



Delivering High-Quality DSD Services at Scale

A CQUIN Learning Network Workshop

April 26– 29, 2022

Johannesburg, South Africa

QI Collaborative: Retention, Suppression & Advanced HIV Disease in Malawi

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29th April 2022



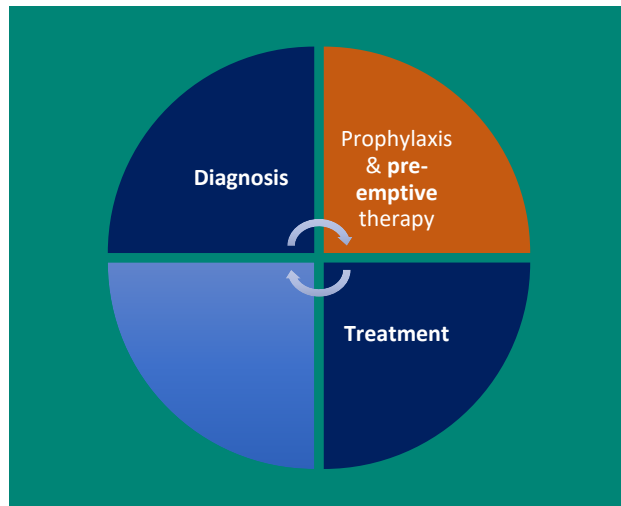
HIV Learning Network
The CQUIN Project for Differentiated Service Delivery

BILL & MELINDA
GATES foundation



Project design

MOH AHD Model



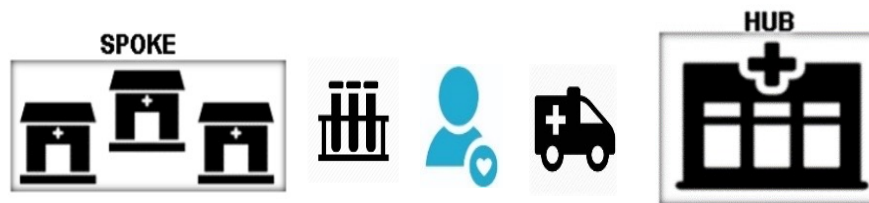
Intensive AHD Model



Trainings Mentorship

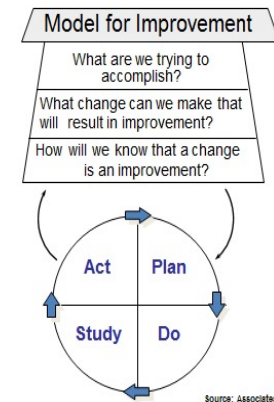


National M&E Framework



Sample Transport Patient Referral

Quality Improvement



Intensive M&E to inform program



AHD Policy ,Guidelines and Coordination in Malawi

National Guidelines and Policy

- National AHD guidelines are integrated in the HIV Clinical Management guideline.
- MOH AHD training materials
- Diagnostic and treatment SOPs
- Desk job aids

AHD Diagnostic Package

- **Clinical evaluation,**
- CD4+**reflex** testing,
- Routine urine LAM and serum CrAg
- Screening for all **HIV+ under five** children
- **Patients Monitoring plan**

Treatment package

- Prophylaxis/OI Rx:
 - CPT,
 - TPT,
 - CM
 - TB treatment
- ART initiation – Test and Treat
- ART Monitoring: VL Monitoring ,
- HIV Resistance Testing
- No standard MOH AHD M&E System

