

THIRTY-THIRD MEETING OF THE RBM PARTNERSHIP SURVEILLANCE, MONITORING, AND EVALUATION REFERENCE GROUP (SMERG)

Venue: Kigali Rwanda 17-20 May 2022

Role of community health workers in malaria surveillance. Practical example of Cameroon

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NMCP- MOH , ,



U.S. President's Malaria Initiative

PLAN

1. CONTEXT
2. OBJECTIVES OF THE NATIONAL STRATEGIC PLAN OF COMMUNITY HEALTH (NSP-CH 2021-2025)

1. WHO ARE THEY?
2. HOW ARE THEY INVOLVED?
3. WHAT ARE THEY REPORTING ON ?
4. HOW ARE THEY REPORTING ?
5. WHAT ARE THE METRICS OF ASSESSING THEIR PERFORMANCE IN CONTRIBUTING THE MALARIA SURVEILLANCE SYSTEM?

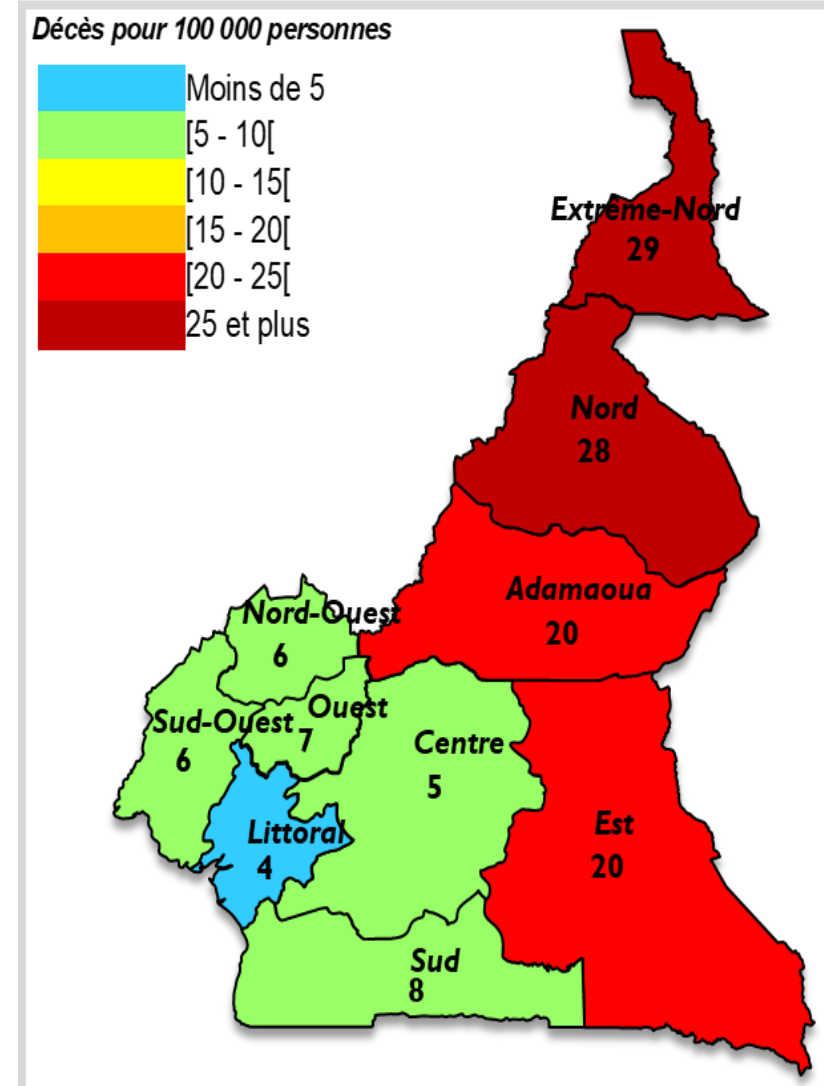
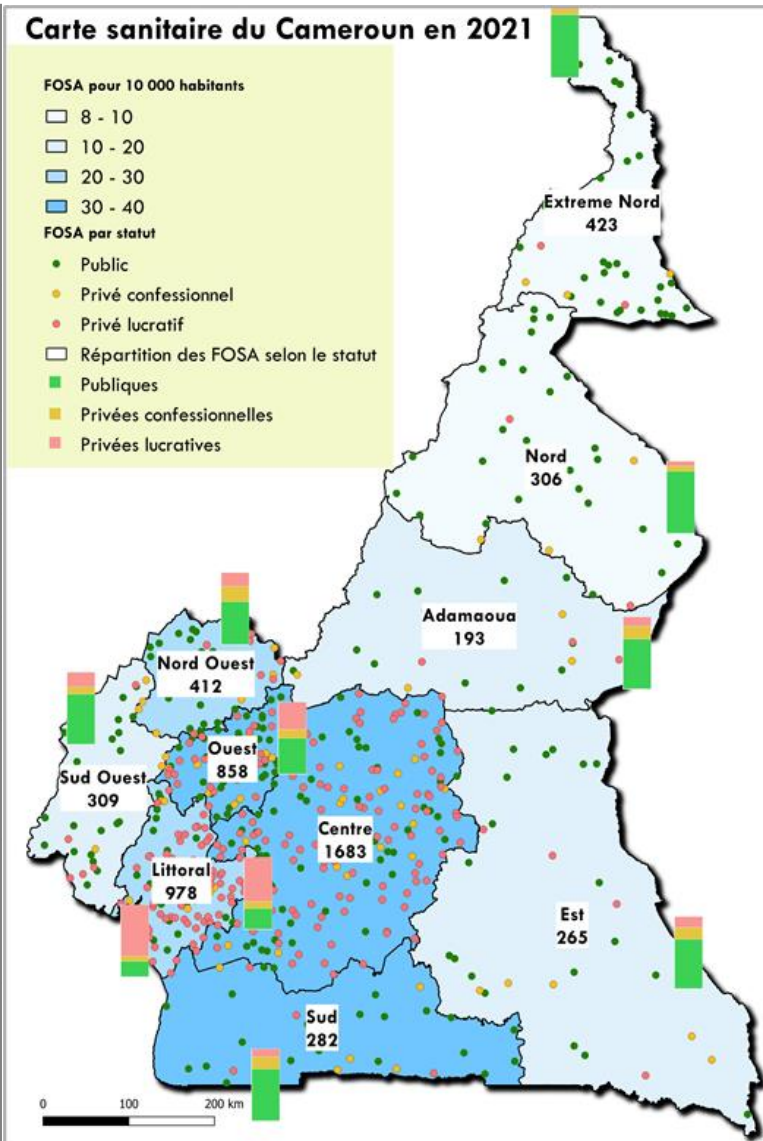
1. SWOTT ANAYSIS
2. CONCLUSION



