

# CQUIN M&E Systems Vulnerability Assessment – **Cameroon** Pilot Findings

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# Agenda

- Introduction and background
- M&E systems vulnerability assessment
  - Methodology
  - Experience using the tool
  - Results
- Implications: from planning to implementation
- Recommendations and next steps

**CQUIN évaluation des vulnérabilités du système national de suivi et d'évaluation**  
DRAFT pour le pilotage dans les pays - octobre 2025

**Objectif principal :**  
Aider les pays à documenter l'étendue et le degré de vulnérabilité des systèmes nationaux de suivi et d'évaluation du VIH face aux réductions actuelles et potentielles du soutien des bailleurs de fonds externes tels que le PEPFAR et le

**Objectif secondaire :**  
Identifier les lacunes des systèmes nationaux de S&E du VIH qui peuvent être indépendantes des réductions actuelles ou futures du soutien externe.

**Structure de l'outil :**  
La figure ci-dessous présente une vue d'ensemble des catégories et des domaines (composantes ou « éléments constitutifs » des systèmes de suivi et d'évaluation) inclus dans l'outil. Il convient de noter que chaque domaine comprend également plusieurs sous-domaines, et que chaque sous-domaine est lui-même subdivisé en plusieurs fonctions de suivi et d'évaluation. Les domaines 5 à 7 sont transversaux et n'entrent pas

**Catégories :**

- Système d'information sanitaire (SNIS)
  - 1. Système SNIS basé sur papier/DHIS2
  - 2. Systèmes SNIS - dossiers médicaux électroniques (DME)
- Optimisation de la mise en œuvre du SNIS
  - 3. Assurance de la qualité des données
  - 4. Diffusion et utilisation des données

**Domaines transversaux :**

- 5. Capacités en S&E des ressources humaines pour la santé
- 6. Suivi et évaluation des services VIH communautaires
- 7. Suivi dirigé par les communautés et engagement communautaire dans le suivi et l'évaluation

**Définitions clés :**  
*Le soutien direct désigne les contributions financières ou en ressources humaines/personnel fournies pour exercer la fonction de S&E (par exemple, le financement des salaires ou des postes, la couverture des coûts opérationnels, les achats, etc. fonction de suivi et d'évaluation sans la financer directement (par exemple, l'orientation technique ou le mentorat, la supervision conjointe, les activités de formation ou d'examen, et d'autres activités hors site telles que la participation à des groupes de travail techniques.)*

# Overview of monitoring and evaluation system components

## Aggregated data (DHIS2 HMIS):

- Collected from service delivery site registers (ART, dispensing, ANC, etc.)
- Entered at the health district (HD) level by focal points, who are government staff responsible for data monitoring and completion
- The data are then validated at the site, district, regional, and central levels before being integrated into DHIS2, the national online HIV platform hosted by HISP.

