Monitoring and Evaluation of AHD: EGPAF Experience

Presented by:

Reuben Musarandega, Associate SI&E Director

Elizabeth Glaser Pediatric AIDS Foundation

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Outline

1. Background
2. AHD work in EGPAF
3. M&E Approach
4. Indicator framework
5. Data systems
6. Data use examples
7. Data quality assurance
8. Challenges

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AHD Work in EGPAF

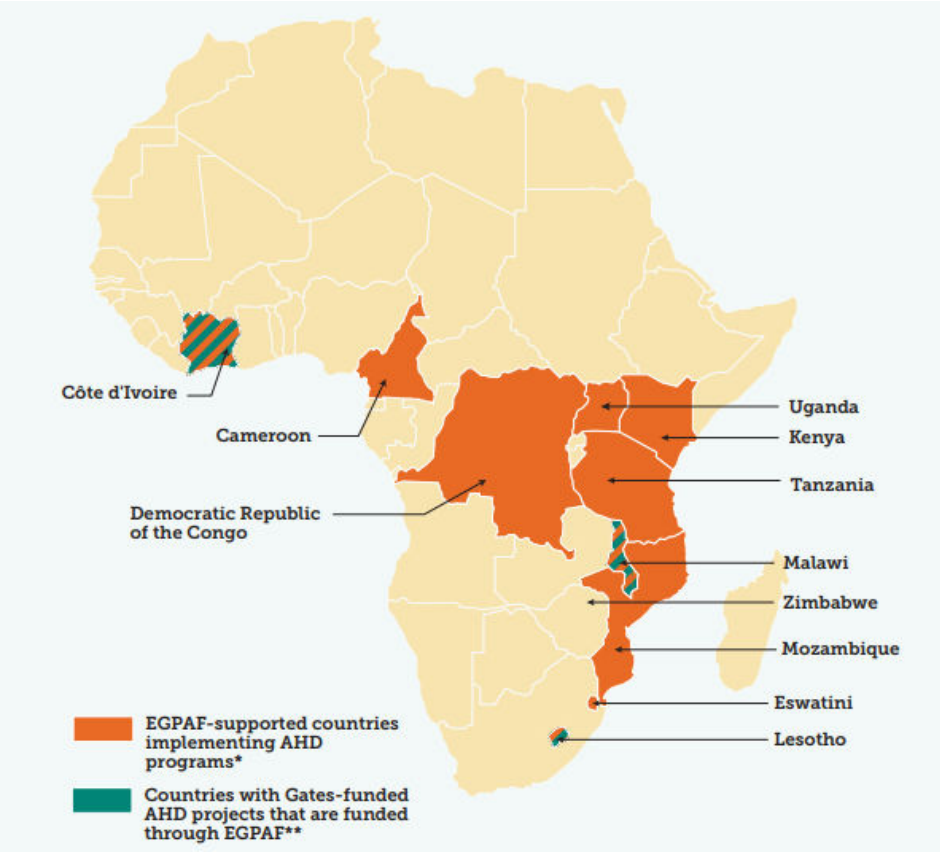

Figure: Map showing countries with EGPAF-supported AHD implementation

- AHD support offered within U.S. President's Emergency Plan for AIDS Relief (PEPFAR) funded HIV care and treatment programs through funding from the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Agency for International Development (USAID).

- Côte d'Ivoire, Malawi, and Lesotho implementing AHD programs through Gates funds, embedded within PEPFAR care and treatment programs.

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AHD Work in EGPAF

EGPAF Global Efforts

Advocacy

EGPAF participates in key Global working groups & meetings on AHD – CryptoMAG, Global Steering Committee

Implementation

- AHD Tools & Frameworks to support implementation,
- Patient Centered DSD Model,
- Hub & Spoke Model,
- Community of practice for AHD
- South-to-South learning & exchange

Evidence Generation

- Evaluations and publications
- Dissemination at conferences

CDC Foundation AHD Funding

Implemented in:
Malawi,
Zimbabwe,
Tanzania

Projects ended Dec 2022

Gates AHD Funding

Phase 1: Malawi
Ended in March 023,
No Cost Extension

Phase 2: Malawi, CDI, Lesotho, Kenya
Start 1st Nov 022
End 31st Oct 2024

PEPFAR-Funded AHD work

- **Implemented in:**
  Lesotho, Eswatini, Mozambique, Malawi, Tanzania, Kenya, CDI, Cameroun, DRC, Uganda (TA)
- AHD implemented within existing HIV care & treatment programs

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Scope of AHD Work

- Technical assistance and support for established AHD programs
- Adapting lessons learned from mature programs in supporting scaling-up of AHD services to different epidemic settings and country contexts
- Evaluating more mature and starting up AHD programs funded by different funders
- Leverage program activities to create “common good” resources that can be used across various countries for AHD program implementation
- Sustain and Transition QI AHD Model in Malawi

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“We Have Learned from Our Friends:”

Changes to Strengthen Advanced HIV Disease Services in Malawi

Background: “These are human beings. These are not just numbers.”

Fourteen percent of people living with HIV (PLHIV) in Malawi are estimated to have advanced HIV disease (AHD) (UNAIDS, 2020). “These are human beings,” said Dr. Eddie Matiya, AHD Project Lead, Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) in Malawi. “These are not just numbers.” For these clients, living with AHD translates to living with a higher risk for morbidity associated with opportunistic infections (OIs) and thus a higher rate of mortality in comparison to PLHIV without AHD. As part of the Bill and Melinda Gates Foundation (BMGF)-supported initiative to combat AHD, Malawi implemented a quality improvement collaborative (QIC) where work improvement teams (WITs) from over 40 health care facilities across the country met every three months between April 2021 and February 2023 to exchange knowledge and experience as they conducted quality improvement (QI) projects to strengthen AHD services through five key performance indicators (Table 1). The QIC culminated in a Harvest Meeting where all facilities and representatives from multiple levels of the health system came together to identify the most promising practices for improving AHD services. This briefer summarizes the key takeaways from this culminating Harvest Meeting that represents months of learning and, in the words of a poster presenter Grace Misinde (WIT member from Mua Mission Hospital, Malawi), how “we have learned from our friends” across the health care facilities and teams working together in the AHD QIC to strengthen the quality of services for people living with AHD.