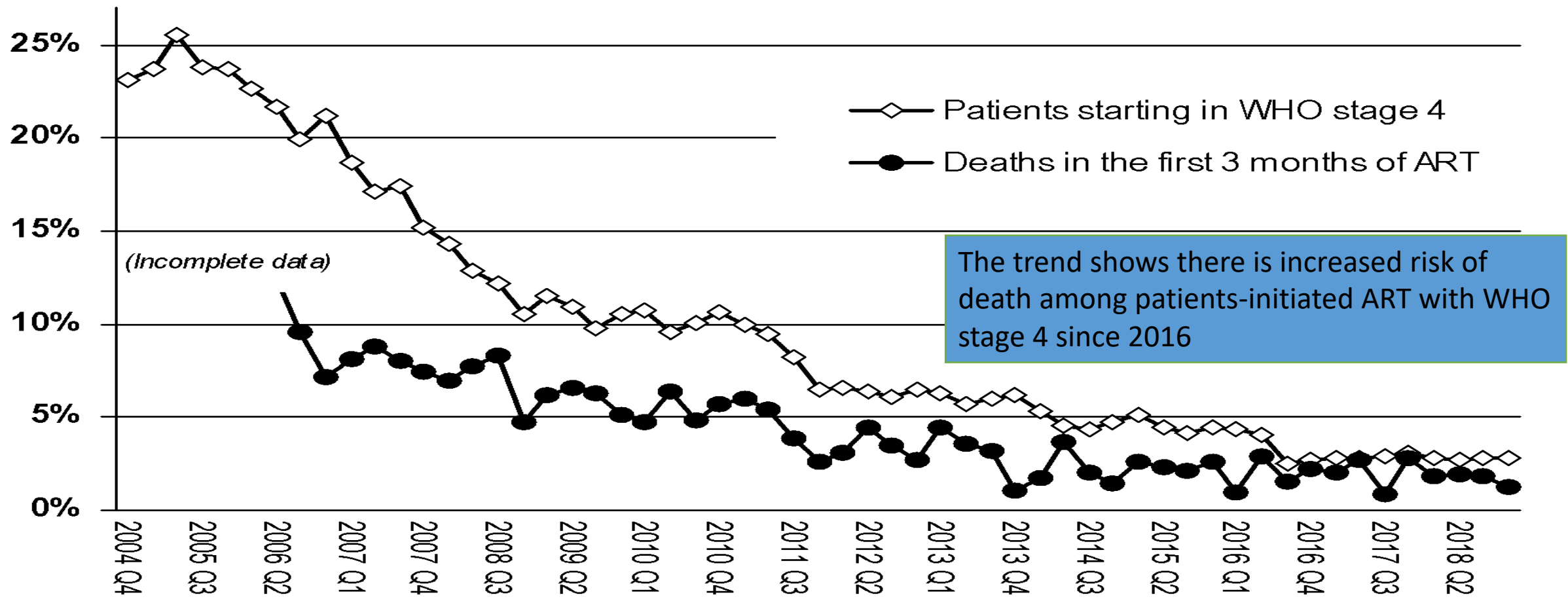
AHD Coordination and Leadership

- National taskforce on AHD
- National and district AHD focal person in place
- CSOs for PLHIV engagement
- National HIV Care and Treatment TWG meeting



DEATHS AMONG HIV CLIENTS PLATEAUED FROM 2016 in Malawi: Increased need to identify deceleration factors

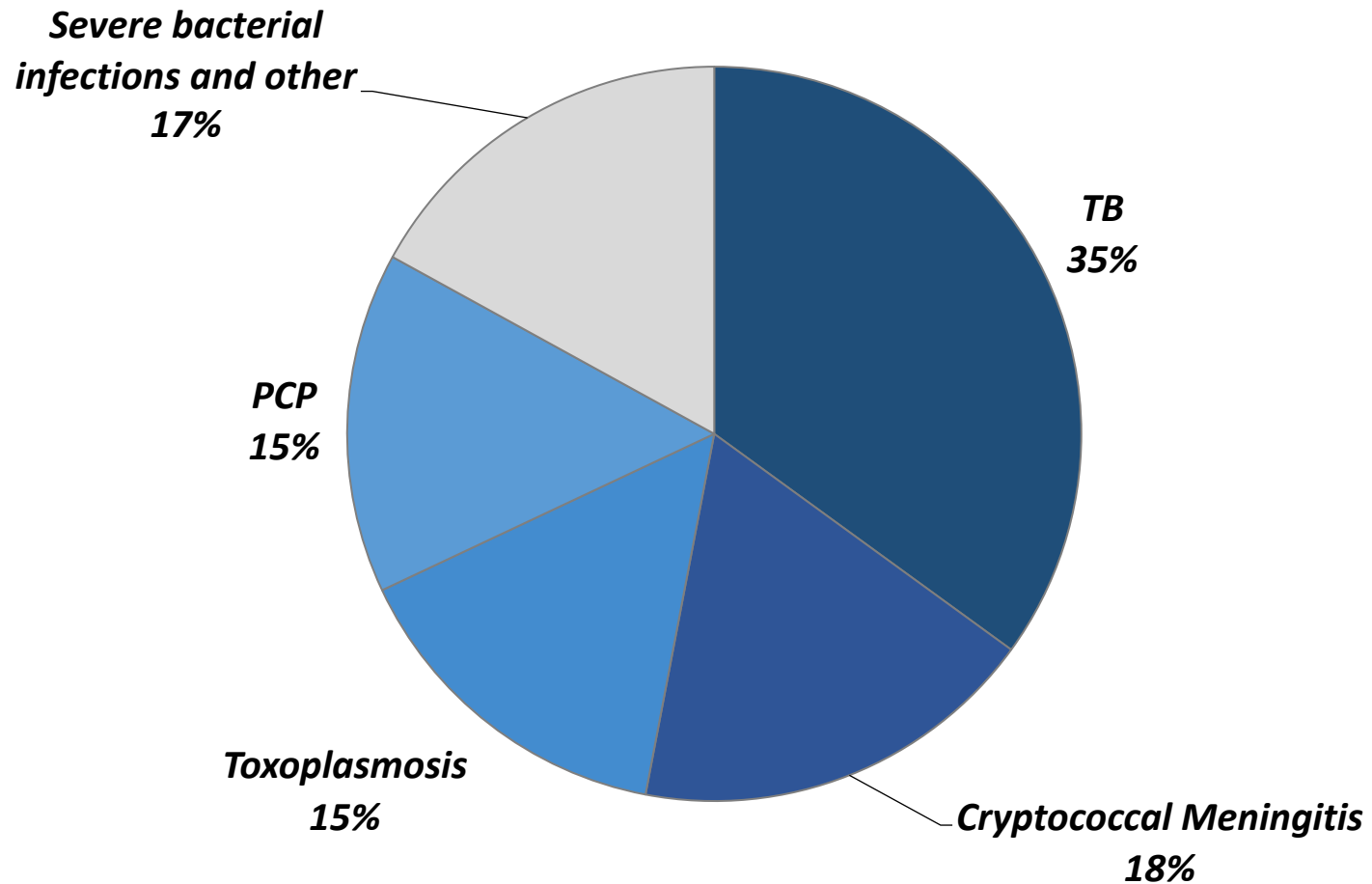
Patients starting ART in WHO stage 4 and deaths in the first 3 months after ART initiation. (Shown as proportions among new patients registered each quarter)