Context (1/ 3)

Health map

Estimated population	27 076 679
Surface area (Km ²)	475 442
Density (inhabitant/ Km ²)	55
Number of regions	10
Number of Health District	197
Number of health area	1 795
Nombre of health facilities in the caountry	6 124
Number of health facilities treating malaria	5 795
8738 CHWs in 127 District and 1155 Health areas	

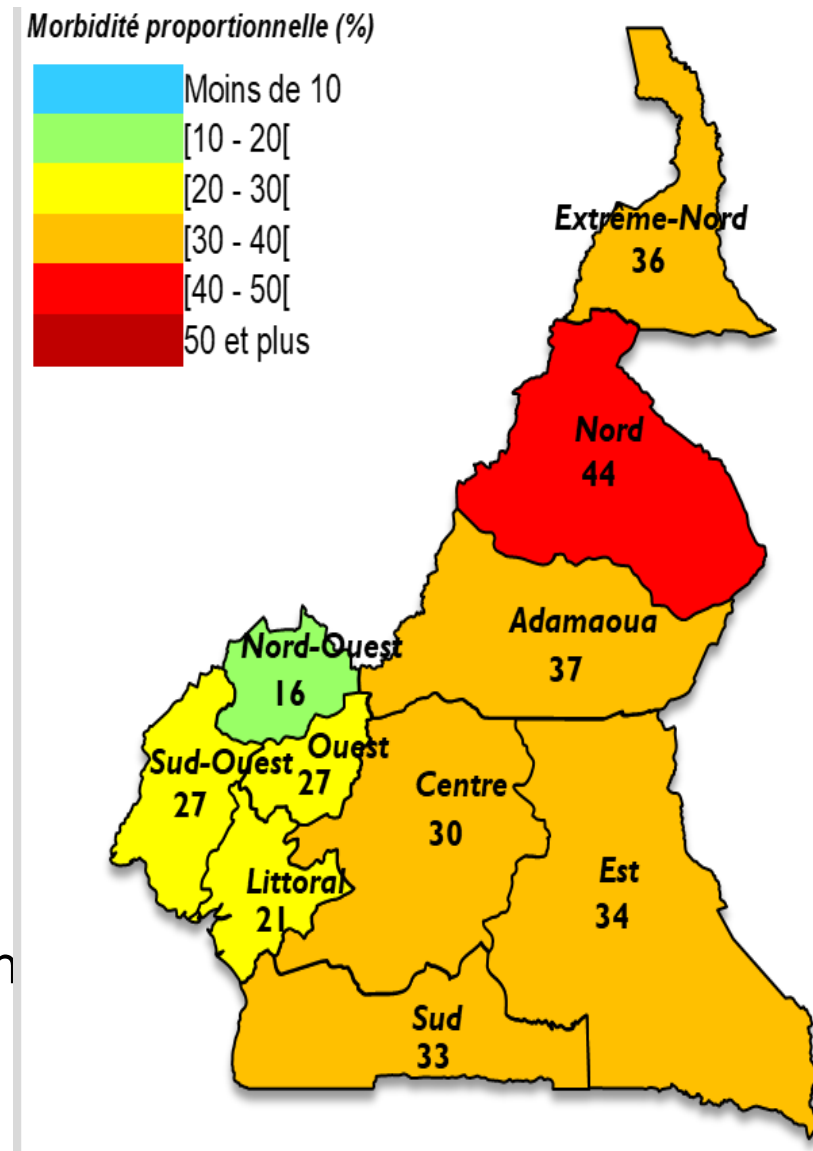


Context (2/3)

Malaria: Main cause of morbidity and mortality in Cameroon.

Epidemiological situation:

- Prevalence rate (24% in 2018 vs. 30% in 2011, DHS)
- 29.6% of the reasons for consultation (PNLP 2021 Report);
- 17.2% of deaths in the country's health facilities;
- **3,069,649** confirmed malaria cases reported out of **10,353,739** consultations for illness;
- **3782** malaria-related deaths out of **27,975** deaths in health facilities
- Cameroon is among the 11 countries with the highest malaria burden in the world (WHO)



Context (3/3)

- Insufficient human, financial and material resources ,
- Low involvement of beneficiaries in the management of health problems in the community
- Insuficeint use of health services , and poor access to health care by community members, worsen by insecurity in certain regions , Covid 19

Need to involve the community for better results :

- Many programs have set up vertical community-based activities
- Implementation of integrated CDI by polyvalent CHWs since 2016
- In 2021, **availability of a National Strategic Plan for Community Health (NSP-CH) 2021- 2025** with the support of several development partners, + a "**case investment Case**" , Implementation of community-based surveillance

Goal and objectives of the NSP-CH:

- **GOAL** "to lay the foundation for the sustainability of the CDIs in order to sustainably improve the performance indicators of the Public Health Programs, in particular those of maternal and child health, control of the priority diseases and conditions including NTDs, and general population health in all communities in the Health Districts of Cameroon”.
- The overall objective is to "Contribute to the reduction of morbidity and mortality with the full participation of communities in all Health Areas and Health Districts of Cameroon by 2025 ».

Five strategic axes which are:

1. Strengthening the institutionalization and governance of community health interventions
2. Improving the supply of quality community health services
3. Communication for development in favor of community health;
4. Strengthening monitoring and evaluation and operational research on community health interventions;
5. Strengthening access to quality health care for vulnerable and key populations, including community health care with a gender and human rights perspective.



By 2025, 80% of community signals are captured and reported through the event-based monitoring system.

Community based surveillance

General Objective :

- ✓ Availability of information for Public Health use

Specific Objectives:

- ✓ To evaluate the interventions implemented and the progress made in the implementation of the program and/or the organized response including mass campaigns
- ✓ To reduce malaria morbidity and mortality
- ✓ To produce information on malaria incidence and mortality (informed planning, monitoring and evaluation of control interventions)
- ✓ Detect sudden or long-term changes in the occurrence of malaria

To strengthen event-based monitoring, the NSP-CH has planned the following:

1. Capacity building of community actors (CHWs, chief of health area) in community-based surveillance;
2. Designing/production of tools for community based surveillance and making them available to all CHWs in the health areas.
3. Establishment of an electronic alert and notification system for signals captured at the community level by the CHW;
4. Involvement of recognized traditional healers and traditional birth attendants implicated in Social behavior change in all Districts and Health Areas.