Table 1: Malawi’s AHD QIC Focused on Improving Five Key Performance Indicators

Topic	Indicator Description
AHD Diagnosis	% of PLHIV with AHD diagnosed with OIs
Treatment Initiation	% of PLHIV with AHD diagnosed with OIs initiated on OI treatment
Retention	% of PLHIV with AHD retained in treatment at six months after initiation in HIV care
Viral Suppression	% of PLHIV with AHD who are virally suppressed in the reporting period
Adherence	% of PLHIV with AHD who achieve adherence rates of 95%–100% based on pill counts during the first three months and six months on antiretroviral therapy (ART)

Image 1: District health team and health facility representatives with Honorable Halima Alima Daudi, MP, Deputy Minister of Health (first row, fourth from left) on Day One of the Harvest Meeting alongside the EGPAF in Malawi team, including Dr. Allan Ahimbisibwe, Acting Country Director; Charles Jenya Soko, Quality Improvement Officer; Dr. Eddie Matiya, Advanced HIV Disease Project Lead; Laywell Nyirenda, Quality Improvement Advisor; Rosalia Dambe, Advanced HIV Disease Monitoring and Evaluation Manager; and Kwashie Kudiabor, Strategic Information and Evaluation Director. Photo: EGPAF/2023

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M&E Approach

Minimum Requirements Approach

AHD Core M&E indicators

- Based on Foundation AHD M&E framework

Primary data collection tools for core AHD indicators

- EMRs
- LIMS
- Paper registers: AHD register, lab register, lab forms, ART register
- Data aggregation tools: tally sheets, report forms

DHIS2 instance data repository of core AHD indicators

Power BI analytics dashboards for core AHD indicators

Additional indicators

- Indicators for QI-based approach
- Process indicators for funded AHD projects
- Site readiness assessment indicators

Data collection tools for additional indicators

- Patient data tools (digital and/or paper-based)
- QI tools: DHIS2-based Ez-QI tool
- DHIS2 data repository for additional indicators
- DHIS2 instance for site readiness assessment tool
- Power BI analytics for additional indicators

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Countries pull data from different existing sources, updated them as needed. They summarize data into an AHD indicator report in MS Excel which is imported into DHIS2 instances. Then data visualized on PowerBI dashboard

Data Flow, Data Management, Data Analytics

Patient level tools & systems

EMR

LIMS

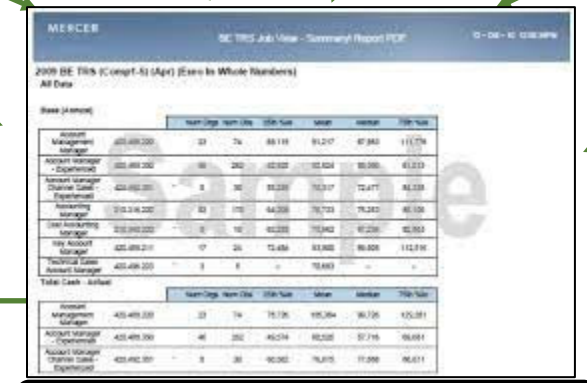
Inpatient register

Manual lab forms

Manual AHD register

Patient files / cards

DHIS2 Instance for AHD indicator data management



AHD indicator summary report

Power BI Dashboards

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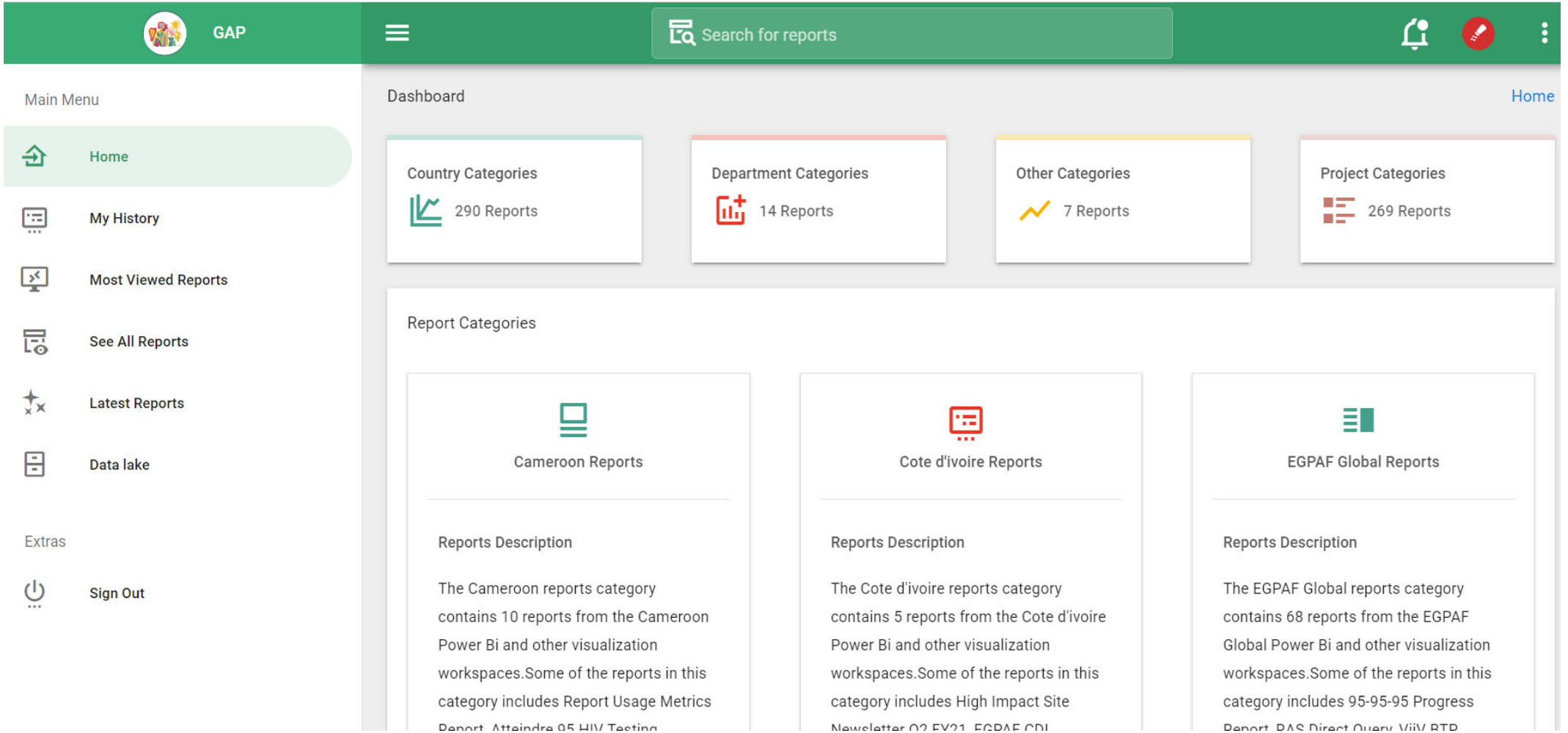
Through the Glaser Analytics Platform (GAP), all EGPAF data reports - global and country program reports are accessible to all EGPAF staff after registration for access. AHD data are also accessible through the GAP