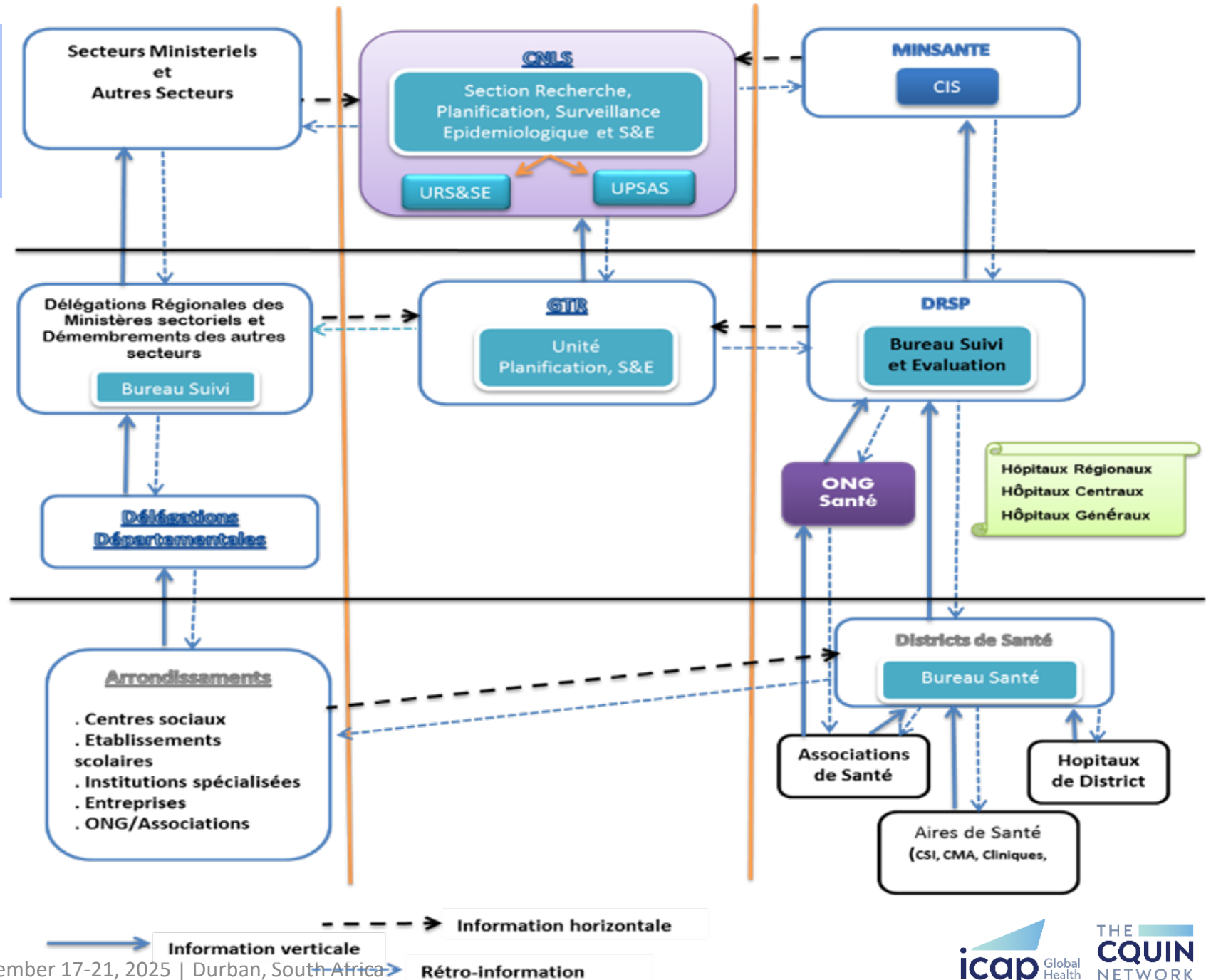
## Patient-level data (DAMA/EMR):

- Collected from clinical registers (ART, dispensing, ANC, etc.) and entered directly at the sites by *data clerks* and *DAMA clerks*;
- Validated locally at the site level before being used for cohort monitoring.
- Approximately 400 out of 6,000 sites (6.67%) use DAMA, covering about 83% of the national ART cohort. No standardized national EMR solution has yet been adopted.
- DAMA data used both at the site level and on the central online platform, is not interconnected across health facilities and is not interoperable with DHIS2.

## Community M&E:

- Collected from registries (ART, dispensing, PrEP, communication, etc.)
- Validated at the site and health district levels

# Data flow diagram



# Methodology (pilot)

- Components of the M&E system assessed:
  - The M&E systems vulnerability pilot covered all domains and sub-domains of the national M&E system:
    1. *HMIS [paper-based, DHIS2, and DAMA/EMR]*
    2. *Optimizing HMIS implementation [data quality assurance, data dissemination and use]*
    3. *M&E human resources for health (HRH) capacity*
    4. *M&E of community-based HIV services*
    5. *Community-led Monitoring (CLM) and community engagement (CE) in M&E*
- Participants: Participants included representatives from:
  - Health Information Unit (CEA) | **Domains:** *Data use, HMIS/EMR*
  - CNLS/UCS | **Domains :** *Data quality, HMIS/EMR*
  - CARE | **Domains :** *Community M&E*
  - RECAP+ | **Domains :** *CLM*

# Methodology (pilot)

- **Approach/Process:**

- An initial sensitization meeting was held to present the tool, establish a detailed work schedule, and designate those responsible for each domain.
- Each lead then consulted key sector stakeholders (programs, technical partners, and NGOs) to complete the corresponding sections.
- A joint validation meeting brought together all involved actors (CNLS, PNLT, IPs, NGOs, RECAP+, UCS, CARE, etc.) to officially introduce and review the tool, review feedback, and validate the entries.
- Entries were then finalized and consolidated before validation.