WHO ARE THEY ?

Eligibility of the CHW

- Reside in the community;
- Be available;
- Be at least 30 years old and no more than 60 years old;
- Be able to express themselves in the local language(s);
- Be of good character and reputation;
- Have a sense of responsibility and leadership;
- Ability to communicate, convince and persuade;
- Ability to learn and adapt;
- Physical ability to perform the duties of the position
- Ability to read/write French or English is an asset;
- Have a source of income.

Practicing health professionals (e.g., doctors, nurses) are not eligible to be CHWs. .

HOW ARE THEY INVOLVED ? (1/5)

Approche based on integration :

- Concept already tested by several countries)
- Provides an integrated package of services at the community level for the benefit of child and mother for the promotion of Essential Family Practices
- By a single CHW or a group of trained CHWs selected in the community, by the community, with the support of health personnel
- Avoid multiplicity of isolated CHWs in the same community
- Avoids competition between programs
- Strengthens the CHW-community interface and involves the community in monitoring the performance of these CHWs, Bring health staff closer to the community they serve
- The selection process is participatory and includes community members, the district management team and the chief of health areas

HOW ARE THEY INVOLVED ? THE TRAINING (2/5)

Training : By Ministry of Health and partners

- Training of trainers in 5 days, recycling every 2 years;
- Integrated training, DS level by trained trainers;
- 19 modules: including prevention of COVID 19, gender and human rights, surveillance, ...
- Initial training is done in 10 days in a row;
- Update based on lessons learned: sequential sandwich; classroom theory and community immersion practice;
- On-site training, facilitation during supervision, refresher training every 2 years (5 days).



HOW ARE THEY INVOLVED? MINIMUM PACKAGE (3/5)

Minimum package of activities

- Health promotion activities (FP, EPI, C4D);
- Disease prevention activities (WASH, STI/HIV, TB,...);
- Curative activities and therapeutic follow-up (malaria, ARI, simple diarrhea);
- Surveillance activities , monitoring and evaluation (reporting).

These activities are divided into several tasks



HOW ARE THEY INVOLVED? ACTIVITIES (4/5)

Activities	frequencies	Thematic package to be delivered
Home visit	1 per week; Visit 10 homes	C4D according to target
Case management	Continue	Malaria, diarrhoea, Accute resp Infection
Educative talk	1 session / month	HIV, Malaria, Diarrhoea, ARI, Malaria, TB, Nutrition, vaccination WASH etc.
Search for irregular and lost to follow-up patients	Continue	TB, ANC, Vaccination, HIV
Reference of cases	Continue	HIV, Malaria, Diarrhoea, ARI, Malaria, TB, malnutrition, etc.
Reports writting and submission	Monthly	Collection, analysis compilation decision taking
Surveillance Community diagnosis	In the begining and every two years	Head count;collection of baseline data community vulnerability mapping development, an action plan Collection and analysis of data monthly fordécision making

HOW ARE THEY INVOLVED? Supervision of the CHWs (5/5)

Administrative supervision ;

- By the District civil society organization or the Council

Technical supervision :

- By the Chief of health area of the main health facility
 - 40 integrated indicators of the Community health intervention: (32 under the responsibility of the CHW and 8 under the responsibility of the community surveys)
 - Regular supervision of CHWs, availability of drugs and good management of the resources generated by the sale of medicines.
- Chief of health area continue ensuring the integration of CDI data into the monthly activities report of the health facilities and the DHIS2;
- They share the data from the CHW reports with the HDs.

