

M&E system vulnerabilities and steps towards resiliency, Mozambique

Orrin Tiberi, Monitoring and Evaluation Advisor,
Ministry of Health, Mozambique



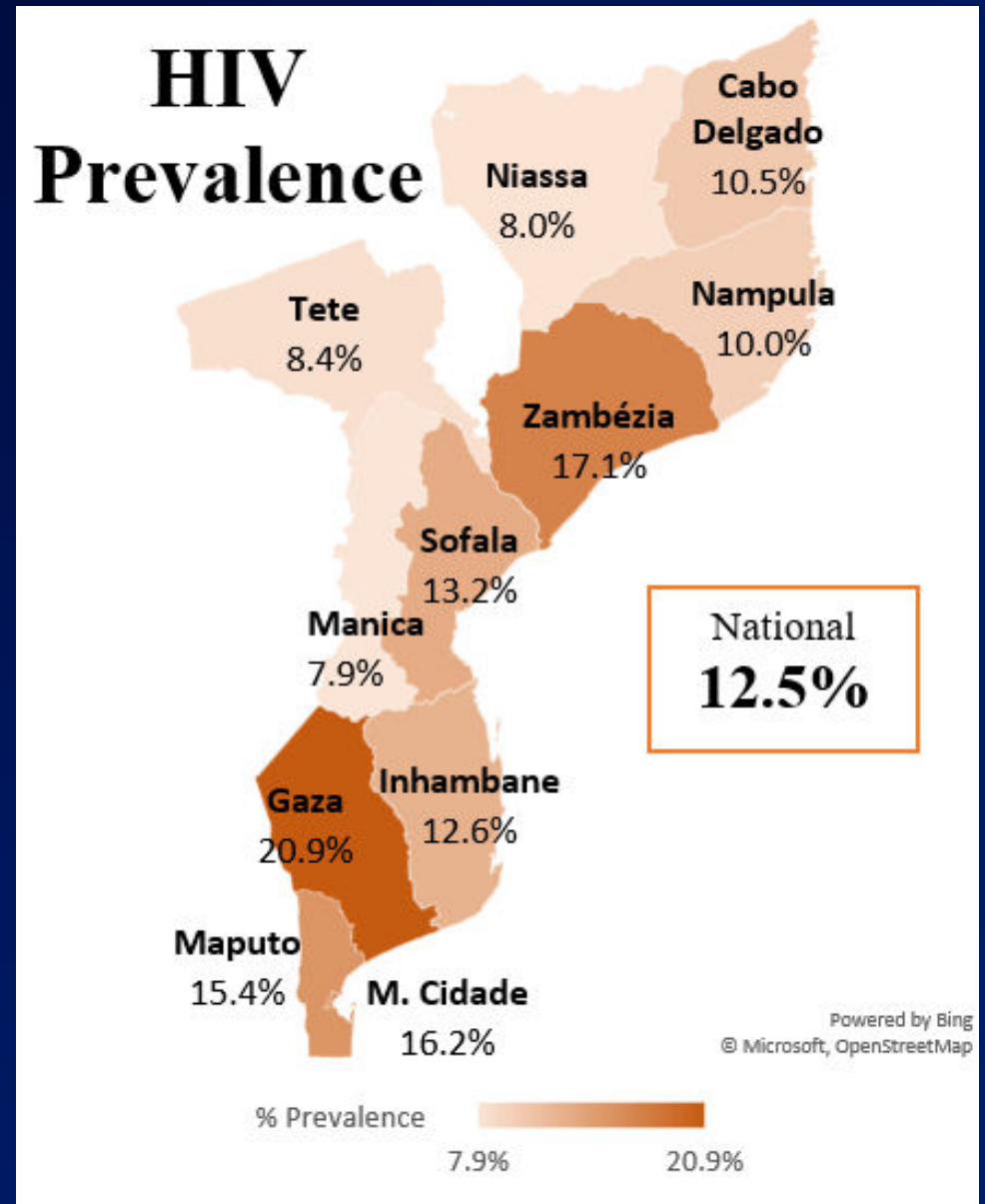
Outline

- Context of HIV in Mozambique
- Context of the M&E system in Mozambique
- Results of the HIV Indicator Prioritization (July 2025)
- Results of the HIV M&E Vulnerability Assessment Pilot (October 2025)
- Discussion of Implications of the Pilot
- Next Steps