Global Data Access: Glaser Analytic Platform



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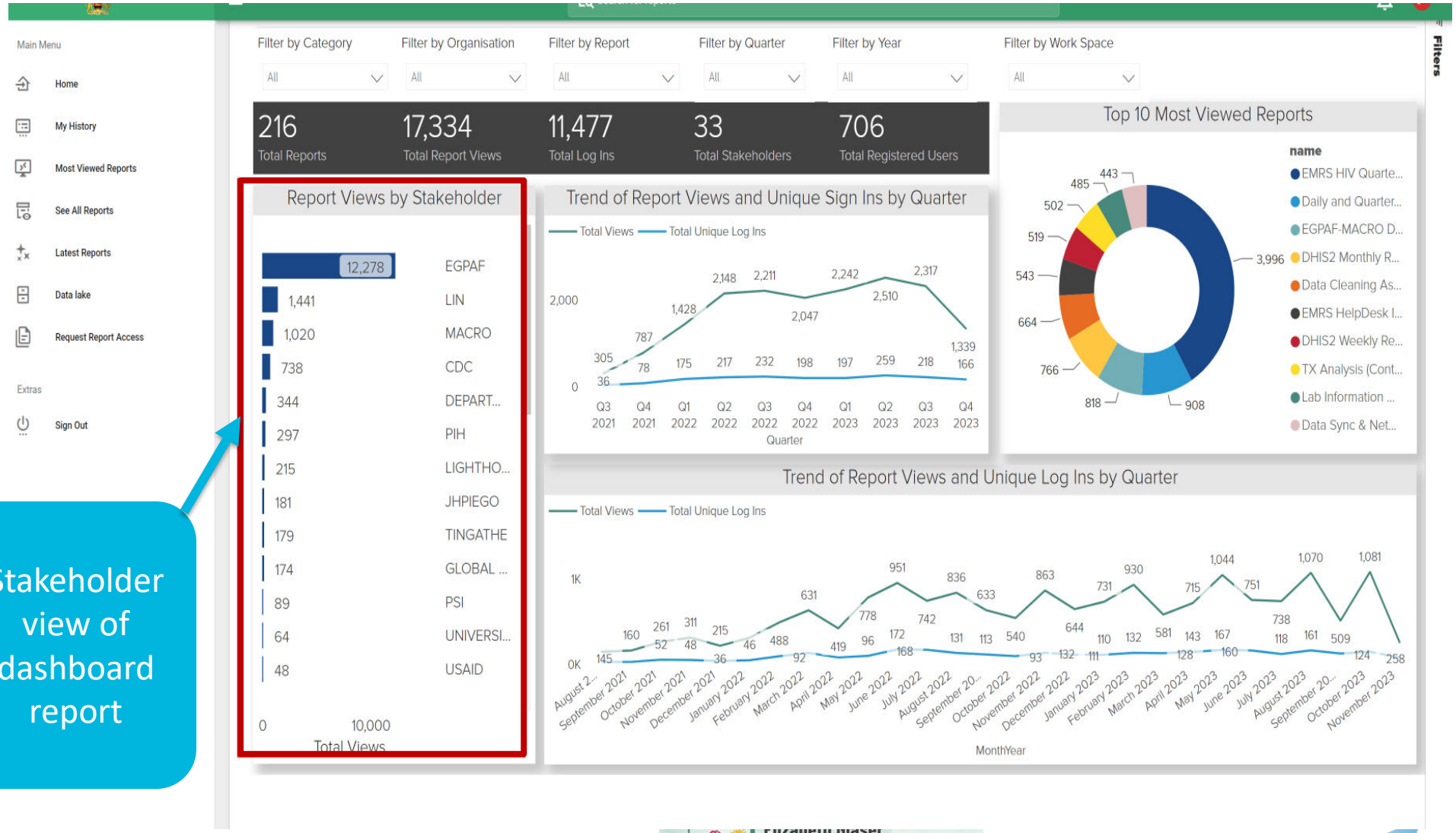
External stakeholders have access to GAP and all EGPAF reports on GAP - registration required for access. A guide to data access was published in Malawi where the concept originated before scaling up to EGPAF global

GAP Data Access: External Stakeholders



Stakeholder view of dashboard report

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EGPAF Supported-Sites Reporting AHD Data, Percent of ART, Jan-Sept 2023

% AHD patients identified are out of total eligible for AHD. Challenges of AHD identificati on include limited availability of CD4 testing and reliance on WHO staging, and AHD not offered in all sites.