HOW ARE THEY REPORTING ? : Collection , validation, transmission (1/3)

Level	Main Actions
CHWs	<ul style="list-style-type: none">• Filling of the activity forms• Filling of the the summary sheets
Chief of health area and DCSO	<ul style="list-style-type: none">• Verification of CHWs data (DCSO)• Validation of the monthly report of the CHWs (Chief of health area)• Monthly reports are sent to the district level
Health District	<ul style="list-style-type: none">• Verification, quality control and validation of data from the monthly report forms of the health facilities and chief of health area• Data entry in DHIS2
Regional delegation of Health	<ul style="list-style-type: none">• Quality control and verification of the data entered at the district level• One copy of the data is transmitted to the regional SR• Quality control of data transmitted by the DCSO, Compilation,
Departement charge of Information system	<ul style="list-style-type: none">• Quality control and verification of completeness and consistency• Data extraction for the MSP and SR• One copy is send to the PR
Sub recipient	<ul style="list-style-type: none">• Consolidates data and adds data not captured by DHIS2 to produce the quarterly report• Reports to PR quarterly

HOW ARE THEY REPORTING ?(2/3)

Data Collection and Reporting

- Collective and Monthly on the monthly summary sheet

Variables :

- No. of suspected cases of simple malaria
- No. of suspected cases tested (RDT)
- No. of confirmed cases of simple malaria
- No. of confirmed cases of uncomplicated malaria treated according to national guidelines
- No. of referred cases (severe malaria ...)

Data are transmitted through : NHIS

CHWs → C HA /DCSO → HD →Regional delegation →central level

Analysis and interpretation of data

- Analysis and interpretation of data not yet done at the community level
- The analysis is done at the higher level after notification (Health District or Region)
- Data transmitted through: NHIS (DHIS2)
- Data quality assurance through data validation and data audits;
- Interpretation of data during monthly validation workshops;
- Feedback to CHWs through supervision

WHAT ARE THEY REPORTING ON? Tools (1/3)

Elements of community-based malaria surveillance:

Includes the collection, analysis, interpretation, and dissemination of malaria data for decision making

Tools

- Registers: Under 5 years, Over 5 years
- Referral/counter-referral form
- Longitudinal mother/child follow-up sheet
- Monthly follow-up sheet
- Monthly summary sheet
- Needs expression form
- Household count sheet
- Home visit form

In the pilot sites (automatic data) (7 HDs) (UNICEF)

- In addition to the tools, tablets and community monthly report forms for the collection
- Integration into DHIS2

WHAT ARE THEY REPORTING ON? Community monthly report form (3/3)

RÉPUBLIQUE DU CAMEROUN

Paix-Travail-Patrie

MINISTÈRE DE LA SANTÉ PUBLIQUE

SECRETARIAT GÉNÉRAL

CELLULE DES INFORMATIONS SANITAIRES



MINSANTE

REPUBLIC OF CAMEROON

Peace-Work-Fatherland

MINISTRY OF PUBLIC HEALTH

SECRETARIAT GENERAL

HEALTH INFORMATION UNIT

RAPPORT MENSUEL D'ACTIVITÉS DES AGENTS DE SANTÉ COMMUNAUTAIRE (RMA-ASC)

I. INFORMATIONS GÉNÉRALES

Année		Mois	
Date de remplissage	___ / ___ / ___	District de Santé	
Région		Aire de Santé	
Département		Villages	
Commune		Quartiers	
Noms et Prénoms de l'ASC		Nom FOSA d'attache	
Sexe	M F		
Numéro de téléphone de l'ASC			
Partenaires de mise en œuvre			

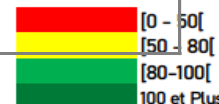
WHAT ARE THE METRICS OF ASSESSING THEIR PERFORMANCE IN CONTRIBUTING TO THE MALARIA SURVEILLANCE SYSTEM? (1/5)

Indicators:

- Completeness, timeliness, reporting rate.
- Number of people seen for health problems
- Proportion of suspected malaria cases submitted for parasitological testing in the community
- Number of RDTs performed by CHWs
- Number of simple cases confirmed by RDT
- Proportion of simple malaria cases among illnesses received by CHW

WHAT ARE THE METRICS OF ASSESSING THEIR PERFORMANCE IN CONTRIBUTING TO THE MALARIA SURVEILLANCE SYSTEM?: Reporting rate in 2021 (2/5) (NMCP report, 2021)

