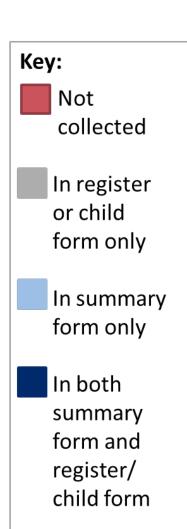


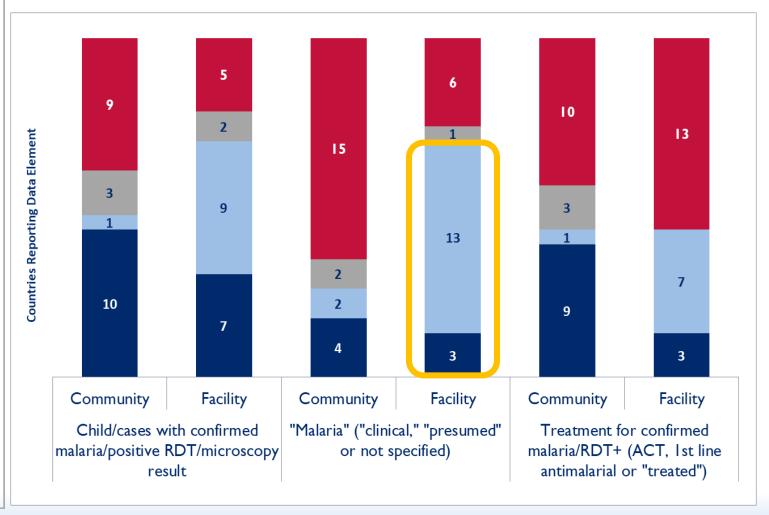
U5: Under five years of age; ACT: Artemisinin Combination Therapy; RDT: Rapid Diagnostic Test **NOTE:** Most malaria data elements collected for children 6-59 months, but some countries collect for children <5 years of age or aged 0-59 months

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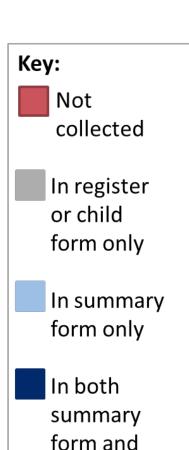
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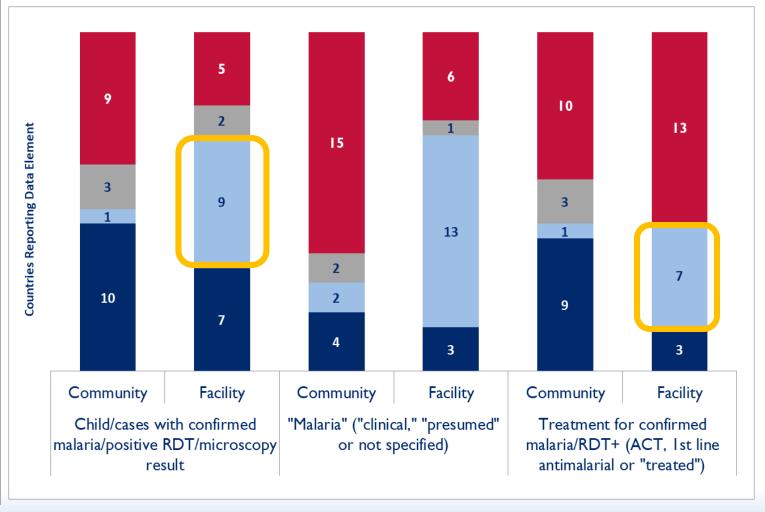
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register/

child form



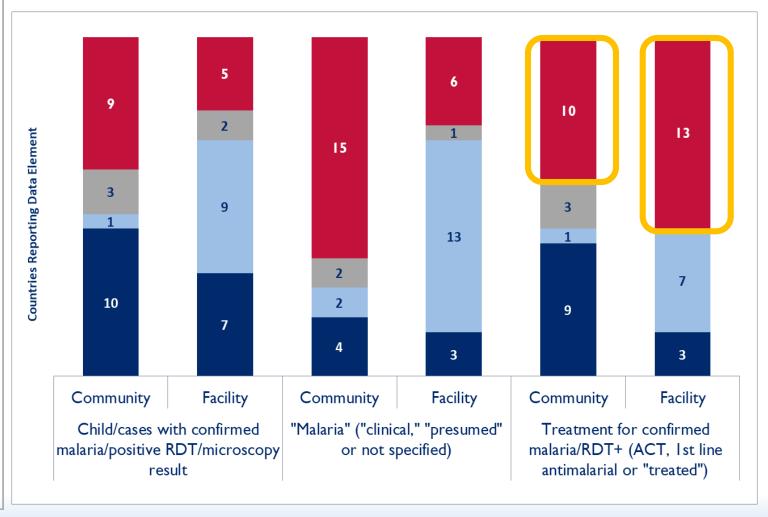
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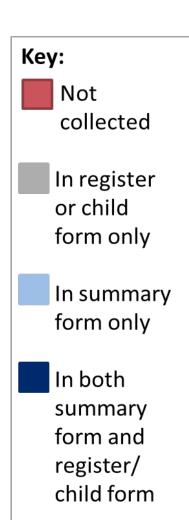
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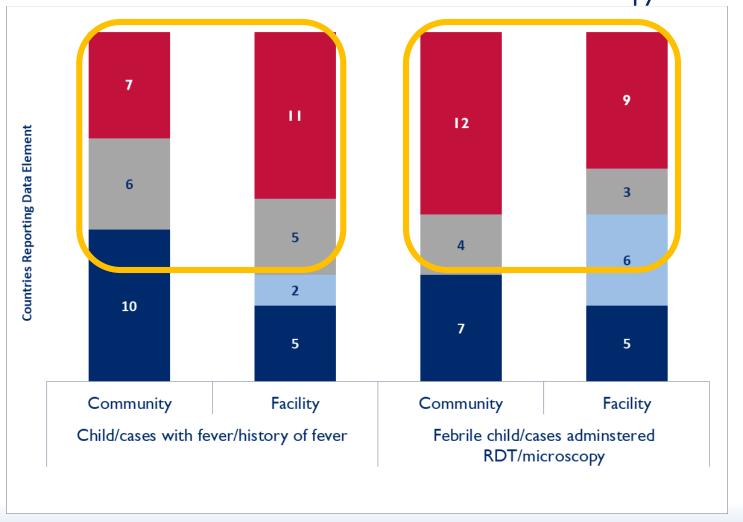
age or aged 0-59 months

child form

How many febrile under-five cases are seen?