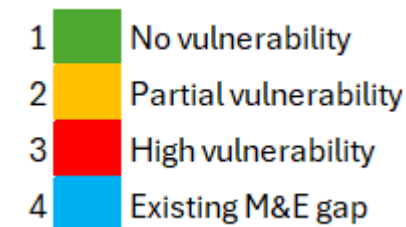
- **Timeline:**

- *October 23-30, 2025:* initial data collection phase

Domain	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	
1-HMIS - Paper DHIS2							CNLS
2-HMIS – EMR							CDC
3-Data quality							CNLS
4-Data use							CNLS
5-HRH							CNLS
6-Community M&E							CARE
7-CLM							RECAP+

# Summary of Findings – Health management information system (HMIS)

Domain	Sub-Domain	Score
HMIS_Paper and National Aggregate Reporting	1.1. Paper-based tools design and updates	2
	1.2. Paper-based M&E tools availability	2
	1.3. Design, updating, and maintenance of national aggregate database (eg, DHIS2)	2
	1.4. Aggregation and digitization of individual-level paper-based data for routine reporting	2
	1.5. Data transmission and validation	3
	1.6. System interoperability with national aggregate database	4
	1.7. Management, archival and retrieval of paper-based records	4
	1.8. Capacity to collect and manage key population (KP) data	2
HMIS_EMR	2.1 Leadership and governance	2
	2.2. EMR design and update	2
	2.3. Aggregation and reporting of individual-level EMR data for routine reporting	2
	2.4. Data validation checks in DHIS2/EMR	2
	2.5. Infrastructure	2
	2.6. Interoperability & standards of data systems	2
	2.7. Retention monitoring and follow-up	2
	2.8. Commodity tracking systems	2
	2.9. Lab specimen tracking systems	2
	2. 10. Documenting key populations	2
	2.11. Data confidentiality and security (including unique identifiers)	4



# Summary of Findings – Health management information system (HMIS)

## HMIS – Paper/aggregate data





- Heavy dependence on external funding for essential M&E functions (printing and distribution of tools, DHIS2 hosting and maintenance, connectivity, and supervision), with limited and irregular government funding.
- Standard tools are available and regularly updated, but these updates depend largely on technical and financial support from partners.

## HMIS – Electronic medical records (EMR)

- Infrastructure and maintenance dependent on donors: hosting, connectivity, and hardware are almost entirely funded by partners, with limited government support.
- Data security, unique identifiers, and patient tracking are partially funded, with no robust national framework.

# Summary of Findings – Data Quality, Data Dissemination and Use, and HR Capacity

Domain	Sub-Domain	Score
Data Quality	3.1. Availability, quality, and use of national and subnational aggregate data outputs	2
	3.2. Supportive supervision	2
	3.3. Completeness of reporting	2
	3.4. Timeliness/Reporting frequency	2
	3.5. Routine data quality review meetings (subnational, health facility etc)	2
	3.6. Protocols/SOPs/tools for regular data quality assurance.	2
Data Use	4.1. Availability, quality, and use of national and subnational aggregate data outputs	2
	4.2. Availability, quality, and use of data outputs from facility-level information systems	2
	4.3. SOPs, protocols, tools, and job aids for dissemination and data use	2
	4.4 Access to data analysis and dissemination tools	3
	4.5. Data review meetings and feedback loops	3
	4.6. Use of surveys, surveillance, and complementary data sources (non-HMIS)	2
HRH	5.1. Adequate staffing across all M&E functions	2
	5.2. M&E capacity building through trainings	3
	5.3. M&E capacity building through supervision and mentorship	3
	5.4. Effective M&E human resources management	3

- 1  No vulnerability
- 2  Partial vulnerability
- 3  High vulnerability
- 4  Existing M&E gap

# Summary of Findings – Data Quality, Data Dissemination and Use, and HR Capacity

## Data quality

- DQA and oversight activities, including planning, logistics, training, and data validation, remain almost entirely dependent on external partner funding, with limited government contribution.
- Data quality review meetings and protocol/SOP/tool updates rely on external funding, with no institutional mechanism for government monitoring or maintenance.
- Data cleaning and reconciliation/ backlog data entry activities entirely funded by the government

## Data dissemination and use

- Dependence on external funding for the production, updating, and dissemination of DHIS2/DME dashboards and reports.