Region	Number of CHWs	Number of awaited reports froms CHWs	Number reports received	Reporting rate	Percentage of districts with a reporting rate inférieur to 80%
Adamaoua	415	2 490	2 450	98%	0%
Centre	733	4 398	4 048	92%	0%
Est	341	2 046	1 922	94%	0%
Extrême-Nord	821	4 926	4 897	99%	0%
Littoral	530	3 180	2 865	90%	0%
Nord	533	3 198	3 186	100%	0%
Ouest	242	1 452	1 447	100%	0%
Sud	175	1 050	824	78%	
Ensemble	3 790	22 740	21 639	95%	0%

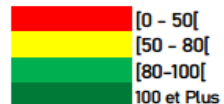


(WHAT ARE THE METRICS OF ASSESSING THEIR PERFORMANCE IN CONTRIBUTING TO THE MALARIA SURVEILLANCE SYSTEM?: Reporting rate in 2021 (3/5) (NMCP report 2021)

Région	Nombre de cas de fièvre rapportés (Femmes enceintes exclues)	Nombre de cas testés par les ASC à l'aide des TDR	Proportion de cas de fièvre testés par les ASC	Nombre de cas confirmés par TDR	Taux de positivité des TDR	Nombre de cas de paludisme simple traités par les ASC avec ASAQ	Nombre de cas de paludisme simple traités par les ASC avec AL	Pourcentage de cas de paludisme simple traités par les ACT	Nombre de cas référés
ADAMAOUA	35 445	31 513	88,9%	26 676	84,7%	18 373	6 882	94,7%	5 882
CENTRE	25 311	18 997	75,1%	16 705	87,9%	9 005	5 941	89,5%	4 349
EST	20 111	13 110	65,2%	10 851	82,8%	5 459	5 120	97,5%	5 269
EXTREME-NORD	126 209	99 781	79,1%	77 917	78,1%	775	73 736	95,6%	21 318
LITTORAL	16 745	12 896	77,0%	10 193	79,0%	5 098	3 739	86,7%	3 132
NORD	81 614	66 633	81,6%	54 954	82,5%	208	52 903	96,6%	16 299
NORD-OUEST	25 125	20 321	80,9%	12 865	63,3%	9 616	2 977	97,9%	6 588
OUEST	31 870	29 272	91,8%	25 301	86,4%	10 229	14 209	96,6%	5 179
SUD	6 215	5 300	85,3%	4 793	90,4%	2 868	1 625	93,7%	763
SUD-OUEST	33 573	29 903	89,1%	25 398	84,9%	18 474	7 390	101,8%	5 589
CAMEROUN	402 218	327 726	81,5%	265 653	81,1%	80 105	174 522	95,8%	74 368

WHAT ARE THE METRICS OF ASSESSING THEIR PERFORMANCE IN CONTRIBUTING TO THE MALARIA SURVEILLANCE SYSTEM?: Reporting rate in 2021 (4/5) (NMCP report 2021)