How many under-five cases are administered an RDT/microscopy?

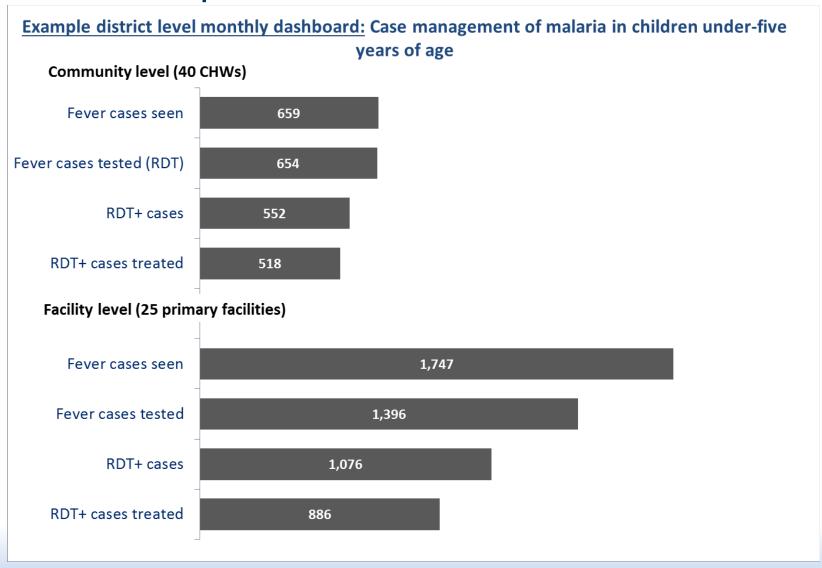




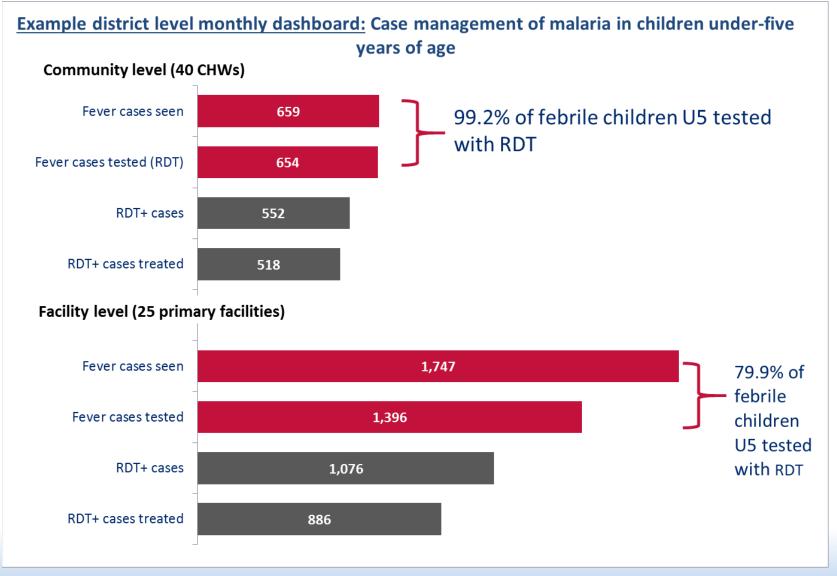
RDT – Rapid Diagnostic Test

**NOTE:** Most malaria data elements collected for children 6-59 months, but some countries collect for children <5 years of age or aged 0-59 months

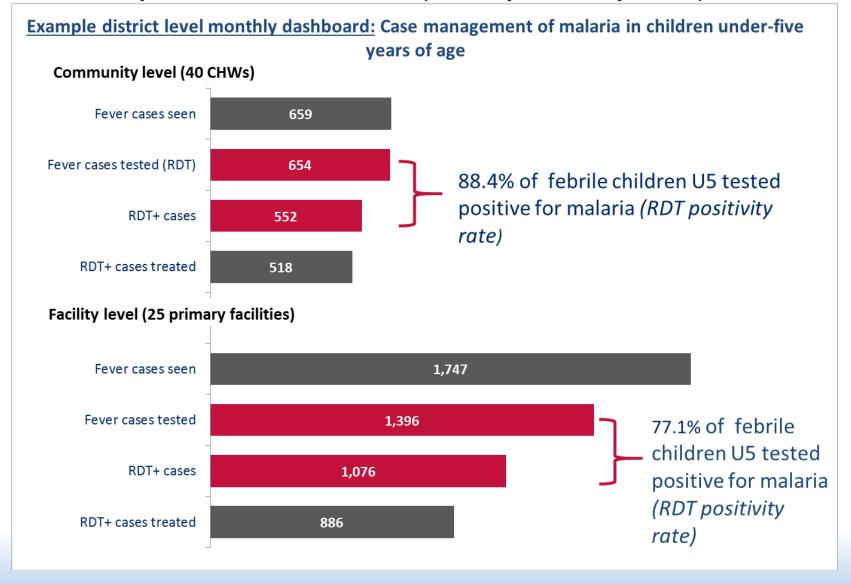
# Example of a district-level dashboard using fever/malaria process and outcome data elements