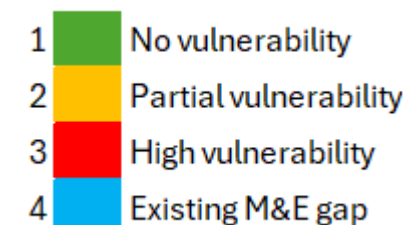
# Summary of Findings – Data Quality, Data Dissemination and Use, and HR Capacity

## Human resources capacity for health

- Reliance on external funding for key M&E positions, including database managers (DHIS2 and EMR) and staff responsible for monitoring data quality.
- Low sustainability of national M&E capacity due to limited funding for initial and ongoing training, mentoring, and supervision.

# Summary of Findings – Monitoring and Evaluation of Community-Based Services and Community-led Monitoring (CLM)

<b>M&amp;E of Community-Based HIV Services</b>	6.1. HMIS - Paper-based and Aggregate database for Community-based Services Data	2
	6.2. HMIS - EMR for Community-based Services Data	2
	6.3. Data Quality Assurance for Community-based Services Data	2
	6.4. Data Dissemination and Use of Community-based Services Data	2
	6.5. Adequate staffing across all community M&E functions	2
<b>Community-led Monitoring (CLM)</b>	7.1 Policy and Governance for CE/CLM	2
	7.2 CE involvement in design of paper-based and electronic M&E tools at HF, subnational, and national levels	2
	7.3 Routine collection of CLM data on critical indicators (prevention, HTS, retention)	2
	7.4 CLM data use (subnational, national)	2
	7.5 CE involvement in data reviews and data quality checks (HF, subnational, national)	2
	7.6 CLM data for KP services	2



# Summary of Findings – Monitoring and Evaluation of Community-Based Services and Community-led Monitoring (CLM)

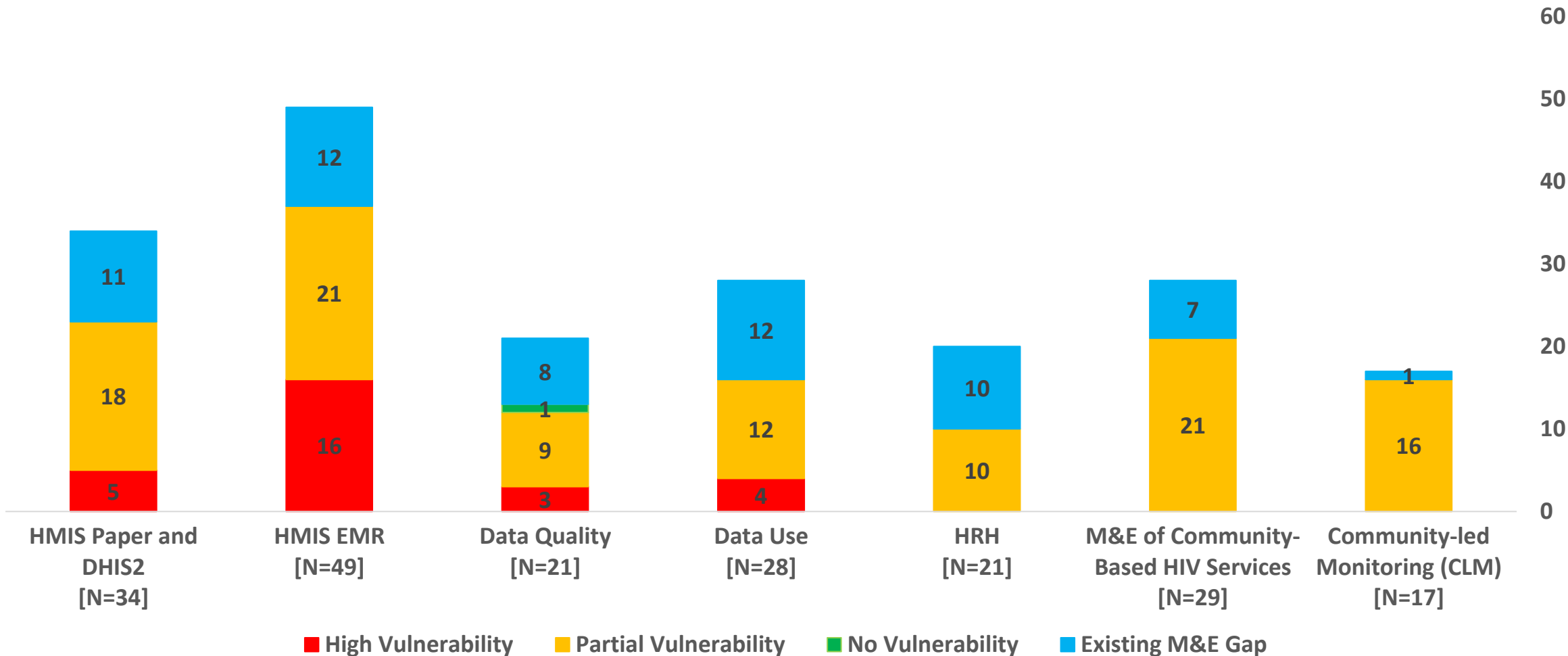
## **M&E of HIV-related community services**