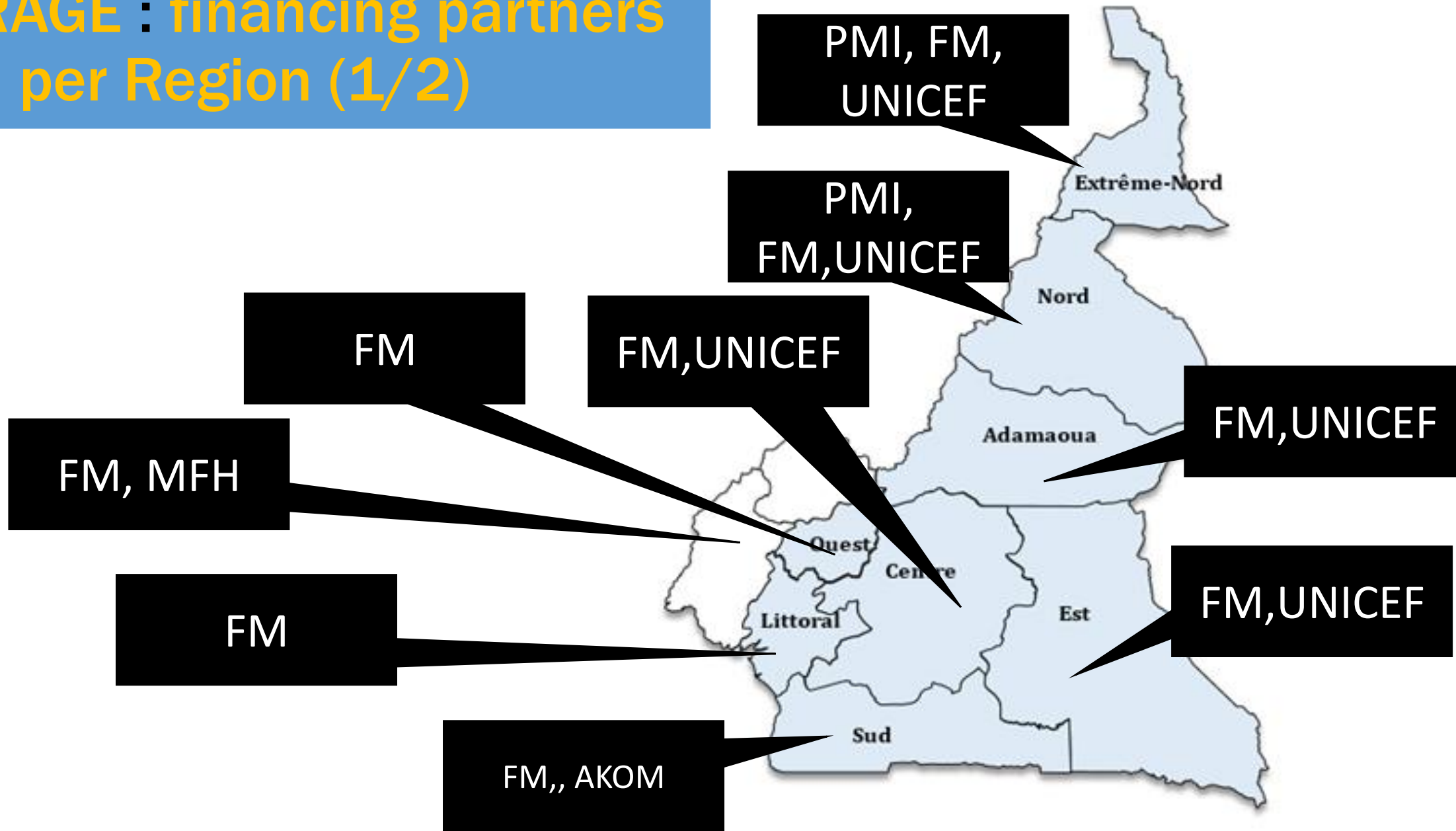
reporting rate	completeness of suspected cases	Completeness of tested suspected cases	Completeness of confirmed cases	Completeness of treated confirmed cases	Completeness of advocacy data	Completeness of home visit data	Completeness of educative talk data
98%	100%	100%	100%	100%	91%	100%	100%
92%	98%	90%	89%	72%	53%	100%	100%
94%	98%	95%	95%	93%	83%	100%	100%
99%	100%	99%	99%	98%	77%	100%	100%
90%	98%	79%	77%	69%	98%	100%	100%
100%	100%	99%	99%	99%	85%	100%	100%
100%	100%	100%	100%	100%	84%	100%	100%
78%	98%	95%	95%	94%	74%	100%	100%
95%	99%	94%	94%	89%	79%	100%	100%



WHAT ARE THE METRICS OF ASSESSING THEIR PERFORMANCE IN CONTRIBUTING TO THE MALARIA SURVEILLANCE SYSTEM?: Comparison SR data base and DHIS2 in 2021 (5/5)

Region	Number of CHWs	Cas suspects			Cas testés			Cas traités		
		Value DHIS2 (A)	Basic Value OSCD (B)	Relatif gap	Value DHIS2 (A)	Basic value OSCD (B)	Relatif gap	Value DHIS2 (A)	Basic value OSCD (B)	relative gap
Adamaoua	415	16 588	20 933	21%	14 897	19 304	23%	12 227	15 968	23%
Centre	733	13 963	41 708	67%	10 639	36 624	71%	7 979	28 847	72%
Est	341	8 304	12 095	31%	6 030	9 693	38%	4 992	8 366	40%
Extreme-Nord	821	42 656	47 350	10%	36 186	40 409	10%	28 550	31 670	10%
Littoral	530	6 875	12 006	43%	4 115	6 545	37%	2 881	4 502	36%
Nord	533	29 022	33 099	12%	25 550	28 263	10%	21 737	25 407	14%
Ouest	242	18 034	20 296	11%	16 429	18 694	12%	13 612	15 835	14%
Sud	175	2 890	5 043	43%	2 348	4 401	47%	2 039	3 792	46%
Ensemble	3 790	138 332	192 530	28%	116 194	163 933	29%	94 017	134 387	30%