AIDS-related mortality driven by a **small number of OIs: TB and fungal infections like **Cryptococcus**: **All treatable****

The majority of AIDS-related deaths of hospitalized adults are caused by opportunistic infections, including:





Goals, Objectives, Location and Timelines

Goal 1: To improve outcomes of the advanced HIV disease (AHD) program by defining and scaling practical models for providing access to AHD services for people living with HIV in Malawi

1.1 Strengthen implementation of services with fidelity for Advanced HIV disease in selected facilities in Malawi;

1.2 Use AHD-specific QI tools and processes to support national scale up and fidelity to screen, diagnose, and treat AHD;

Project Timeline : October 30, 2020 – October 31, 2022

Goal 2. To disseminate these models as best practices for other countries with similar disease burden and resource constraints via mechanisms such as the CQUIN Advanced HIV Disease Community of Practice and the UNITAID/CHAI project for AHD

2.1 Generate evidence to measure the impact/outcomes of the implementation of AHD package with documentation;

2.2 Ensure dissemination and translation to policy/practice.

Project Location:

7 Districts in Malawi

3 EGPAF Supported Districts (Ntcheu, Dedza and Mchinji)

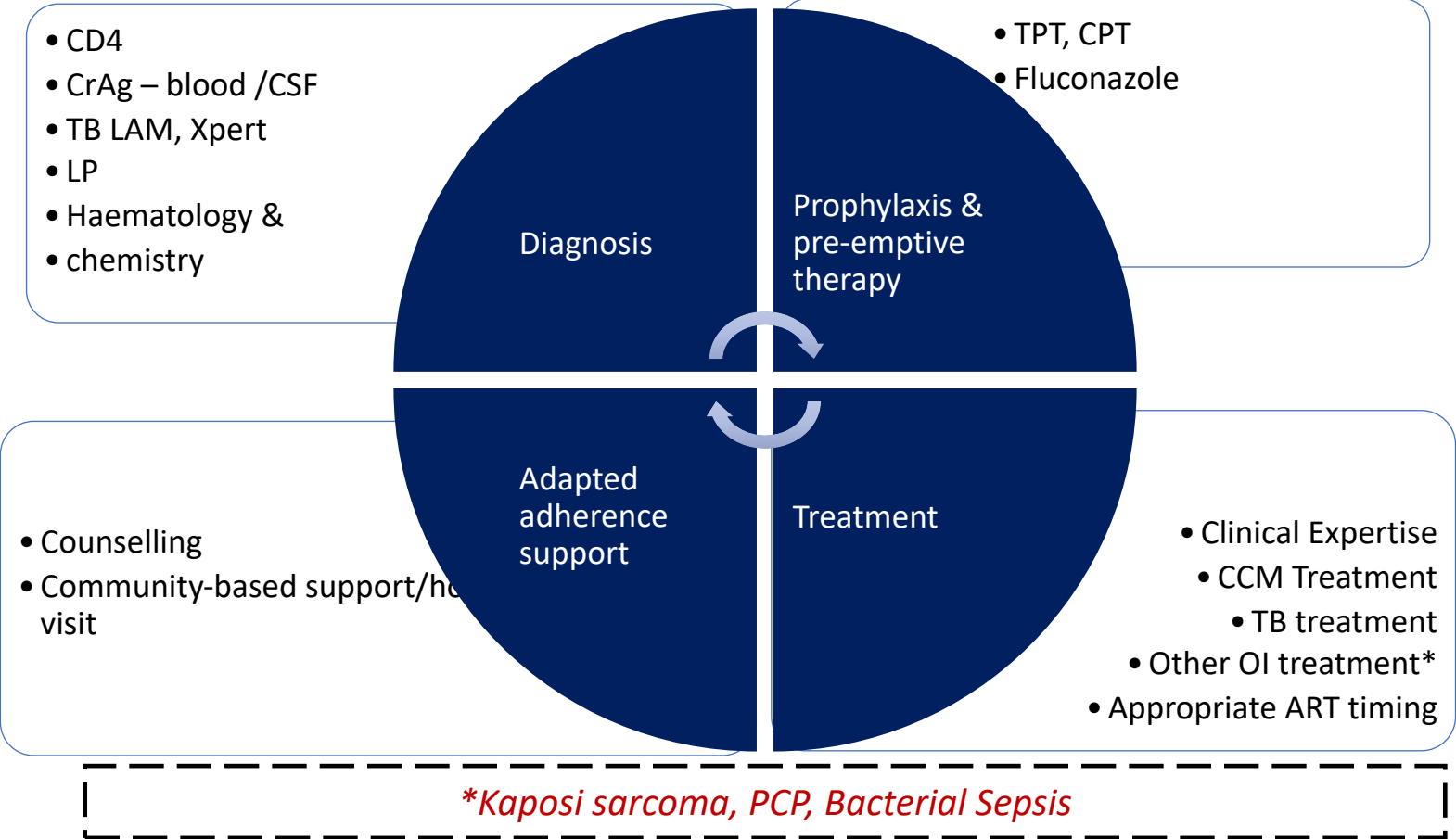
- 22 sites total –
 - 8 Hubs & 14 spoke
- Sites to engage in intensive AHD model of care and QI collaborative