- Vulnerability related to external dependence: the design, production, and updating of community data collection tools, as well as the development of the community DHIS2 module, remain dependent on external funding.
- The current uncertainty surrounding funding makes these critical functions fragile and difficult to sustain in the long term.

## **Community monitoring and community engagement in M&E**

- Community-led monitoring (CLM) remains primarily funded and promoted by partners (PEPFAR, Global Fund, NGOs), without a fully integrated national framework or harmonized policies.
- Data collection tools (Kobo/ODK), review mechanisms, coordination platforms, and triangulation activities are largely supported by external technical assistance.

# Distribution of vulnerability by domain



# Selected gaps in M&E

## Health management information system (HMIS)

- Interoperability between different systems (DHIS2, EMR, vertical databases), preventing integrated analysis
- Archiving and retrieval of paper files
- Implementation of EMR/HMIS policies and procedures at all levels
- Submission of validated aggregate data to the national aggregate database
- Capacity strengthening and skills building for health facility staff to apply and maintain data validation procedures
- Development of an electronic system for tracking laboratory samples

## Optimizing HMIS implementation

- Support for remote supervision platforms (telementoring, virtual quality assurance sessions) and their connectivity costs
- Funding for retrospective data cleaning exercises or backlog entry activities
- Financing for skill development activities focused on timely data submission and reporting processes
- Coverage of costs for emergency catch-up activities aimed at updating delayed reports
- Capacity building and mentoring of staff so that they can independently conduct and maintain regular data quality assurance review meetings
- Access to data analysis and dissemination tools (software, analytics platforms, training and coaching, etc.)

# Selected gaps in M&E

## HR for health capacity

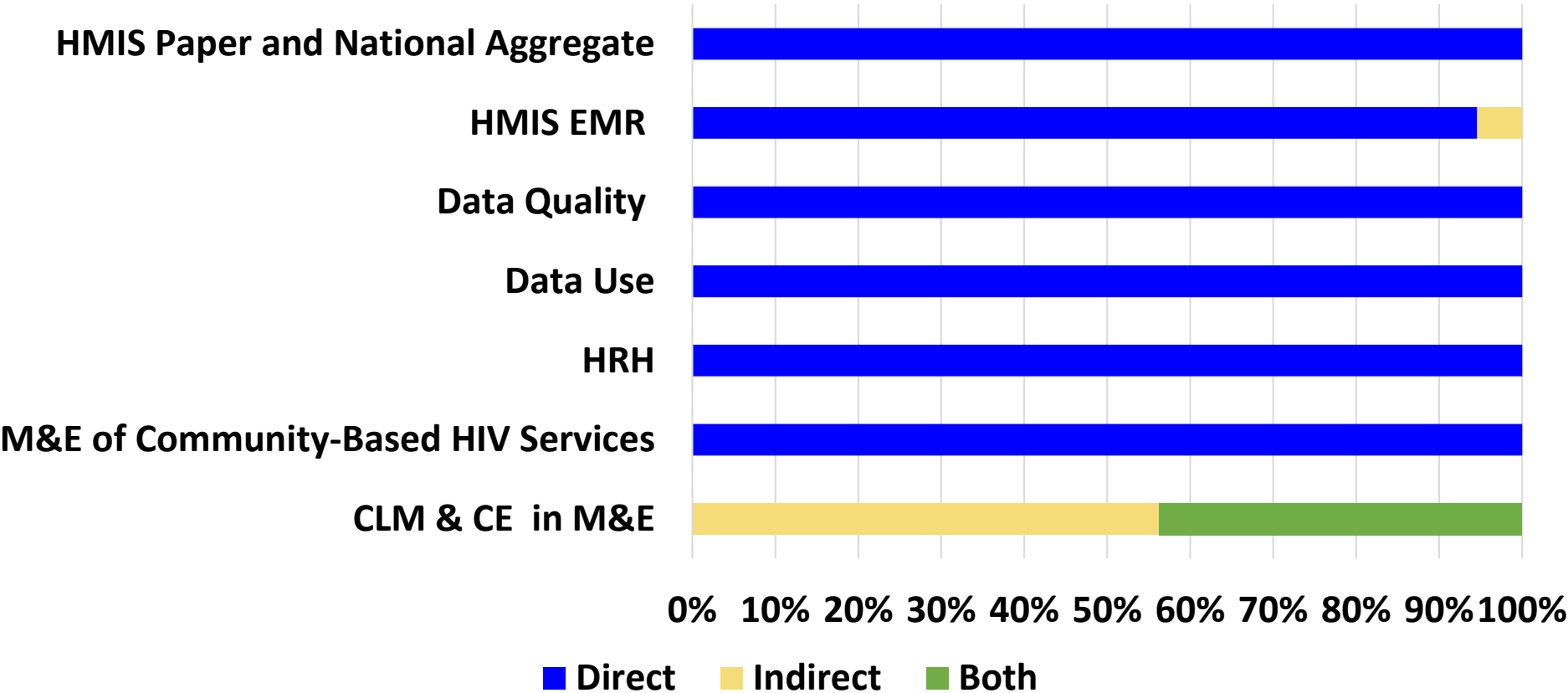
- Development of M&E frameworks and job profiles, along with the definition of staffing targets
- Monitoring and distribution of M&E personnel across different levels from community and health facilities to subnational and national levels
- Development, maintenance, updating, and/or use of an HR database to track staff assignments, training coverage, certifications, etc.