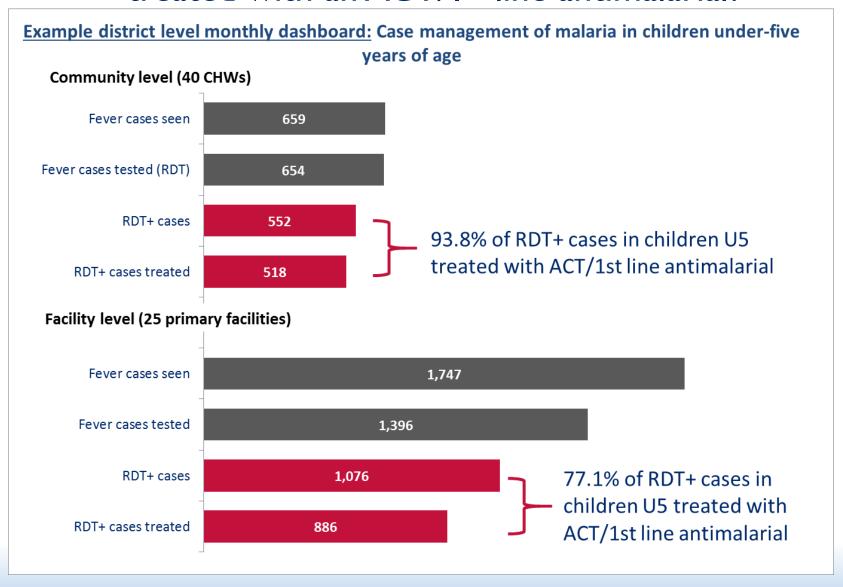
## What percent of fever cases in children under-five were tested with an RDT?



## What percent of tested fever cases in children under-five are positive for malaria (RDT positivity rate)?



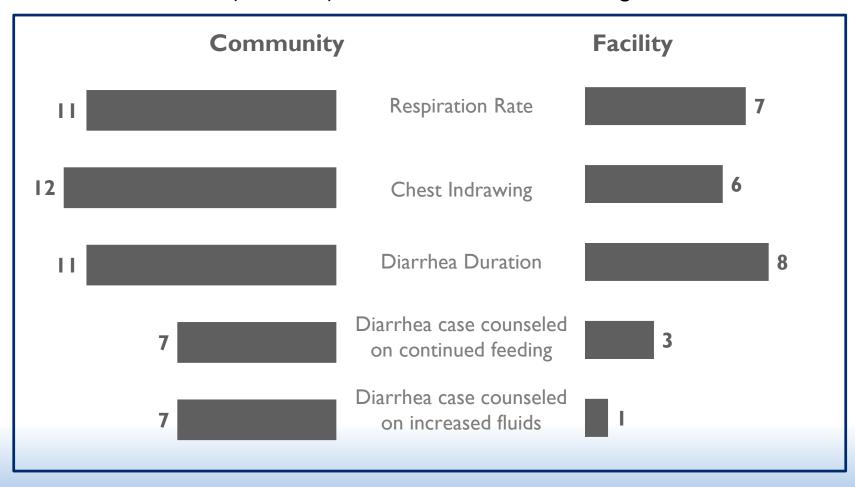
## What percent of RDT+ cases in children under-five are treated with an ACT/Ist line antimalarial?



U5: Under five years of age; ACT: Artemisinin Combination Therapy; RDT: Rapid Diagnostic Test

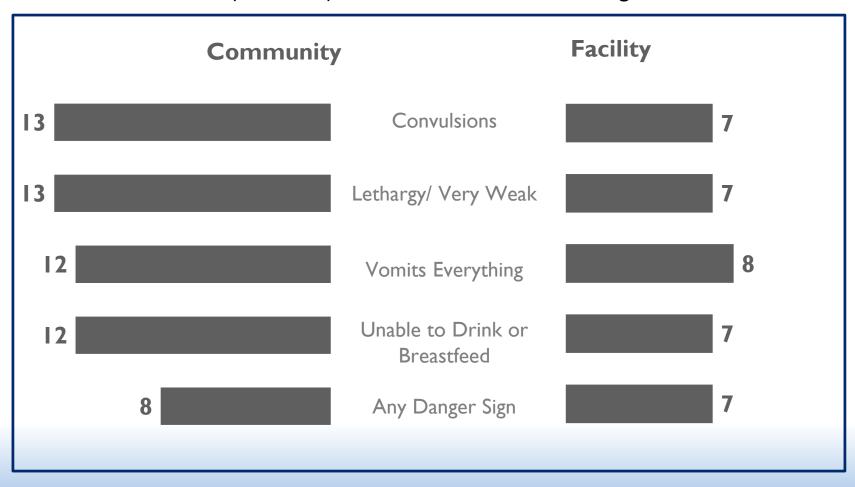
What assessment and counseling steps are community and facility-based workers completing when managing a sick child?

Number of countries (out of 23) with data element in their registers or sick child forms



# What danger signs are community and facility-based workers assessing when managing a sick child?

Number of countries (out of 23) with data element in their registers or sick child forms



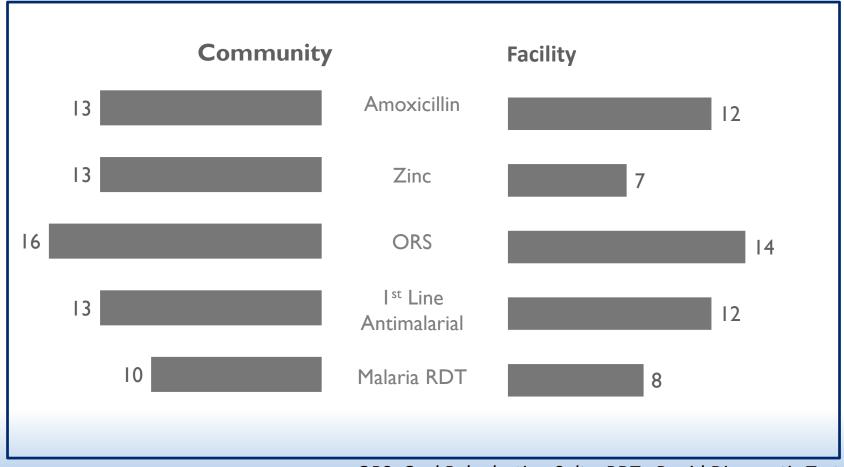
# Job aids to monitor sick child management processes