4 Districts served PEPFAR IPs

- Karonga : Partners in Hope,
- Nkhotakota :Partners in Hope,
- Mangochi: Baylor
- Mzuzu north :Lighthouse trust
 - 21 sites total
 - Facilities to enhance MOH's AHD model of care and QI collaborative

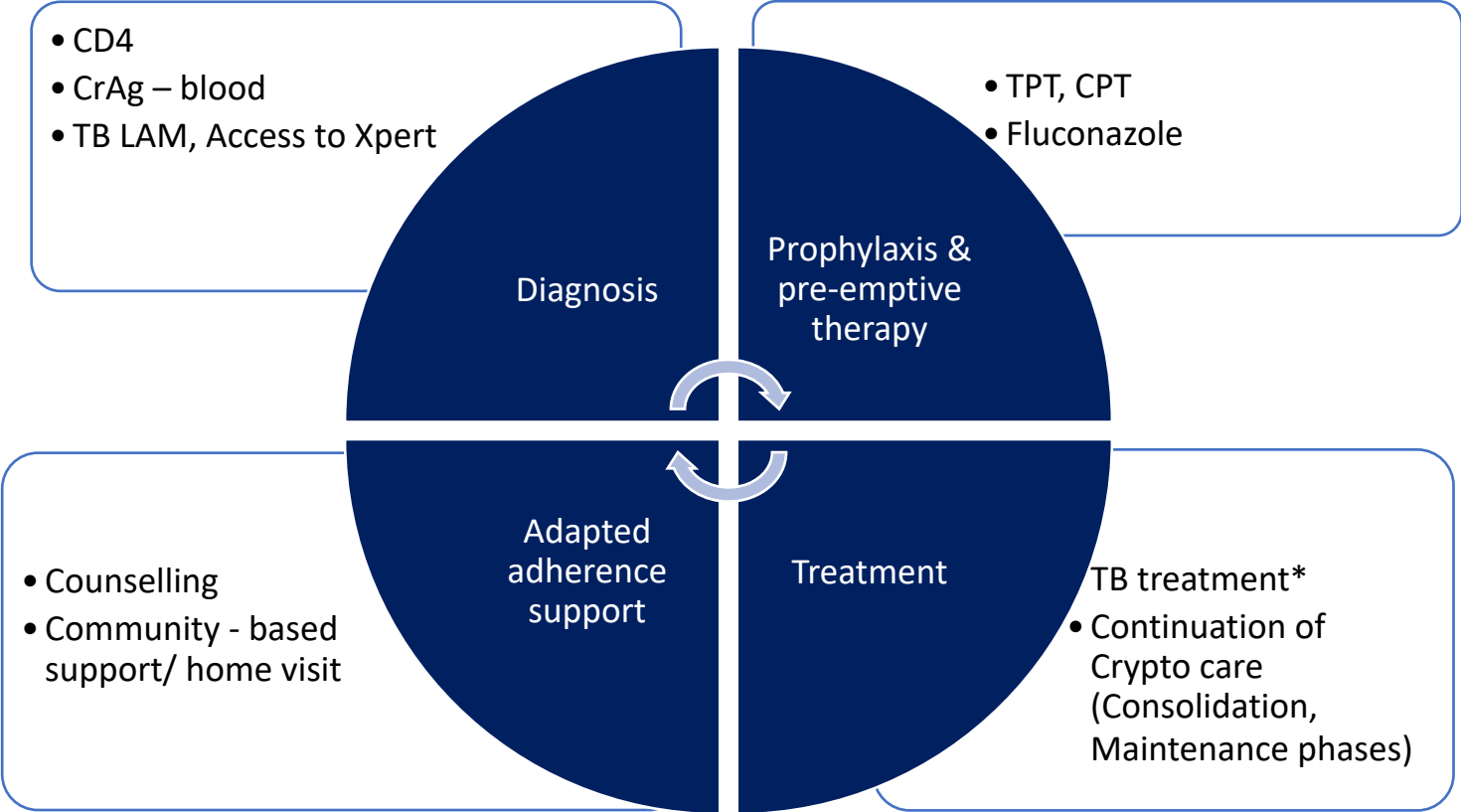


MOH AHD Package for hospitalized patients (Hub)





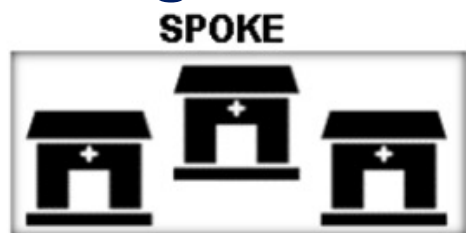
MOH AHD Package for outpatients (Spoke)



**Accreditation to provide TB diagnostic and treatment services*



Operationalizing the Hub and Spoke Model



ART | **OPD**



Patient referral where unavoidable but mainly Sample Transport



ART | **IPD** | **OPD** | **LAB**

Screening and diagnosis

- Sample referral system to hub
- Cd-4
- CraG-serum
- TB LAM, Access to Xpert

Prophylaxis & Preemptive Tx

- TPT, CPT
- Fluconazole

Treatment

- TB treatment*
- Continuation
- Crypto care (consolidation maintenance phases)