Cameroon	CDI	Eswatini	Malawi	Tanzania	Lesotho	Kenya
29 (39%) out of 75 sites reporting	34 (64%) out of 53 sites reporting	65 (100%) out of 65 sites reporting	53 (71%) out of 177 sites reporting	143 (24%) out of 598 sites reporting	67 (37%) out of 181 Sites reporting	432 (96%) out of 448 sites reporting
590 (3.8%) AHD patients identified	517 (9.9%) AHD patients identified	268 (19.9%) AHD patients identified	4467 (32.6%) AHD patients identified	2527 (31.2%) AHD patients identified	1492 (51.3%) AHD patients identified	6451 (66.0%) AHD patients identified

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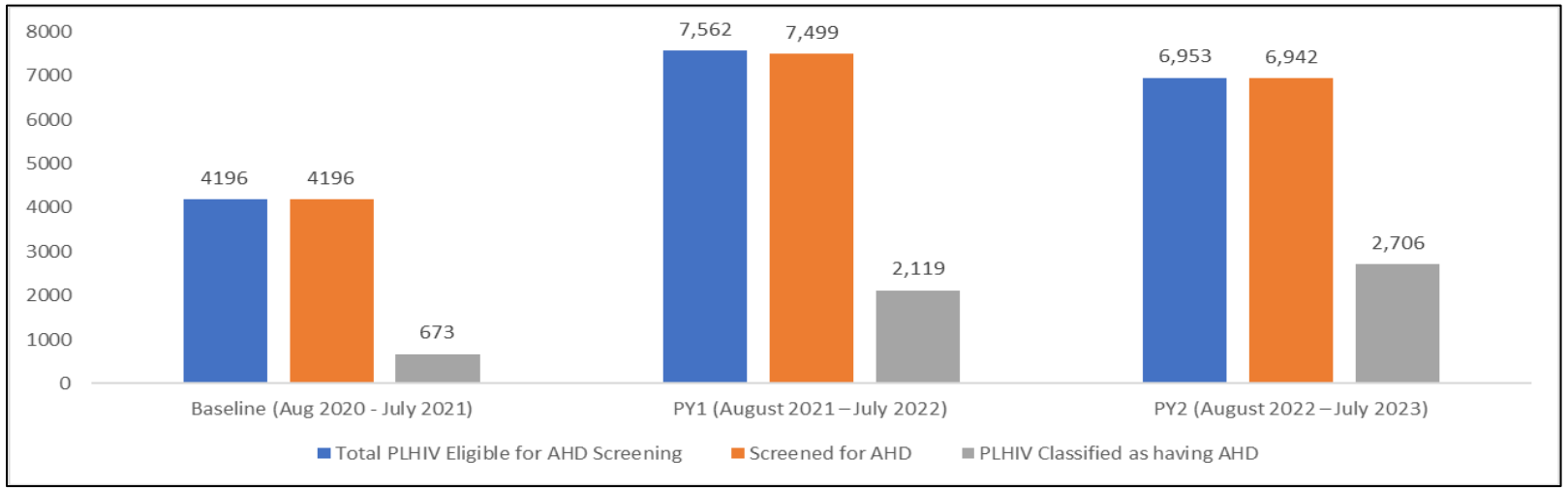
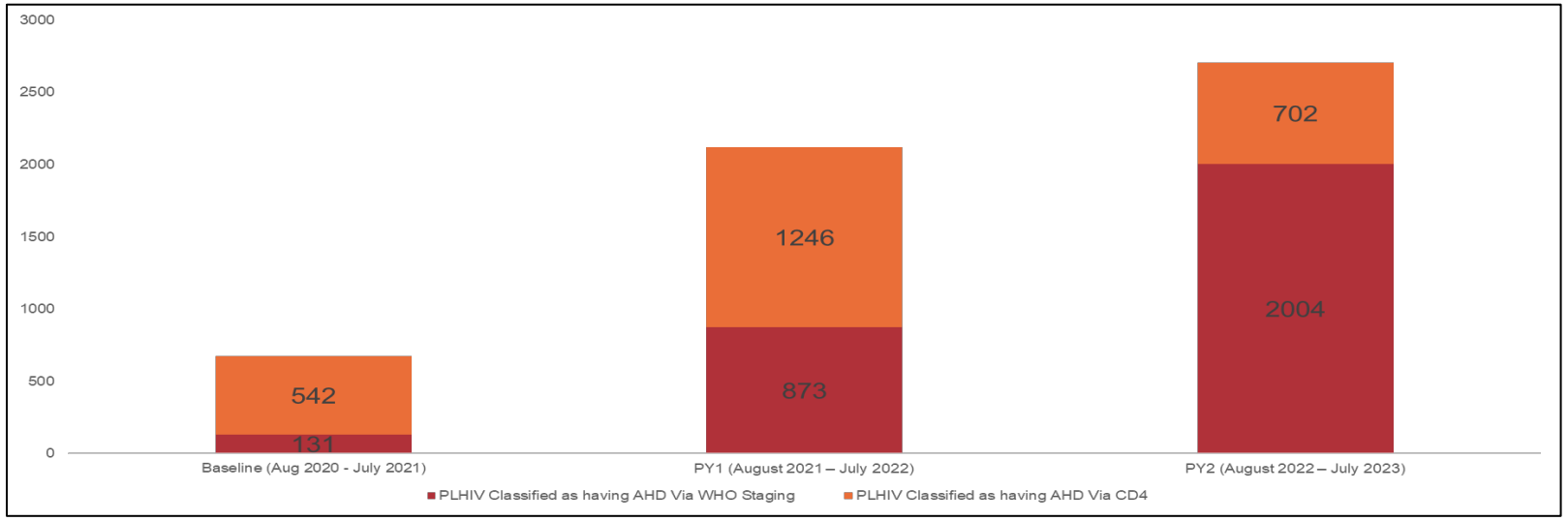
AHD Data Analysis and Use: Example1





Data analysis looks at performance along AHD cascades:

- AHD screening,
- TB diagnosis and treatment,
- CM diagnosis and treatment,
- Other OIs diagnosis and treatment, and
- AHD outcomes