#### REGISTRE DES ENFANTS AGE DE 2 MOIS ET 5 ANS

Date -	Nom Parents	Age	en mois	raille	NC AC	PI	Plaintes					EVALU	ATION (cochez le si	jne présent, écri	vez ou cochez si n	écessaire) et CLAS	SIFICATION					
Nº d'ordre	Adresse (secteur/Cellule/village)		ove	T <sup>o</sup>	NC AC	ac	ctuelles Sig	gnes Généraux de Danger	Toux et/ou Difficultés Respiratoires	Diarrhée	Fièvre	Rougeole	Problèmes d'Oreill	Anémie	État N	utritionnel		Infection à VIH	Risqu	se de TB		
								Incapable de boire	□Oui, □Non,jours	□Oui, □Non,jours	□Oui, □Non,jours	□Eruption géneralisée	Actuel: □Oui □Non	Påleur palmaire	- Oedeme des deux pier	ds? □Oui, □Non	- Sérologie de l'en	ant: □(+), □(-), □Non disponible	e □Contact avec TPB+			
								u de prendre le sein		□Diarrhée durant 14 jrs ou plus	□Si fièvre depuis 7 jours,	et un des signes suivants:	Passé : □Oui □Non	□Sévère	- Signe de Gravité? ⊟Ou	ii, □Non		ıt ≥ 18 mois? □Oui, □Non	□Toux depuis 14 jours ou			
								Vomit tout Antécédents de	- Respirations par /minute	ou au cours de 3 derniers mois  Sang dans les selles	et présente tous les jours Urines peu abondantes	□toux, □veux rouges.	☐ Douleur d'oreille ☐Écoulement d'oreille	☐ Légère ☐Absente	- MUAC			tion: □(+), □(-), □Non disponibi ère: □(+), □(-), □Non disponibi				
								onvulsions	/minute	□Sang dans les selles □Léthargique/ Inconscient	ou coca-cola	□ecoulement nasal	depuisjours	(pas de pâleur)	□<115mm  □Entre 115 et 125mm		Seroiogie perein  □Pneumonie actu		→ Risque de TB: □Haut			
									☐ Respiration rapide	□Agité/ Irritable	□Hémorragies spontanées	→Rougeole? □Oui, □Non	□Douleur à la pression	(pas oc paca)	□≥125mm			ante actuelle ou dans les 3 mois	□Toux depuis 14 jours or		ement	
			have	************						-		Icérations dans la Bouche	du tragus		- Poids		□Ecoulement d'o	eille actuel ou dans le passé	Amoxycilline pdt 5 jrs			
												Si ulcérations:	☐ Gonflement douloureu		- Taile		□Malnutrition		□Fièvre depuis 14 jours o			
							Mir	République Démo nistère de la Santé Pu	ocratique du Congo blique/Secrétariat Génér	al		□profondes et/ou étendues?	derrière l'oreille			□T/Åge ≤ -3DS	□Tuberculose		Amoxy pdt 5 jrs, GE(-) e			
						Pri	rise en Char	ge Intégrée des Malac	dies de l'Enfant dans la C	ommunauté		pacité de la comée us aux Yeux				□T/Åge entre -2 et -3DS □T/Åge > -2DS	☐Ganglions sur d	eux aires ou plus	<ul> <li>Microscopie, Culture ou</li> <li>RX du Thorax suggestive</li> </ul>			
		FIG	HE IND	IVID	UELLE	DE	PRISE E	N CHARGE COMI	MUNAUTAIRE DE L'	ENFANT MALADE de	0 à 59 mois	us aux reux			LIF/1 > 1203	L11/1ge > 12D3	☐Gonflement des	parotides	- IDR □(+), □(-), □Non di		anui uspo	
	1	1. INFO	RMATIO	NS GI	ENERA	LES													- Sérologie VIH: □(+), □(-		e	
												Rougeole Grave et Compliqué	□ Mastoidite	☐ Anémie Sévère	■ Malnutrition Aiguë Sér	ère avec Complication	☐ Infection VIH C	onfirmée	☐ TB Pulmonaire Bactéri	ologiquement Cor	nfirmé	
	,	N° Fich	e :		Date :		. I I	DPS :	ZS :	AS :		Rougeole avec Complications ux Yeux et/ou à la Bouche	☐ Infection Aiguë de l'Or ☐ Infection Chronique de				☐ Infection VIH P	ssible Ou Exposition Au VIH	☐ TB Pulmonaire Clinique	ement Diagnostiq	ué	
	s	Site de	Soins d	e :			Nom	de la mère/Gardier	1:	Adresse/Village :		ix Yeux et/ou à la Bouche	l'Oreille	□ Pas d'Anemie		rère sans Complication dérée sans Complication	☐ Pas d'Infection		☐ Exposition à la TB ☐ TB Possible			
												Kougeoie	☐ Pas d'Infection d'Orei	e	☐ Malnutrition Chronique		Li Pas d filection	a vei	☐ TB Peu Probable			
	2	IDEN	TIFICAT	ION D	E L'EN	FANT	T MALADE								☐ Malnutrition Chronique	e Sévère						
			III IOAI				IMPLEMENT	-							☐ Pas de Malnutrition							
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		Sexe	: M	10	₹ LF		161	Etat nutritionnel	vert jaune rouge	Enregistré Etat Civil		yeux rouges,	□Écoulement d'oreille	□Absente	□<115mm			ère: □(+), □(+), □Non disponible				
				_	-		~					ecoulement nasal	depuisjours	(pas de pâleur)	□Entre 115 et 125mm		□Pneumonie actu		→Risque de TB: □Haut	, <b>□</b> Faible		
	3	3. PLAI	NTES (C	OCHER	NONS	I ABS	SENCE SIGNE	E ET OUI SI PRESENCE	SIGNE)			tougeole? □Oui, □Non	□Douleur à la pression		□≥125mm			ante actuelle ou dans les 3 mois		u plus malgré trait	ement	
												cérations dans la Bouche	du tragus  Gonflement douloureu		- Poids		□Ecoulement d'o □Malnutrition	eille actuel ou dans le passé	Amoxycilline pdt 5 jrs			
			Cal					Depuis combi	ien de temps	Traitement reçu à dor	micile	Si ulcérations: Elprofondes et/ou étendues?	derrière l'oreille	·	- Taille □P/T ≤ -3DS	□T/Åge ≤ -3DS	☐Mainutrition ☐Tuberculose		☐Fièvre depuis 14 jours o Amoxy pdt 5 jrs, GE(+) e			
	Fié	èvre	a				NON OL	Jou	ırs				1	1					, p y, -2.( / -			
			Qu.	1	_	_						m for Under Five	es (Form 1A) Jol	Aid (v.1, p.1	L)							March 2015
	Die	amhée	-				_					rmation recorded						Data Field	Inform	ation record	≥d	
	DI.	armee			4		NON OL	Jou				ne of the village clinic						Month & Year	Month	& Year of the	report	
				Pol.		10		_				ne of the group village I	nead (GVH) area in wh	ich the village clin	ic is located		ľ	HSA name	Name	of the HSA		