Adherence support

- Counselling
- Community-based support/ home visit



**Trainings
Patient Consultation
Mentorship
QI**



- Clinical assessment
- CD4
- CrAg – blood /CSF
- TB LAM, Xpert
- LP
- Hematology & Chemistry
- Hub for spoke site P

- TPT, CPT
- Fluconazole

- Clinical Expertise
- CCM Treatment
- TB treatment
- Other OI treatment*
- Appropriate ART timing

- Counselling
- Community-based support/ home visit



Key interventions implemented

- Support **National Scale-Up of a refined package of AHD care** in collaboration with MOH and other IPs and through implementation of hub and spoke model (**SOP, Job Aids, M&E**)
- Build the **capacity** of national and district-level MOH managers and **site-level healthcare workers** and strengthen **sample transport lines between hubs and spokes**
- Deliver optimized AHD DSD packages of care in all targeted sites
- Establish an **AHD QI Collaborative across all 43 sites** in collaboration with DHA, QMD, health facility managers and staff and other IPs
- Adapted all AHD/QI tools being used by Malawi: registers, treatment cards and training packages bench
- On track in the quest to nationalize AHD registers
- Established structured mentorship visits to facilities and strengthened implementation units
- **Commodities tracking for key supply areas** including replenishing of some supplies



QI ACTIVITY TRACKER

QI projects update:

- 106 QI project on going in all 43 sites targeting AHD
- 81 in EGPAF supported facilities
- 25 in Non EGPAF supported facilities

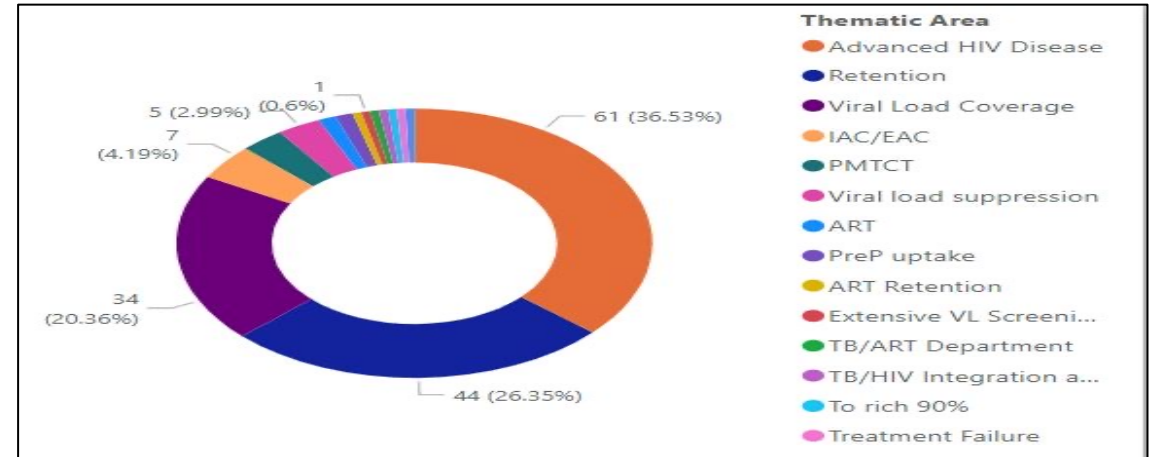
Capacity building:

- A total of 309 HCWs underwent an integrated AHD/QI 6Days trainings
- 176 HCWs trained in 22 sites in EGPAF supported sites
- 133 HCWs trained in 21 sites in Non-EGPAF supported sites
- 28 providers trained as mentors from all districts

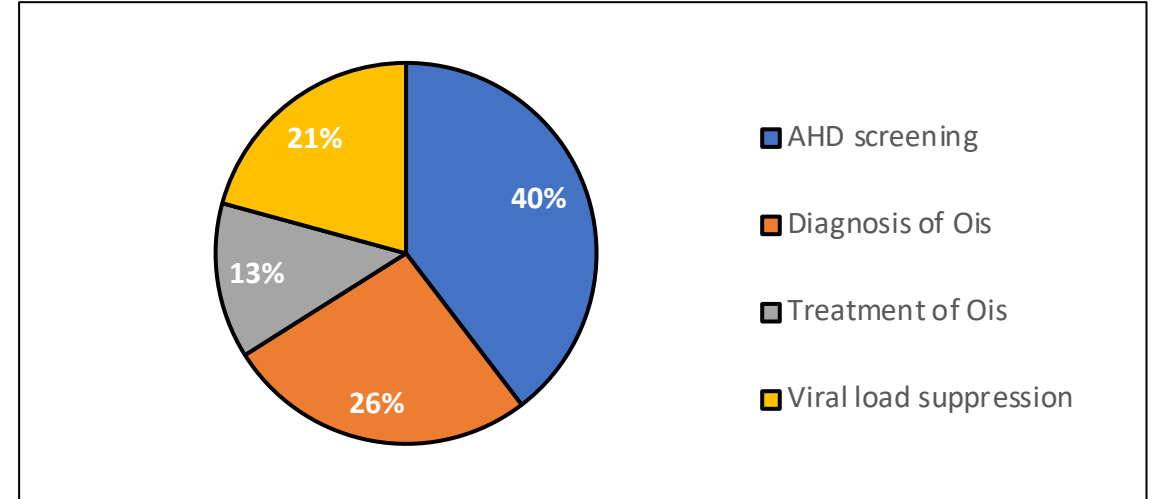
QI Number of QI Teams:

- A total of 55 QI Teams formed and function. District Hospital have more than one QIT.
 - 33 QITs in EGPAF supported sites
 - 22 QIT in non-EGPAF sites (one site dropped after training)

Advanced HIV as the dominant contributor to QI Project count

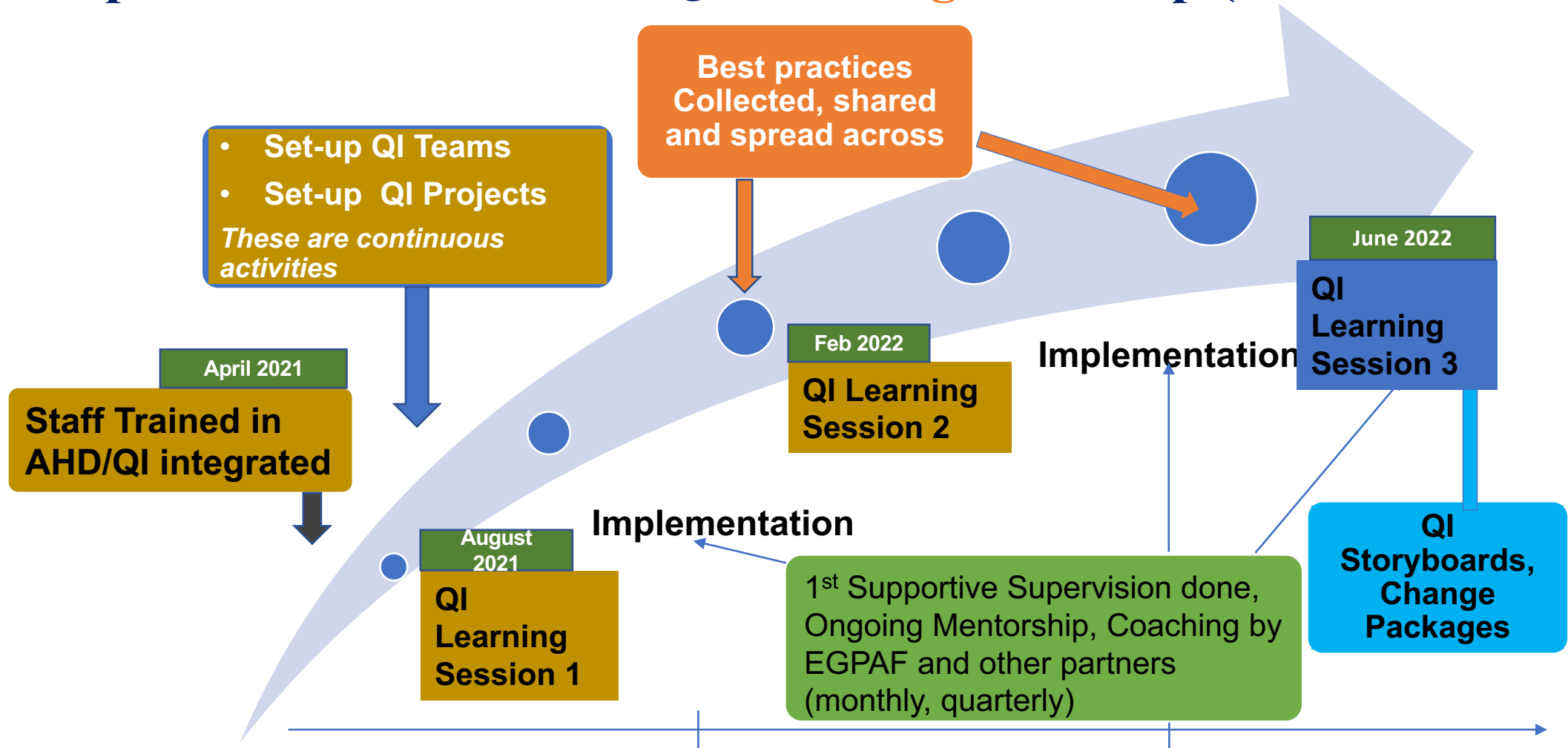


QI Collaborative indicators tracking: Viral suppression as new area of focus






QI Implementation on track: QI Learning Roadmap (60% of the work done)





Tracking of facility progress simplified with use of electronic Dashboards



**Elizabeth Glaser
Pediatric AIDS Foundation**
Fighting for an AIDS-free generation

QUALITY IMPROVEMENT PROJECT MONITORING

Page Information

Year

All

Months

All

District

All

Facility

All

Thematic Area

Advanced HIV D...


Status

All

Indicators list

All

Provides the user an instant view of the facility improvement data points. Aims at identifying facilities with missing data points. Its based on the fact that complete data sets are more meaningful and facilitate accurate decision making.