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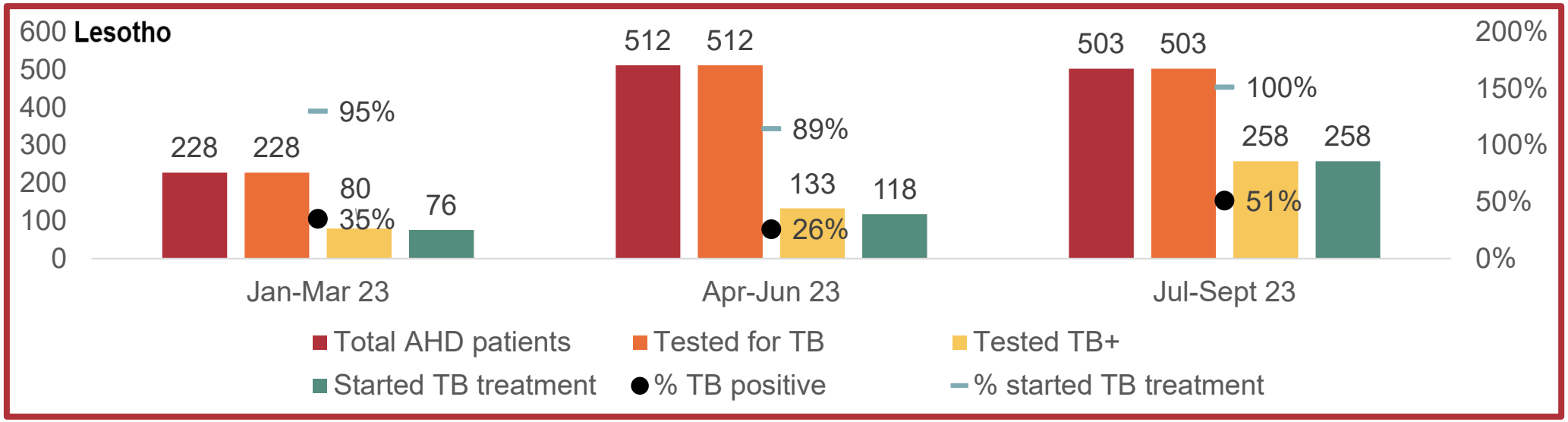
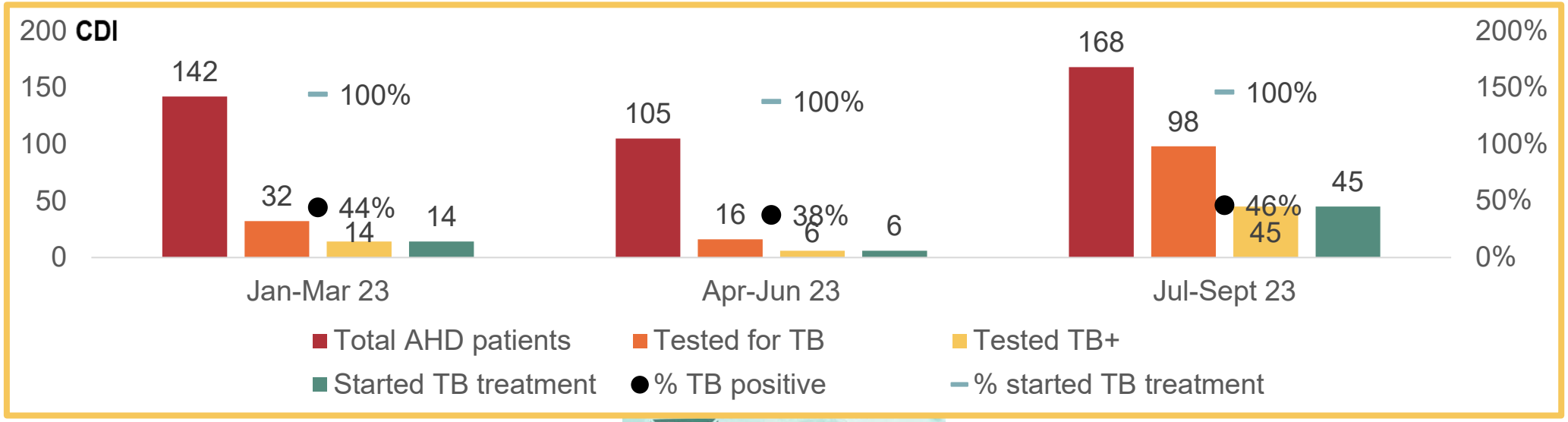
AHD Data Analysis and Use: Example2





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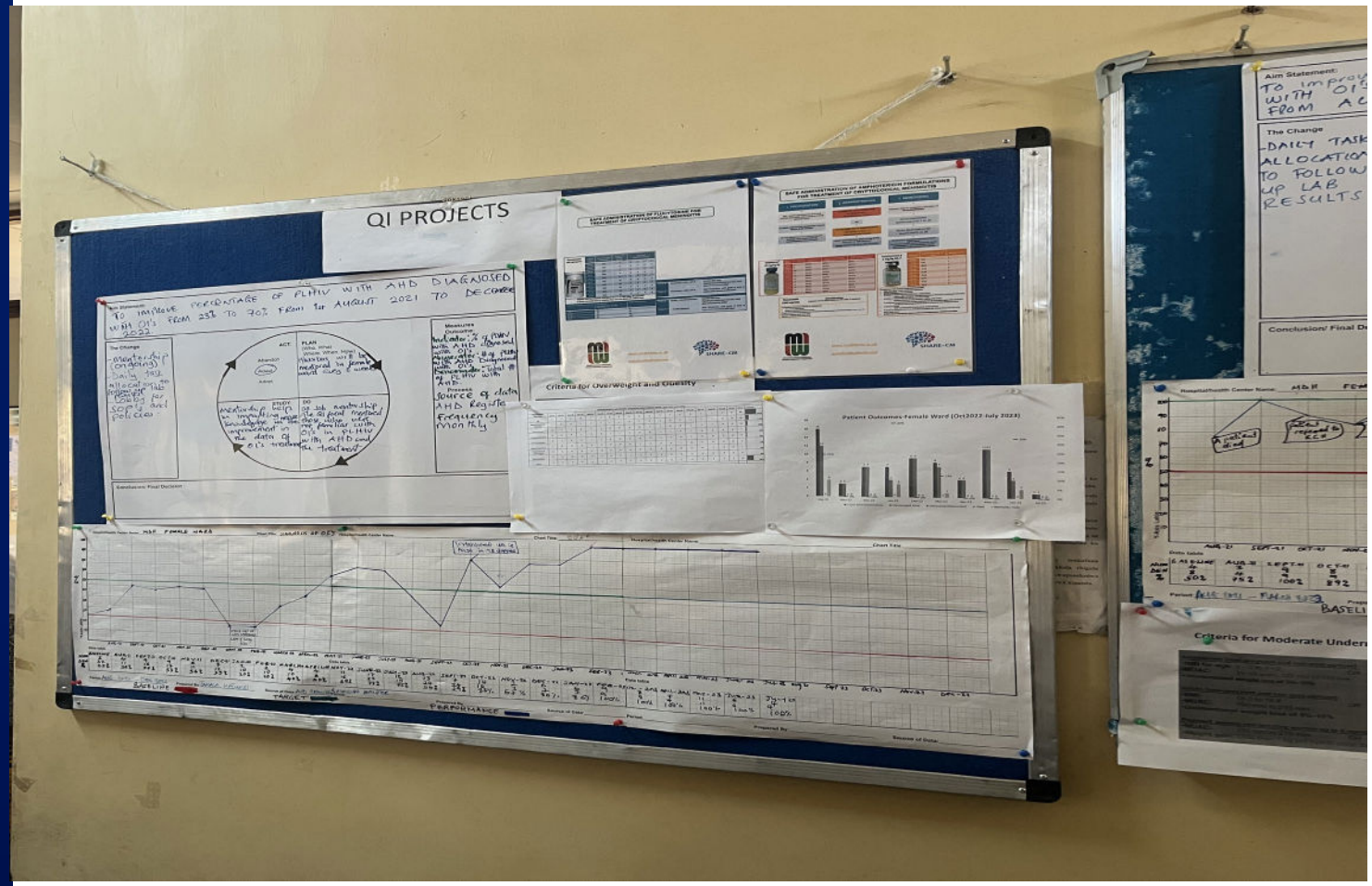
AHD Data Use: Malawi Example