Context of HIV in Mozambique

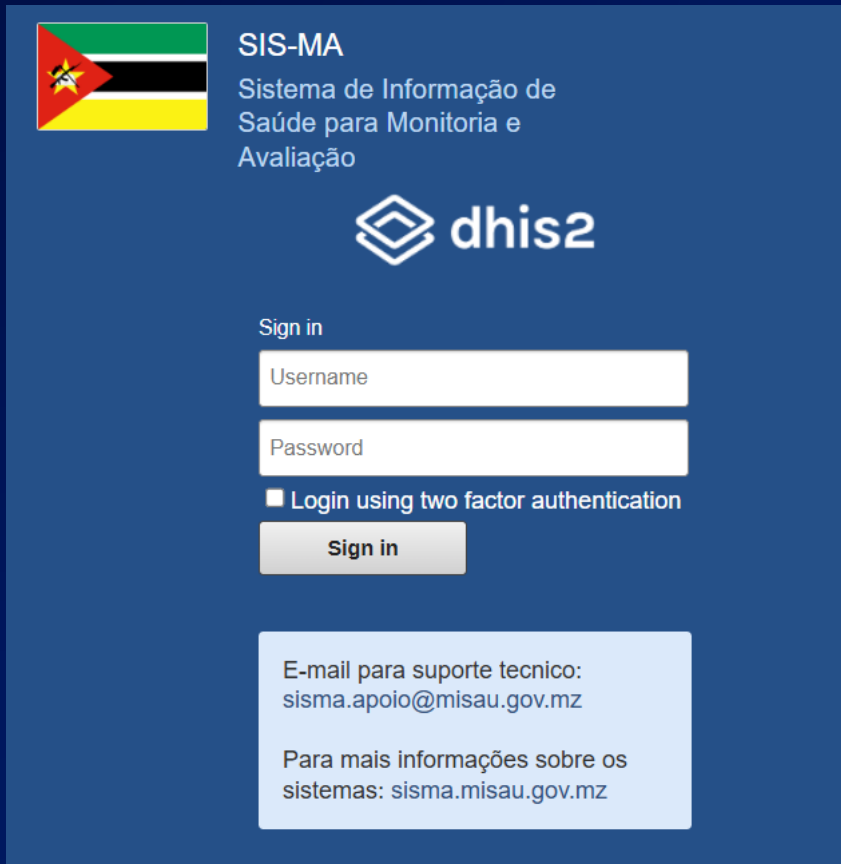
Moçambique, 2024	Total	% in relation to the total PLHIV	Confidence Interval
N° PLHIV	2,480,000	-	2.30-2.69 million
N° Adults 15+ LHIV	2,300,000	93%	2.12-2.54 million
N° Men 15+ LHIV	800,000	32%	731,000-878,000
N° Women 15+ LHIV	1,500,000	60%	1.38-1.66 million
N° pregnant women HIV+	134,000	-	115,000-149,000
N° Adolescents (10-19) LHIV	159,000	6%	113,000-199,000
N° Children (0-14) LHIV	180,000	7%	150,000-201,000
N° New Infections	92,000	-	32,000-114,000
N° new infections per day	252	-	
N° new infections adults	75,000	-	59,000-86,000
N° new infections children	16,000	-	11,000-21,000
Vertical transmission rate	12%	-	9%-114%
N° deaths related to HIV/AIDS	44,000	2%	37,000-52,000

Source: Estimates 2024, Spectrum v6.42



Context of HIV M&E

- Mozambique national HIV M&E team provides support and implementation guidance to the provincial teams
 - No direct oversight of provincial M&E teams
- Data is reported from paper registers into the national DHIS2 (SIS-MA)
- Though some of these reports are strengthened by the PEPFAR supported EMR, there is not national adoption of an EMR system



The image shows a screenshot of the SIS-MA login interface. At the top left is the Mozambique flag. To its right, the text reads 'SIS-MA Sistema de Informação de Saúde para Monitoria e Avaliação'. Below this is the 'dhis2' logo. The login section is titled 'Sign in' and contains two input fields for 'Username' and 'Password'. A checkbox labeled 'Login using two factor authentication' is present below the password field. A 'Sign in' button is located below the checkbox. At the bottom of the login area, there is a light blue box containing contact information: 'E-mail para suporte tecnico: sisma.apoio@misau.gov.mz' and 'Para mais informações sobre os sistemas: sisma.misau.gov.mz'.