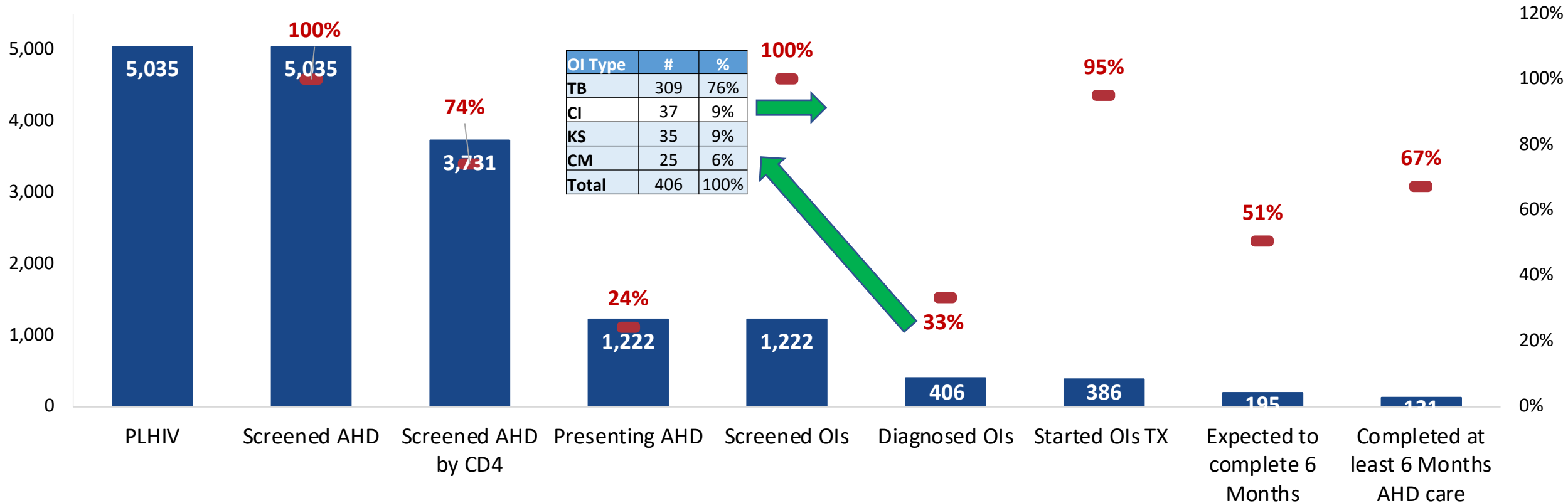
Facility	January	February	March	April	May	June	July	August	September	October	November	December
Golomoti Health Centre						40%	65%	10%	60%	100%		
In Progress						40%	65%	10%	60%	100%		
Guillime Mission Hospital			100%	100%	67%	100%	100%	100%	100%	100%	67%	100%
In Progress			100%	100%	67%	100%	100%	100%	100%	100%	67%	100%
Kapiri Mission Hospital			48%	52%	56%	85%	97%	31%	74%	92%	94%	71%
In Progress			48%	52%	56%	85%	97%	31%	74%	92%	94%	71%
Kochilira Health Centre					67%	91%	100%	100%	100%	100%	100%	100%
In Progress					67%	91%	100%	100%	100%	100%	100%	100%
Lizulu Health Centre					70%	70%	79%	74%	96%			40%
In Progress					70%	70%	79%	74%	96%			40%
Ludzi St Josephs Health Centre						100%	88%		100%	25%	89%	80%
In Progress						100%	88%		100%	25%	89%	80%
Makapwa Health Centre												
Total	87%	91%	68%	60%	52%	71%	86%	68%	87%	82%	79%	80%



SUCCESSSES



Increase in identification and treatment for OIs: 33% of AHD clients were treated for OIs in 22 facilities (Jan–Dec 2021).



OI Type	#	%
TB	309	76%
CI	37	9%
KS	35	9%
CM	25	6%
Total	406	100%

On ART eligible for AHD screening: HVL, Defaulters BB2C, Stage ¾, Admitted
Screened AHD: Cd4 testing and Stage ¾ (no cd4)

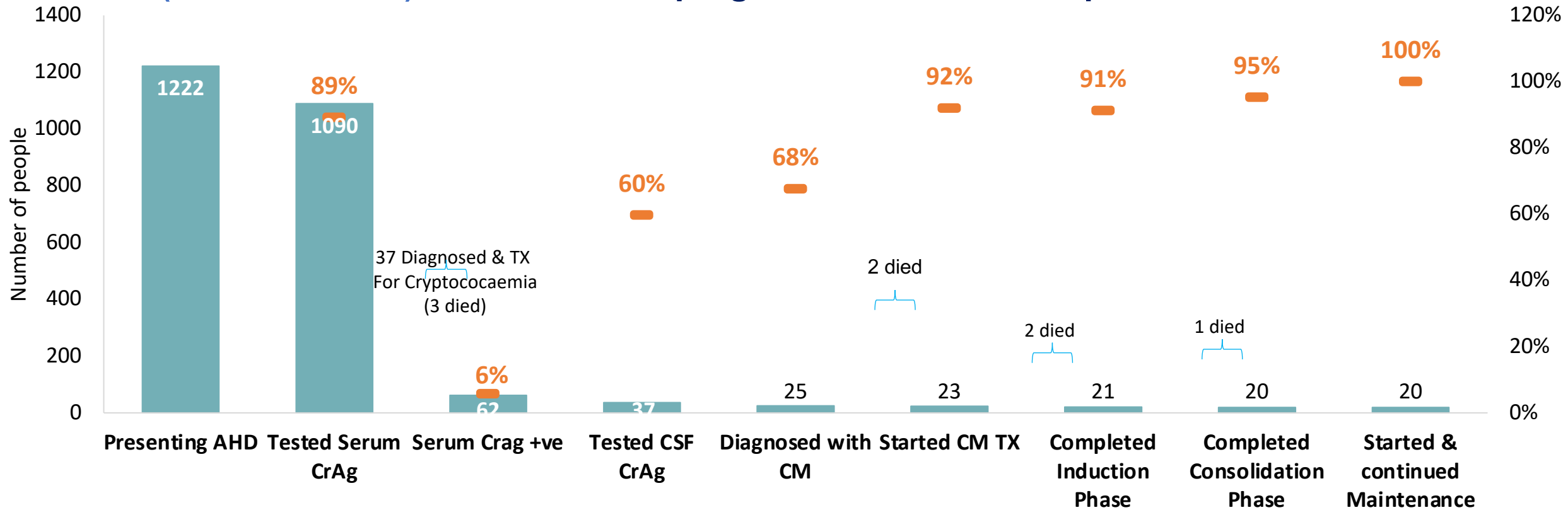
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OIs Outcomes by December 2021								
406	Alive on AHD Care			Died				Unknown
	336 (83%)			22 (5%)				
	< 6 months	=> 6 months	Discharged	CM	CI	TB	KS	
	122 (36%)	131 (39%)	83 (25%)	5 (22%)	3 (14%)	13 (59%)	1 (5%)	48 (12%)