Daily HCWs use the data to manage patients through EMRs and registers.

Weekly & monthly, they plot run charts for key indicators to monitor progress made by project interventions – using a QI approach



Data displays for AHD QI projects in Malawi, August 2023

Nurses explaining AHD QI results to EGPAF learning visit team, Aug 2023

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EGPAF AHD Indicators

Disaggregated by: Patient type*, Age, Sex
* New on ART, Returned to Care, Failing Treatment (HVL), CU5 starting treatment

1. AHD Screening: CD4 Testing and WHO Staging

- PLHIV eligible for AHD screening *(Newly diagnosed HIV+ patients, HVL patients, RTT patients, UC5<1 yr ART, Other per C. guidelines),*
- PLHIV screened for AHD by CD4 count *(Includes those who are screened by both CD4 and WHO staging*),
- PLHIV screened by WHO staging only (No CD4),
- PLHIV diagnosed with AHD by CD4 (<200) (includes those who are screened by both CD4 and WHO staging),
- PLHIV diagnosed with AHD by WHO Staging only (Stage 3/4),
- PLHIV automatically considered AHD clients without CD4 count or WHO staging,
- Total PLHIV diagnosed with AHD *(sum of last 3 groups)*,

2. Tuberculosis Diagnosis, Treatment and Outcomes

- Total PLHIV diagnosed with AHD,
- PLHIV investigated/tested for TB (by type of test – TB Lam, GeneXpert, Chest Xray, other),
- PLHIV diagnosed with TB,
- PLHIV started TB treatment, PLHIV started TPT
- TB treatment outcomes *(cohort data where patients with each outcome are counted at 9 -12 months after start of treatment per country TB treatment regimens)*,

3. Cryptococcal Meningitis Diagnosis and Treatment

- Total PLHIV diagnosed with AHD,
- PLHIV tested with Serum CrAg,
- PLHIV tested positive to Serum CrAg,
- PLHIV tested with CSF CrAg,
- PLHIV tested positive to CSF CrAg
- PLHIV started CM treatment,
- PLHIV started pre-emptive treatment
- CM treatment outcomes (Induction phase, consolidation phase)

4. Diagnosis and Treatment of Other OIs

- Total PLHIV diagnosed with AHD,
- PLHIV screened for other OIs by type of OI (Severe bacterial infections, Pneumonias, Kaposi sarcoma, malnutrition, other),
- PLHIV started treatment for the respective OIs diagnosed,

5. AHD Follow-Up Outcomes

- AHD clients with a follow-up VL test and received results after AHD diagnosis,
- AHD care outcomes at 6 and 12 **months** (Alive and in care, Died, Discharged from AHD care, Lost to follow-up)

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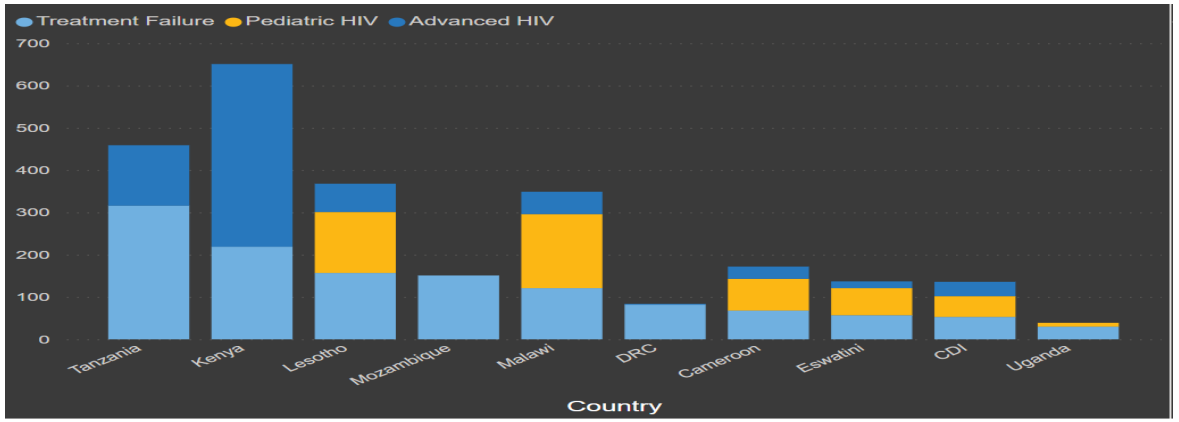
Challenges