	То	ux ou	hume 6	DIE.		N	NON OL	Jou	irs .			ne of the traditional au	thority (TA) in which t	ne village clinic is l	ocated			Date of reporting	Date o	n which the re	eporting form was complet	ed
			Č	16	3			_				ne of the district in whi	h the village clinic is l	ested				Do you stay in the catch			in the catchment area	
	Au	utres sig	nes (à sp	écifier)	):			Jou	ırs								-	Do you stay in the catchr	NO II I		not live in the catchment a	
	_									100		al number of people wh	o live in the village cli	nic catchment are	а		L	Nearest Health facility	Name	of the health	facility to which the HSA su	ibmits Form 1A
4. SIGNES D'ORIENTATION A RECHERCHER/DEMANDER SYSTEMATIQUEMENT SI OUI, ORIENTER																						
	A	A SIGN	ES GENE	RAUX	DE DA	NGER	2			(Aller au N°11)				CM Cases report summary								
	A. SIGNES GENERAUX DE DANGER				F361	Ĭ	$\neg$ $\square$	3		New cases		Rel	ferrals with danger sig	als with danger signs		Referrals made because of Drug		Deaths (within 7 days of receiving treatment at a village cli		at a village clinic)		
				ele de boire ou de téter			63 Ba		<b>-      </b>	1	NON OUT	35 36-59		2-4 5 - 35	36-59 months	1	2-4	5 - 35 36-59	I	2-4	5 - 35 36-59	TOTAL
	inc	apabie	de boire	ou de	eteter	-8		NON OUT	A convulsé ou d	convulse	NON OUI	ths months		months months	36-59 months	TOTAL	months	months months	TOTAL	months	months months	TOTAL
						W.	1	200	<sup>-</sup>	March 1				Record ose who								
							2		Inconscient ou i				I	had		Add all fever			Add all fever referrals		# with fever who died	
	Vor	mit tou	ce qu'il	conso	mme		8	NON OUT	pas aux stimuli	externes 💮	NON OUT	# with fever		danger	th fever who were	referrals due to	Shaded #	with fever referred due to mRDT stockout	due to mRDT	Shaded	within 7 days of being	Add all deaths treated for fever
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							Es of	A.						eferred								
	_																	with fever # with fever			# with positive mRDT who	Add all deaths
		3. SIGN	ES D'ALE	RTEE	T DE GF	RAVITI	TE	-				th positive mBDT	dd all new cases of positive mRDT.	Shaded	Shaded	Shaded		ferred due referred due to LA 6x1 to LA 6x2	Add all fever referrals due to LA stockouts	Shaded	died within 7 days of being treated with LA at a	treated for
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	Moi	ins de	2 mois				É	NON OU	Pâleur palmair	ire 🔪 🚭	NON OUT		dd all new cases of									
							55		_		A	th negative mRDI	negative mRDT	Shaded	Shaded	Shaded		Shaded		Leave blan	nk. If <u>mRDT</u> is negative, no tro	eatment is given.
	Eta	at nutrit	ionnel R	DUGE	8	7.00	-	***	_	(23)		12-59 months	TOTAL	2- 11 months	12-59 months	TOTAL	2- 11 months	12-59 months	TOTAL	2- 11 mon	ths 12-59 months	TOTAL
					A COL			NON OUI	Comment or all and	do Cara	NON OUI		dd all new cases of # v	with diarrhea and	danger sign who were	Add all diarrhea	# with diarrhoea referred due to ORS		Add all diarrhea		hoea who died within 7 days	Add all deaths
						12			Souvent malad	14	-	uhoca	diarrhoea	refe		referrals due to danger sign	stockout. (Refe	rrals due to zinc stockout not recorded.)	referrals due to ORS stockout.	of being tre	ated with ORS and zinc at a village clinic	treated for diarrhoea
						The state of the s	The state of the s		11	the same of the						dunger sign	are		40000000	# with coug		M06330868
				4 jour	s ou plu	ıs, ou	u fièvre qui	NON OUI	Très affaibli		NON OUI			# with cough &	# with cough &	Add all fast	# with cough 8		Add all fast	respiratory r		
	dur	re 7jrs	ou plus						_	100		# with cough & respiratory rate ≥	dd all new cases of	respiratory rate ≥ 50bpm who were	respiratory rate ≥ 40bpm who were	breathing	respiratory rate 50bpm referre		breathing referrals	50bpm who within 7 day		Add all deaths treated for fast
					1-16	<b>M</b>	MI 0	<b>~</b>	<b>⊣</b>		_	40bpm	fast breathing	referred due to	referred due to	referrals due to danger sign	due to Amoxicil	in to Amoxicillin	due to Amoxicillin stockout	being trea	ted being treated with	breathing
			n difficile			3.6			- 1					danger sign	danger sign	danger sign	stockout	stockout	2005/2000	with Amoxi		
			s costal (	grave			0	NON OUI	Devient plus m	alade malgré les soins	NON OUT					Add all red eye			Add all red eye	at a village o	linic village clinic ye who died within 7 days of	Add all deaths
	ou sifflement			NON			adéquats à don			d eye	Add all new cases of red eye	with red eye who dange	referrals due to	# with red eye re	# with red eye referred due to eye ointment stockout			ted with eye ointment at a	treated for red			
					1	d	2	A Comment	- 1							danger sign		assessed to	ointment stockout		village clinic	eye
														with <b>yellow or</b> red	MUAC score or swelling	ng of both feet who		Leave blank			Blank	Blank
												vere referred	malnutrition		were referred							
										Palmar pallor	# with nalmar nal	or who were referred	dd all new cases of	# with na	lmar nallor who were a	eferred		Leave blank			Leave blank	Leave blank