M&E Indicator Prioritization - July 2025

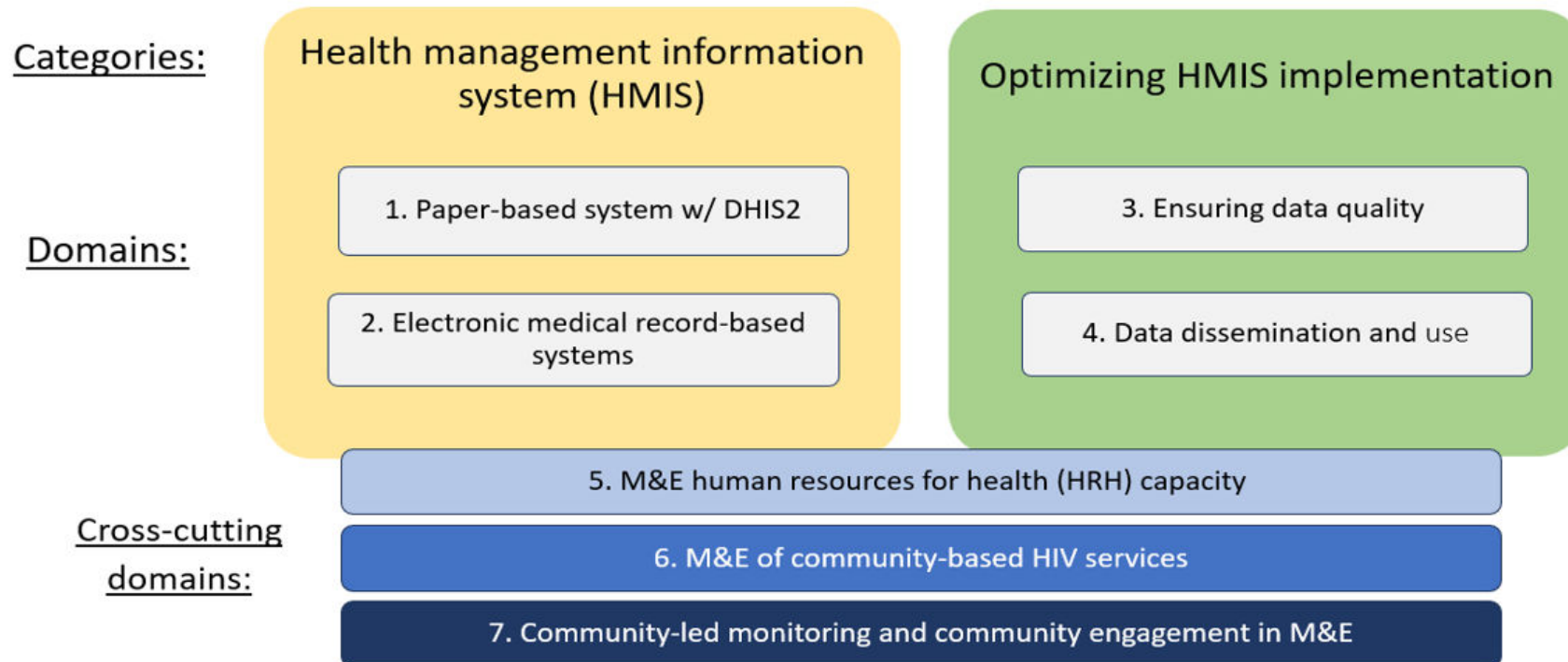
#	Program Area	Indicator	Mozambique
			>=50%
1	VTP	1st ANC attendance	Dark Green
2		1st ANC testing	Dark Green
3		1st ANC HIV+	Dark Green
4		1st ANC Known HIV+	Dark Green
5		HEI 1st EID	Dark Green
6		HEI final outcome	Light Green
7		HEI ARV prophylaxis	Dark Green
8	HTS	HTS_TST	Dark Green
9		HTS_POS	Dark Green
10		HTS_TST by modality	Dark Green
11		HTS_POS by modality	Dark Green
12	ART	TX_NEW	Dark Green
13		TX_NEW by CD4 count	Grey
14		TX_CURR by MMD	Grey
15		Interruption in Treatment [IIT]	Dark Green
16		AIDS-related mortality	Dark Green
17	VL	VL results received	Dark Green
18		VL results <1,000 C/ml	Dark Green
19	TB	TB diagnosis	Dark Green
20		Initiated on TPT	Dark Green
21		Completed TPT	Grey
22	HIV Prevention	PrEP_NEW	Dark Green
23		Received PrEP	Dark Green
24		Received PEP	Dark Green
25		Received condoms	Grey

- For the initial assessment of M&E indicators done in July 2025, the country identified few indicators that would be impacted by a funding decrease.
- Rationale: The presence of paper-based reporting structure and a DHIS-2 reporting system, both not directly reliant on donor funding.

Key	
Keep [No Change]	Dark Green
Keep [But Modify]	Light Green
Drop	Red
N/A	Grey

CQUIN M&E System Vulnerabilities Assessment Pilot - October 2025

- National M&E system categories and domains included are shown below
- Each domain includes multiple subdomains; each subdomain is further broken down into M&E functions, which are assessed in the tool



Results of the Systems Assessment: Paper-based HMIS and EMR

- Key vulnerabilities that were found in the paper-based systems, mostly a result of donor supported key positions in the M&E space (**all national M&E personnel are PEPFAR funded**)
- EMR, being entirely supported by PEPFAR, had results aligned with the expectations and extremely vulnerable to funding cuts

Results are Preliminary!

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

Results of the Systems Assessment: Data quality and Dissemination

Results are Preliminary!