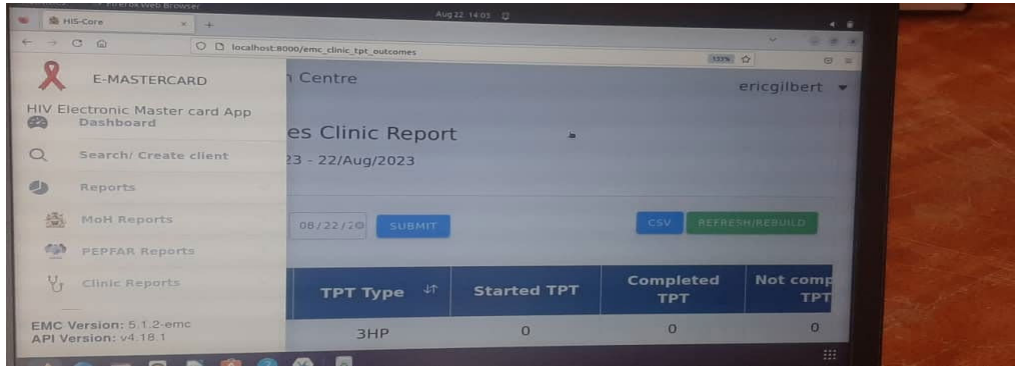
Serial No.	Date	SDP	Unique ID	Name of Client	Sex	Age	Measurements			HIV Status	Last Taken ARVs		Seriously Ill	AHD Symptoms Screening										WHO Clinical Stage				Most Recent Viral Load		CD4 Testing and Results		
				Name and Surname	Male / Female Pregnant / Breastfeeding / Female Non-Pregnant	Years	Height (CM)	Weight (KG)	Body Mass Index (W/H²)	New Positive / Previous Positive	Never / More than 3 Months ago / Between 1 week and 3 Months / Current (within last 7 days)		Any danger Signs? Yes / No	Cough / Weight Loss/Failure to Thrive / Fever/Night Sweats / Mouth Sores / Shortness of Breath / Central Nervous System / Yellow Eyes / Vomiting/Abdominal Pain / Diarrhea / Peripheral Neuropathy / Rash on Arms/ Legs/ Trunk								WHO Clinical Stage 1 / WHO Clinical Stage 2 / WHO Clinical Stage 3 / WHO Clinical Stage 4				Not Done / Result and Date (dd/mm/yy)		Not done / Less than 200 / 200 cells and above / Result and Date (dd/mm/yy)		
	dd/mm/yy				M FP BF FNP					NP PP	N 3M+ W3M C		Y N	Co	WL	FN	MS	SoB	CNS	Ye	GI	DA	PN	Ra	1 2 3 4				ND result dd/mm/yy		NO <200 200+ result		dd/mm/yy

1. **Using multiple data sources vs AHD-specific tools**
2. **Aligning multi-country indicators**
3. **Enforcing data submissions**
4. **Frequency of data submission – monthly vs quarterly**
5. **Adding AHD modules to EMRs**

Malawi AHD Register: Approved for national use



AHD data submission on EGPAF Global Analytics Platform



Absence of AHD from EMRs and cost of adding it

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Thank you!