# What stocks do CHWs and facilities have to manage sick children?

Number of countries (out of 23) with data elements related to stocks in their summary forms



ORS: Oral Rehydration Salts; RDT: Rapid Diagnostic Test

# Illness prevention

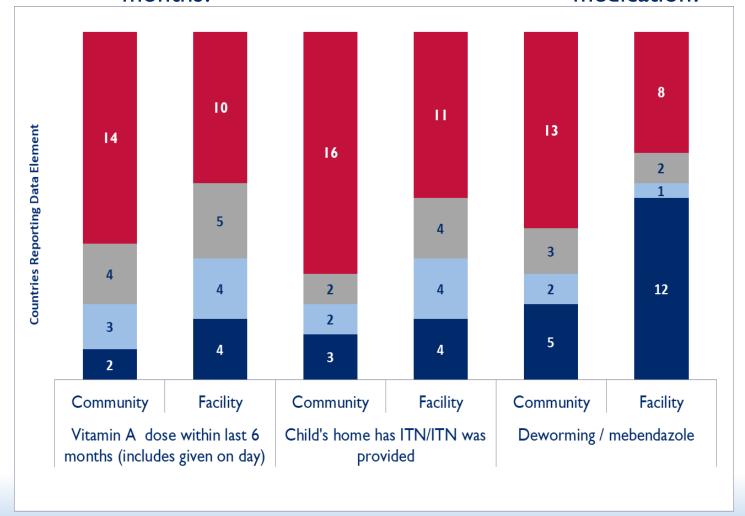
How many children U5 received vitamin A in the last 6 months?

How many children U5 have an ITN in their home?

How many children U5 received deworming medication?

#### Key:

- Not collected
- In register or child form only
- In summary form only
- In both summary form and register/ child form



U5: Under five years of age; ITN: Insecticide Treated Net

#### **Malnutrition**

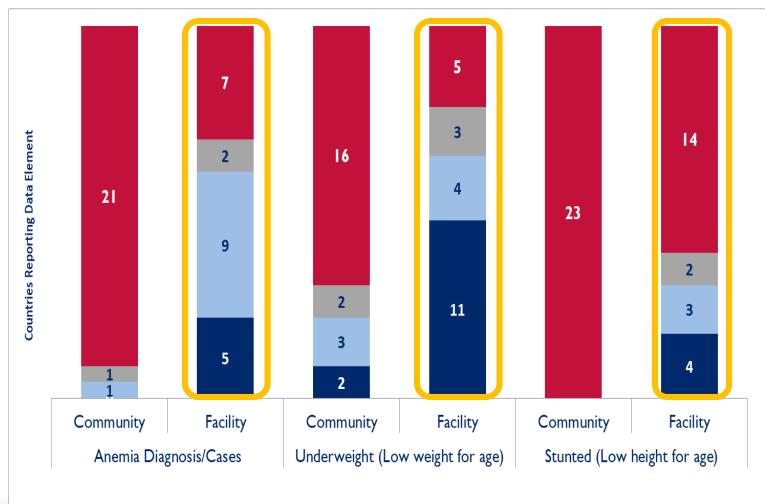
How many U5 children are diagnosed with anemia?

How many U5 children are underweight?

How many U5 children are stunted?



- Not collected
- In register or child form only
- In summary form only
- In both
  summary
  form and
  register/
  child form

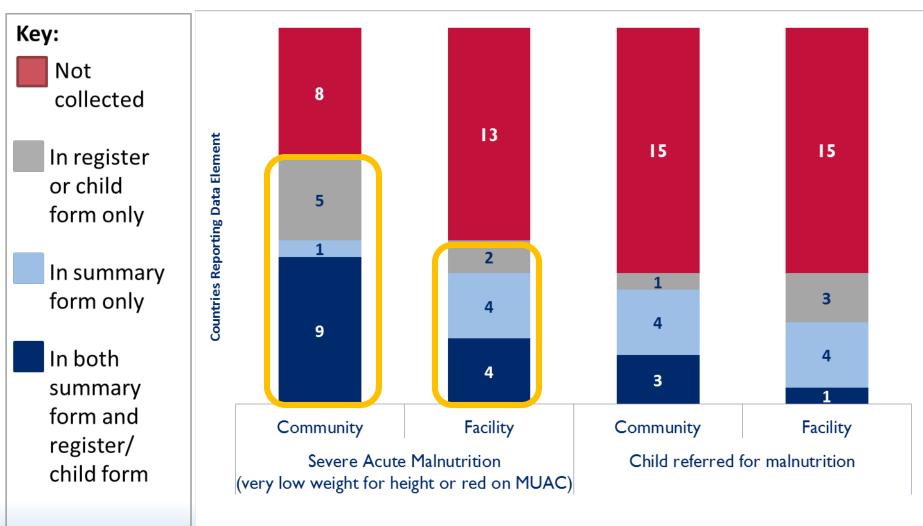


U5: Under five years of age

#### **Malnutrition**

### How many children U5 have severe acute malnutrition?

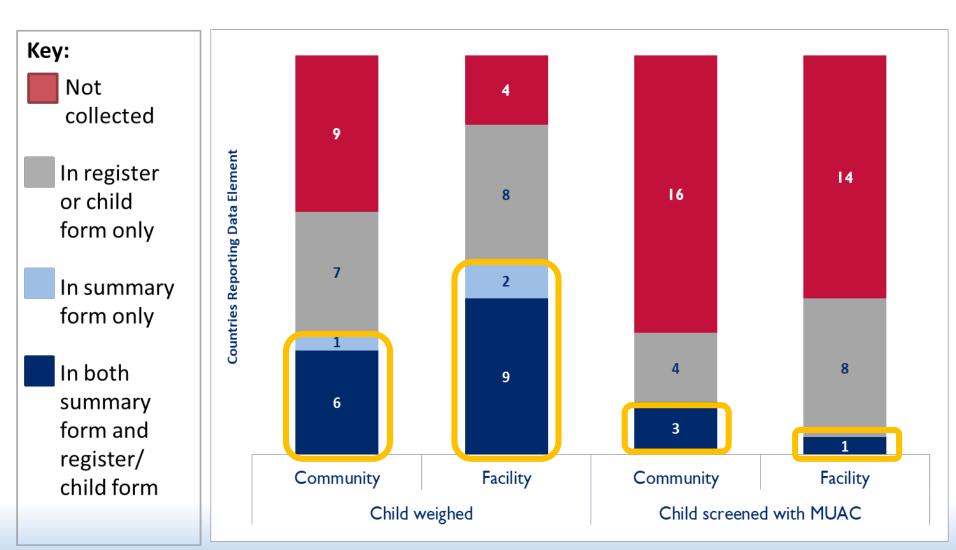
# How many children U5 are referred for management of malnutrition



#### **Malnutrition**

How many children U5 are weighed?