- For both these areas there are key vulnerabilities in both the financing of the activity (such as supervision and data quality assessments which rely 100% on external funding) and the oversight of the activities.
- For example, 3.3, 3.4, 4.1, 4.4 are all activities that are completely within the responsibility of MoH, however as the country has PEPFAR supported M&E HRH at the national level, they still show as vulnerable.

Domain	Sub-domain		
3. Data Quality			
	3.1. Availability, quality, and use of national and subnational aggregate data outputs		Partial vulnerability
	3.2. Supportive supervision		High vulnerability
	3.3. Completeness of reporting		Partial vulnerability
	3.4. Timeliness/Reporting frequency		Partial vulnerability
	3.5. Routine data quality review meetings (subnational, health facility etc)		Partial vulnerability
	3.6. Protocols/SOPs/tools for regular data quality assurance.		Partial vulnerability
Domain	Sub-domain		
4. Data Dissemination and Use			
	4.1. Availability, quality, and use of national and subnational aggregate data outputs		Partial vulnerability
	4.2. Availability, quality, and use of data outputs from facility-level information systems		High vulnerability
	4.3. SOPs, protocols, tools, and job aids for dissemination and data use		Partial vulnerability
	4.4. Access to data analysis and dissemination tools		Partial vulnerability
	4.5. Data review meetings and feedback loops		Partial vulnerability
	4.6. Use of surveys, surveillance, and complementary data sources (non-HMIS)		Partial vulnerability

Results of the Systems Assessment: M&E HRH, community-based services, and CLM/CE

- These three domains each have existing M&E gap, which should be taken into consideration during the upcoming MoU discussions with PEPFAR
- Due to the high reliance on external funding for the HIV response (95% in 2022) there are also challenges in M&E for services that are not based at the health facility.

Results are Preliminary!

Domain	Sub-domain		
5. HRH Capacity			
	5.1. Adequate staffing across all M&E functions	Yellow	Partial vulnerability
	5.2. M&E capacity building through trainings	Yellow	Partial vulnerability
	5.3. M&E capacity building through supervision and mentorship	Yellow	Partial vulnerability
	5.4. Effective M&E human resources management	Blue	Existing M&E gap
Domain	Sub-domain		
6. M&E of community-based HIV services			
	6.1. HMIS - Paper-based and Aggregate database for Community-based Services Data	Red	High vulnerability
	6.2. HMIS - EMR for Community-based Services Data	Red	High vulnerability
	6.3. Data Quality Assurance for Community-based Services Data	Blue	Existing M&E gap
	6.4. Data Dissemination and Use of Community-based Services Data	Red	High vulnerability
	6.5. Adequate staffing across all community M&E functions	Red	High vulnerability
Domain	Sub-domain		
7. Community-led monitoring and Community Engagement in M&E			
	7.1. Policy and Governance for CE/CLM	Yellow	Partial vulnerability
	7.2. CE involvement in design of paper based & electronic M&E tools at HF/subnational/national level	Blue	Existing M&E gap
	7.3. Routine collection of CLM data on critical indicators (prevention, HTS, retention?)	Yellow	Partial vulnerability
	7.4. CLM data use (subnational, national)	Red	High vulnerability
	7.5. CE involvement in data reviews and data quality checks (HF, subnational, national)	Yellow	Partial vulnerability
	7.6. CLM data for KP services	Red	High vulnerability

M&E activity shifts for 2026

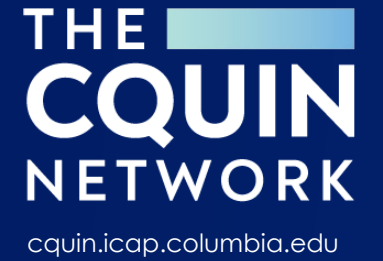
M&E activities moving away from external funding:

Data Quality Assessments. The simplification and decentralization of the DQAs started in 2024, however with the SWO the process accelerated substantially, and both the tool and corresponding action plan can be completely led by the provincial or district level (i.e reduced or without additional funding) without support from the national level. However, results are submitted to the national level for validation and inclusion into the national database.

National HIV Data Cleaning: In the first round the national level led the validation activity, visiting 6 to 8 health facilities in each province to ensure that the archive cleaning was done correctly. This round that responsibility has been pushed to the provincial level, decreasing the need for funding while increasing its reach

Reflections and Next Steps

- The system assessment showed the country that there were many areas that may be impacted by external funding cuts, especially related to the national M&E HRH.
- The total budget cut was ~30% between PEPFAR and Global Fund in Mozambique, meaning that many of the M&E priorities will continue, albeit on a reduced budget. Discussions within the current MOU with PEPFAR should include identified vulnerabilities
- M&E POCs from MoH, partners, and donors will need to work together on developing a plan for continued M&E support in the coming years, especially related to HRH sustainability



Thank you!
Obrigado!