COVERAGE : financing partners per Region (1/2)



COVERAGE (2/2)

PARTNERS	IMPL. PART	REGIONS	DISTRICTS	HEALTH ARES	CHWS
UNICEF		5	21	217	1,320
Global Funds	Plan Int, ReachOut	10	79	739	5,710
PMI	Impact Malaria	2	16	169	1,333
Akomll Council		1	1	3	30
JHPIEGO		1	1	9	35
MFH		1	7	11	205
REACHOUT		1	2	7	105
TOTAL		10	127	1,155	8,738
Cameroon		10	190	1,802	20,000
Couverage		100%	67%	64%	44%

In Cameroon, 1 CHW /1000hbts (rural area), 1/2500hbts (Urban area)

SWOTT ANALYSIS

STRENGTHS

- Good completeness of case management variables
- Existence of data aggregation tools by sex and age;
- Effectiveness of monthly OSDV missions by the civil society org.
- verification of data quality during the supervision of CDI by the region
- Setting of the community Monthly activity report in the DHIS2

WEAKNESSES

- No individual case reporting system
- No response system based on notification of a single event
- Insufficient notification of deaths at community level
- Inadequate interpretation and use of data at community level
- stock-outs of standard documents
- Persistent inconsistencies in CDI information between DHIS 2 and SR database data
- Poor completeness of logistical data ;
- Insufficient supervision of CHWs by the Chief of health areas in some HDs

OPPORTUNITIES

- Existence of many partners willing to strengthen malaria surveillance (FM, PMI, UNICEF and BMGF)
- Participation of CHWs in several health projects that strengthen their capacity
- Progressive implementation of the community monthly report activity (RMA-C) in the DHIS2;
- Taking into account the CDI data in the DQA activities

THREATS

- Insufficient human (CHWs) and financial resources to strengthen surveillance;
- Poor geographical accessibility of certain health areas which hinders feedback and decision making on data
- Insecurity in some regions

WAY FORWARD

1. Strengthen data collection and reporting at the community level
2. Ensure the availability of data management tools (Registers, copies of monthly activities reports)
3. Automatic / electronic data collection at the community level (use of tablets)
4. Strengthen data quality through supervision, data validation meetings, data audits with feedback
5. Training of actors at the peripheral level in the analysis and interpretation of data for decision making
6. Scale up the community-based Monthly report and operationalize the community-based surveillance system
7. Institutionalize and scale up the CDI b CHWs
8. Mobilize additional resources for the acquisition of equipment and the operation of the community-based surveillance system

CONCLUSION

- The CDIs is part of the solution to late care seeking behavior, due to insufficient access
- The CHWs are bringing the health care services closer to the population, and the population closer to the health facilities.
- This contribution is progressively reflected in the improvement of the attendance and we can expect an improvement of the health indicators.
- There is a need of availability of complete and quality data for a better assessment of the real burden of the disease, including the impact of control measures.
- **Community-based surveillance will contribute to:**
 - **early detection and management of malaria cases and epidemics,**
 - **avoid preventable death**
 - **evidence-based decision making**





**WE ARE COMMITTED TO FIGHTING AGAINST
MALARIA, TO ENSURE THE WELLBEING OF CHILDREN
AND THEIR FAMILIES**

ACKNOWLEDGEMENTS

- The Ministry of public health and technical departments
- Regional and district management teams, Chief of health areas: support in the implementation
- The Council and community leaders for their involvement
- The communities for the support given to the CHWs
- Our long-standing partners for their multiple supports: GF, PMI, UNICEF, WHO, Plan Cameroon, Reach-out, Medicine for Humanity, CRS, ACMS...
- Of course RMB Partnership and PMI for giving us the opportunity to be part of this event

The logo consists of a colorful umbrella with green, yellow, and red segments and a red star on top. Below the umbrella is a grey silhouette of a family: a woman holding a baby, a man, and two children. The text 'ISDC-CDI' is written in red inside a light blue oval on the umbrella.

ISDC-CDI

THANK YOU FOR YOUR KIND ATTENTION