How many children U5 are screened for malnutrition with a MUAC?



U5: Under five years of age; MUAC: mid-upper arm circumference

### Importance of screening data element

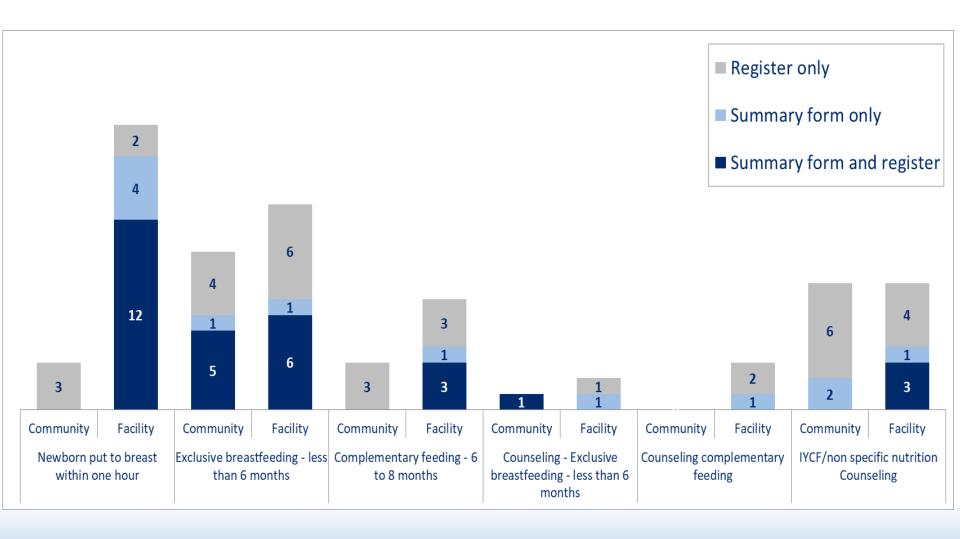
Number of children with severe acute malnutrition (SAM) (MUAC<110 mm)

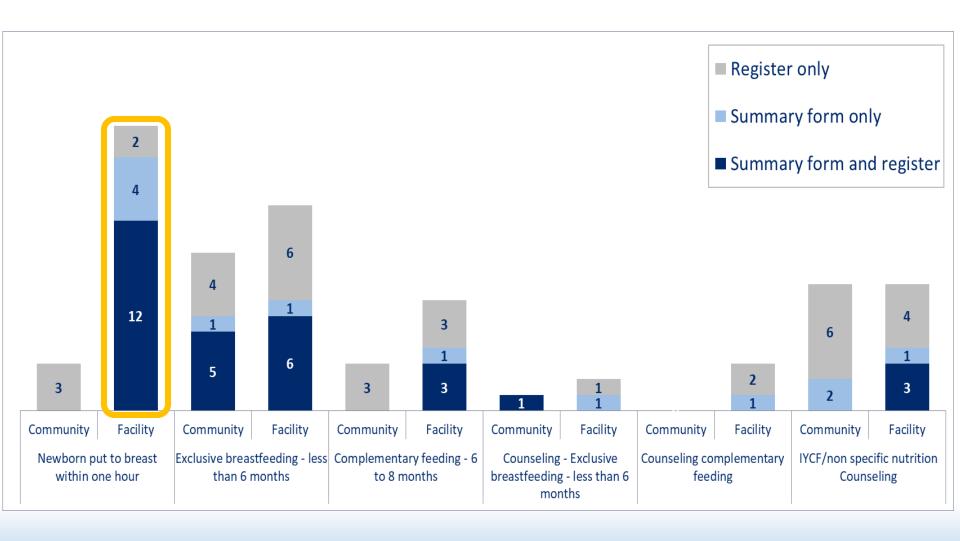
% children 0-5 yrs. of age screened with SAM