Supplementary slide on stakeholder access to EGPAF dashboards

Malawi Analytics Platform

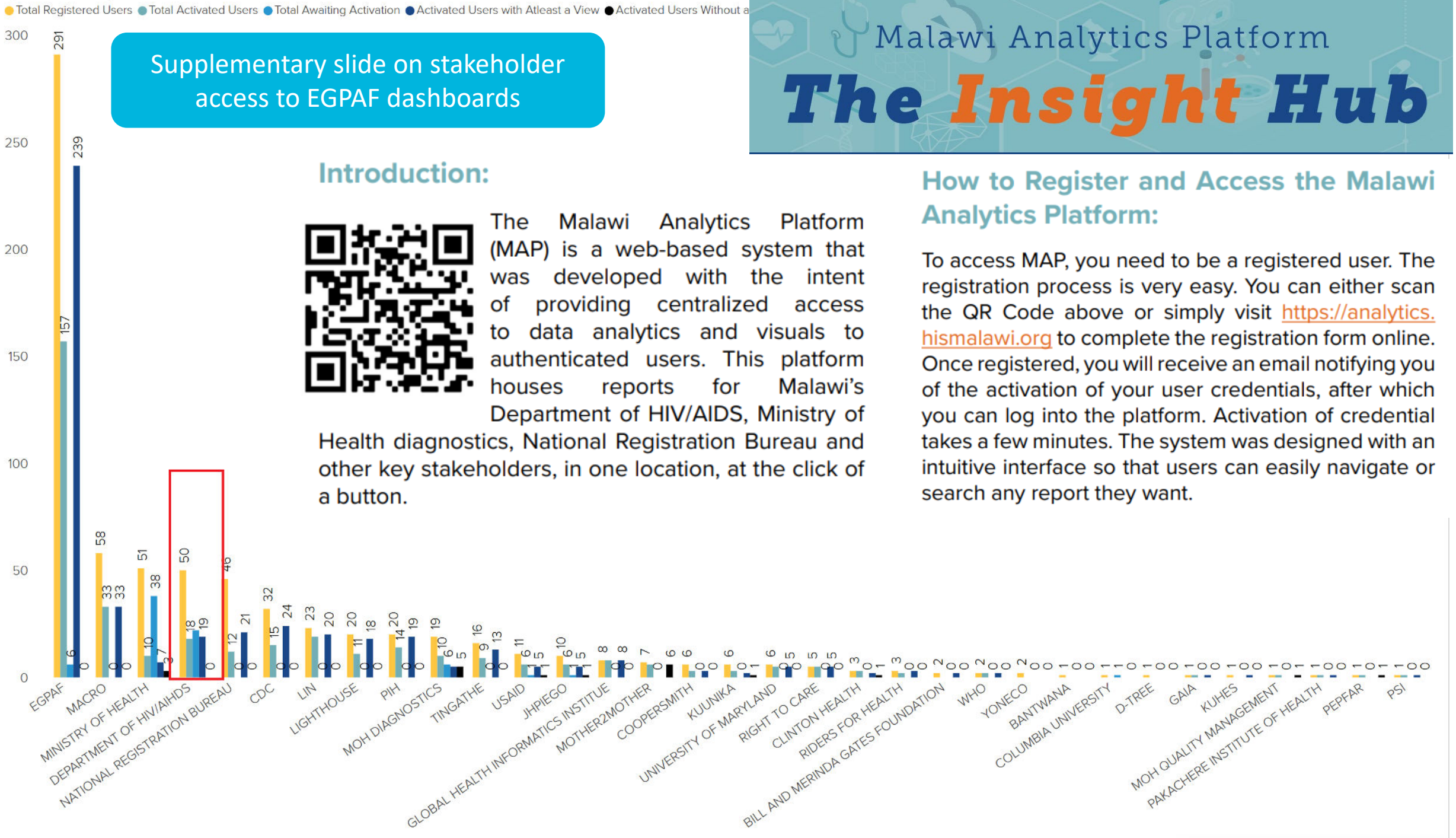
The Insight Hub

Introduction:

The Malawi Analytics Platform (MAP) is a web-based system that was developed with the intent of providing centralized access to data analytics and visuals to authenticated users. This platform houses reports for Malawi's Department of HIV/AIDS, Ministry of Health diagnostics, National Registration Bureau and other key stakeholders, in one location, at the click of a button.

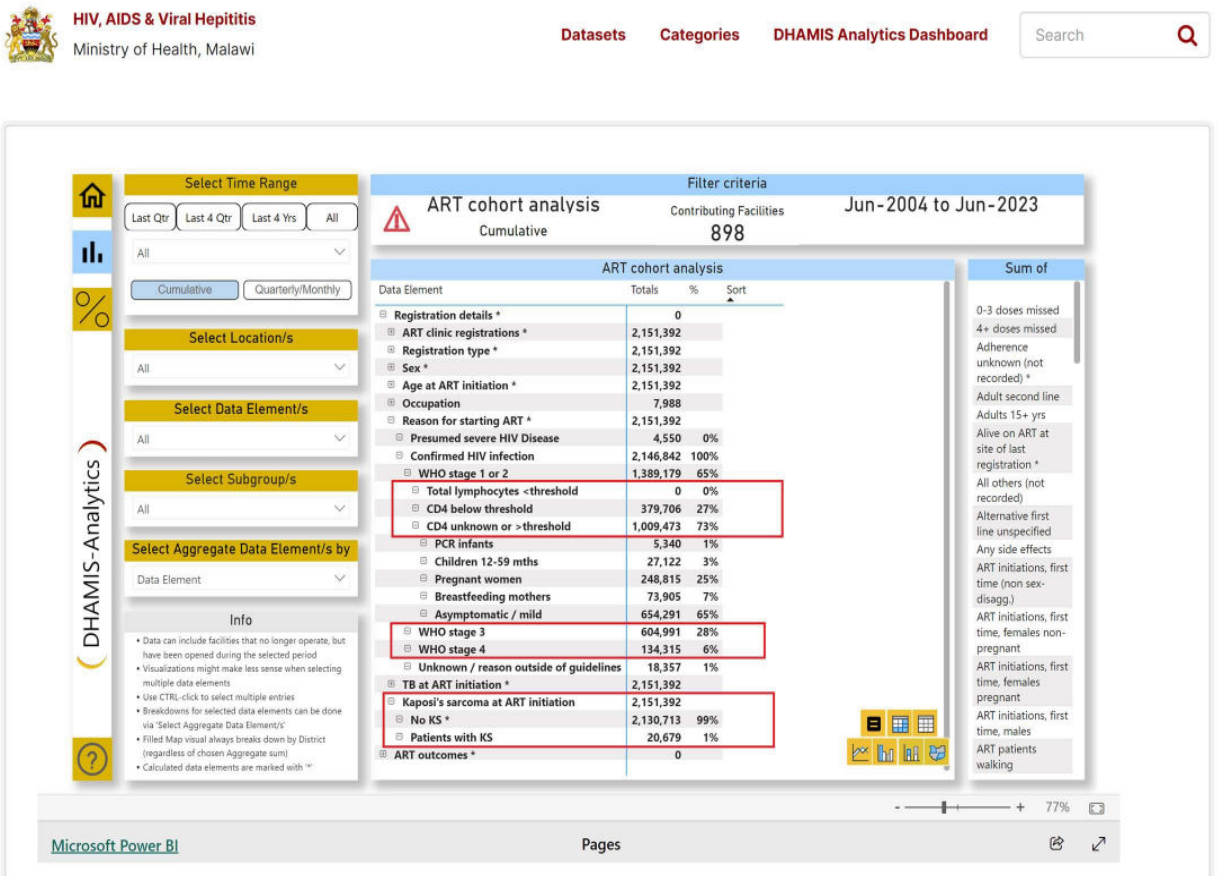
How to Register and Access the Malawi Analytics Platform:

To access MAP, you need to be a registered user. The registration process is very easy. You can either scan the QR Code above or simply visit https://analytics.hismalawi.org to complete the registration form online. Once registered, you will receive an email notifying you of the activation of your user credentials, after which you can log into the platform. Activation of credential takes a few minutes. The system was designed with an intuitive interface so that users can easily navigate or search any report they want.



The MOH has its own ART database called DHAMIS (Dept of AIDS and AIDs Management information System) for storage and repository of HIV data. The don't really have a fully fletched disaggregated ART data. The proxy AHD data they have are just aggregate number of cases of: KS, # started treatment, TB, CD4, WHO staging and serum CrAg tests (positive or negative). Below is the screen shot of the MOH DHAMIS. Often, MoH would reach out to EGPAF BMGF project to give them some data as needed on some areas.

The MOH database cannot sync with MAP because they have different format. Furthermore, MAP only has data on the 53 EGPAF sites (22 BMGF and 31 CDC) while MOH has more other sites in phase 1 and now phase 2.

With the introduction of the AHD register, they are thinking of revamping their AHD data and align more to the guidelines. However, MOH has access to MAP if they need additional data. With MOH adapting the BMGF M&E tools as national register, patient cards, then will be re-aligning to a more deeper AHD cascade reporting

EGPAF was not involved in the AHD CMM staging process