## M&E of community-based HIV services

- Design of the national DHIS2 platform for community reporting
- Mechanisms to ensure timely and regular access to up-to-date community M&E tools
- Interoperability between DHIS2 and community health information systems

# Distribution of external funding across domains (direct vs. indirect)

Analysis restricted to M&E functions identified as highly or partially vulnerable



# From Planning to Practice:

Focus Subdomains	Actions and adaptations?
<b>HMIS – Paper/aggregate data</b>	<ul style="list-style-type: none"> <li>• Use of RMAs and site-level data entry to compensate for the absence of district focal points who were previously responsible for data entry</li> <li>• Data validation conducted at site and district levels</li> <li>• Implementation of the district approach to decentralize problem-solving to the health district level, offering a more cost-effective solution for the program</li> <li>• Integration and harmonization of implementation of activities across HIV, TB, and malaria programs to optimize available resources and ensure continuity of essential HMIS functions.</li> </ul>
<b>HRH Capacity</b>	<ul style="list-style-type: none"> <li>• Train all stakeholders (APS/ACRR, Data Clerks, DAMA Clerks) on the use of DAMA to ensure a sustainable and standardized strengthening of capacities.</li> <li>• Organize joint MOH–IP supervisions during the transition period, with a progressive transfer of supervision responsibilities to the MOH to reinforce national ownership.</li> </ul>
<b>CLM and community engagement in M&amp;E</b>	<ul style="list-style-type: none"> <li>• Harmonization of tools and development of a community DHIS2 platform to ensure consistent, continuous, and integrated reporting.</li> </ul>

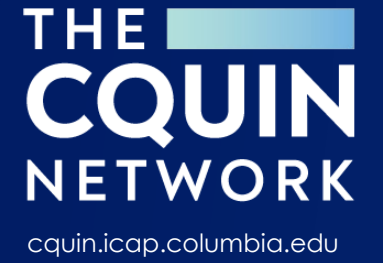
# Recommendations and next steps

1. Finalize and disseminate the evaluation report (FR/EN versions) and present the findings at national and provincial levels.
2. Develop a remediation plan based on the vulnerabilities identified, including priority actions to strengthen national financing and the sustainability of DHIS2/DAMA.
3. Establish national DQA and supervision mechanisms, funded by the government, to reduce dependence on partners for planning, logistics, training, and data validation.
4. Strengthen M&E capacity and sustainability by institutionalizing key HR profiles, creating a national continuous training program, and developing a harmonized framework for community M&E, accompanied by advocacy to mobilize sustainable resources.
5. Conduct targeted advocacy with decision-makers and partners to ensure sustainable financing and the long-term viability of the M&E system.

# Acknowledgments

Our sincere thanks to:

- The CQUIN project leads for their guidance and support throughout this exercise;
- All participants, including development partners, sectoral stakeholders, NGOs, and community representatives, for their valuable contributions;
- The DSD technical working group, for the working session held this November, which enabled the data collection.



Thank you!