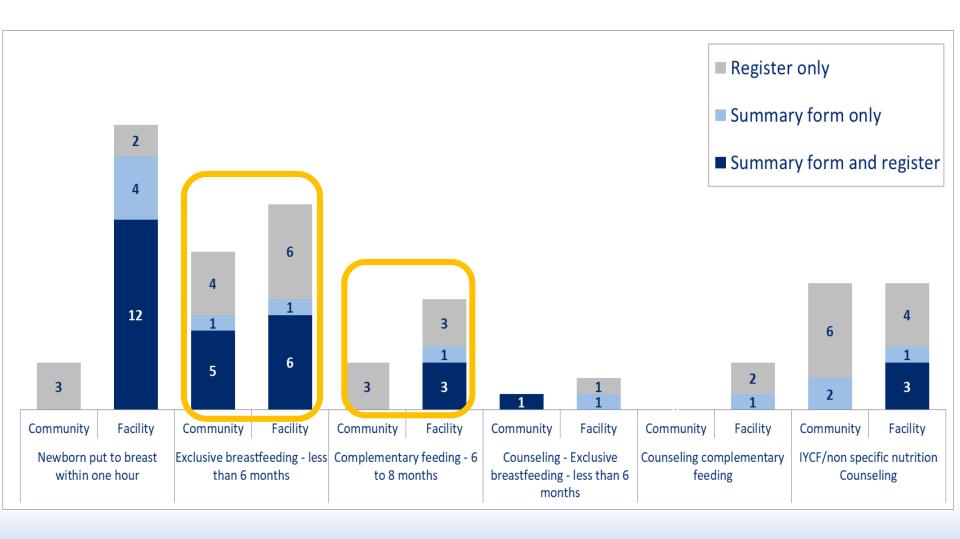
**Child screened with MUAC** 

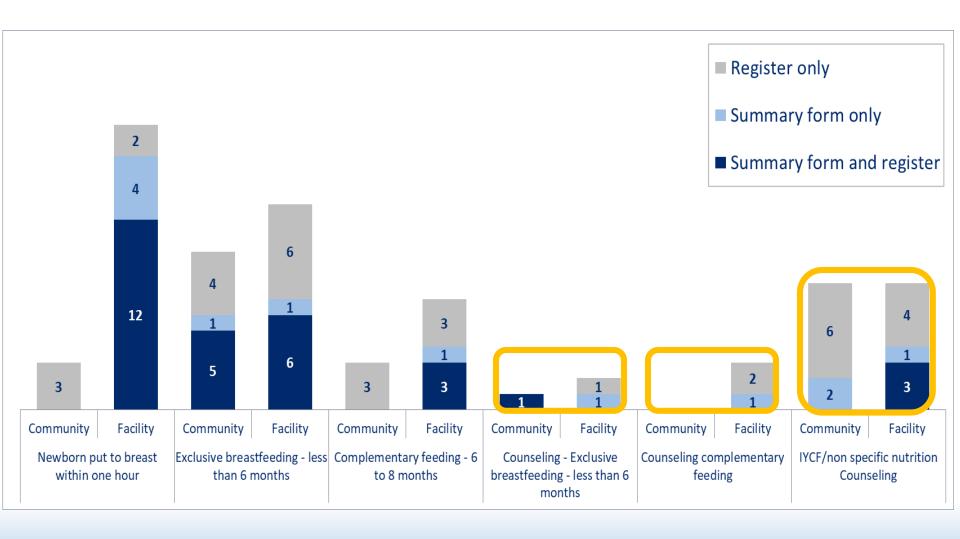
### Importance of screening data element

Number of children with severe acute malnutrition (SAM) (MUAC<110 mm) % children 0-5 yrs. of age screened with SAM Child screened with MUAC % of children 0-5 yrs of age screened for Number of children seen malnutrition









# Examples of Infant and Young Child Feeding practices and counseling data elements

Zimbabwe U5 IMCI register

METH	46.	47. # of	•
45.	Comple-	feeds in	
Breast	mentary	24	
feeding	feeding	hours?	

Kenya CHW summary form



Ghana PNC register

Exclusive breastfeeding (Y/N)\* Bangladesh facility summary form

4	Number of children 0-6 months
5	Number of mothers with children 0-6 months counseled on exclusive breastfeeding
6	Number of children 7-12 months
7	Number of mothers with children 7-12 months counseled on complementary feeding



Summary

### Overview of findings

- Many countries can report on high priority indicators
- Gaps remain in data elements, especially for treatments
- Non-standard or ambiguous terminology and definitions of data elements across levels and forms
- Disconnect between
   registers (source data) and
   summary forms can affect
   data quality
- Data elements in registers can be used to monitor processes, but often missing
- Job aids with algorithms can document important elements to monitor processes



Photo credit: Karen Kasmauski/MCSP. Brickaville, Madagascar 2018

### Strengths and limitations of the review

#### **Strengths**

- Reviewed large number of data elements in many countries across child health and nutrition
- Can inform HMIS revisions at country level
- Can inform global level metrics initiatives, such as Child Health Accountability Tracking (CHAT) and Every Breath Counts

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#### Limitations

- Some data elements may be collected in other registers or forms that were not reviewed
- Only included nationally endorsed forms, but these may not be used in every facility or in private sector
- Ongoing HMIS updates at country level means forms become outdated
- Did not include any information on data quality or completeness

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### The way forward

- Global and country level consensus is needed about what priority data should be collected and available at each level of the HMIS for data use
- Strategic
   investments are
   needed to ensure
   priority data
   elements and
   indicators are
   captured and used
   in national HMIS



Photo credit: Kate Holt/MCSP. Nondwe Iganga, Uganda 2017

### Acknowledgements

MCSP Washington, DC: : Kate Gilroy, Elizabeth Hourani, Tamah Kamlen, Dyness Kasungami, Justine Kavale, Sarah Lackert, Michel Pacqué, Zeenat Patel, Serge Raharison and

**Emily Stammer** 

MCSP country staff who shared forms and answered questions

Ministry of Health and other partners who shared forms and answered questions

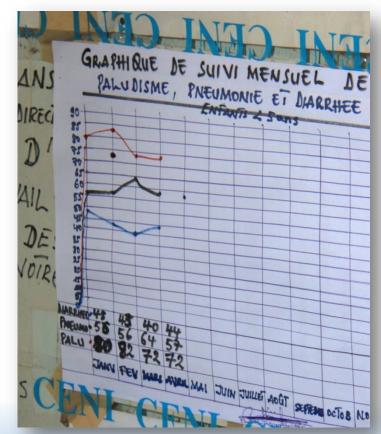
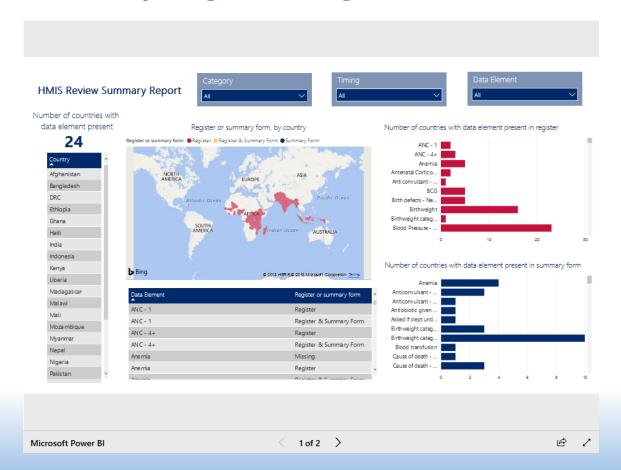


Photo credit: Michel Pacqué /MCSP. Tshopo, DRC 2018

# For the MNH review report and dashboard and forthcoming reports:

https://www.mcsprogram.org/resource/hmis-review/





# For more information, please visit www.mcsprogram.org

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