*** OIs included: Tuberculosis (TB), Cryptococcal Meningitis (CM), Cryptocaemia (CI) & Kaposi Sarcoma (KS)



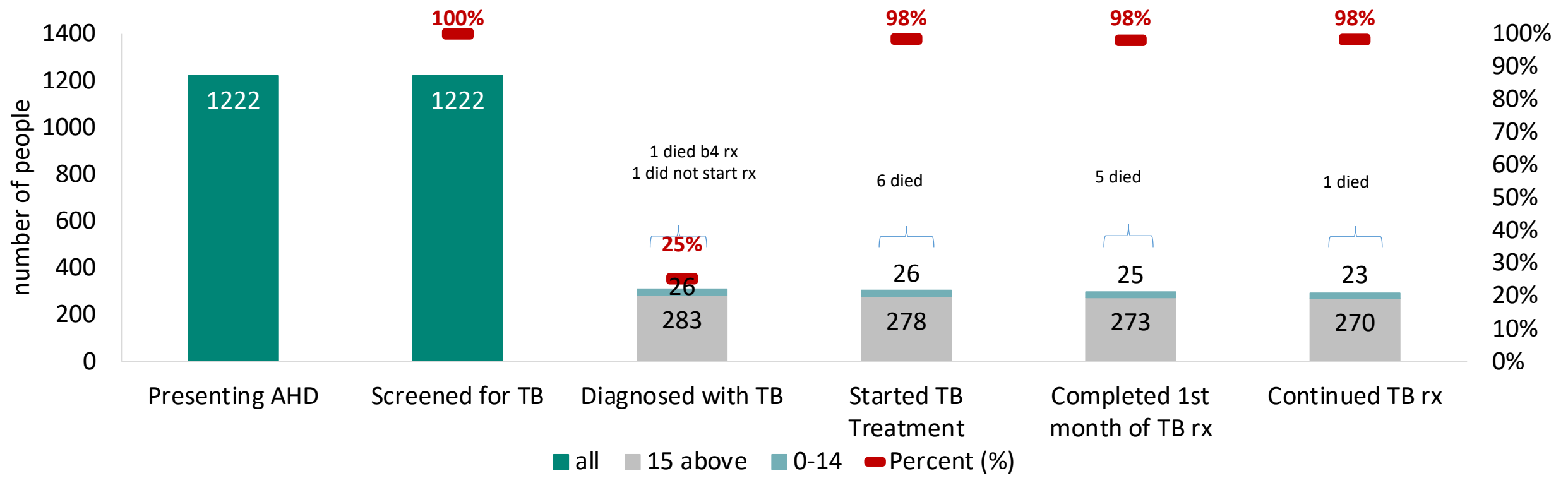
AHD Screening and Treatment Cascade for Cryptococcal Meningitis (CM) in 22 sites (Jan - Dec 2021): 80% of Clients progress to maintenance phase of treatment



Phase	CM TX Option 1	CM TX Option 2	CM TX Option 3	Cryptococcaemia TX
Induction	Liposomal Amphotericin B+ Flucytosine for 7 days	Fluconazole + Flucytosine for 14 days	Amphotericin B + Fluconazole 14days	Fluconazole 800mg tablets for 2 weeks
Consolidation	Fluconazole tablets for 8 weeks			Fluconazole 400mg for 8 weeks
Maintenance	Fluconazole tablets, lifelong			Fluconazole 200mg tablets, lifelong



AHD Screening and Treatment Cascade for TB in 22 sites: >95% of clients sustained on TB Treatment (Jan - Dec 2021)



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National Guidelines on Urine LAM result:

- Positive: treat for TB, regardless of other TB diagnostics R/O RIF Res
- Negative: does not rule out TB. Continue with TB investigations in symptomatic patients accordingly



Promising practices

Screening:

- Screening tool for clinical staff
- Orientation of all staff on AHD client identification criteria
- Relocating the PIMA CD4 Machines to service delivery points

Treatment of OIs

- Facility based ward staff orientation on optimized treatments
- Training of facility-based treatment champions among health care workers

Viral Load management

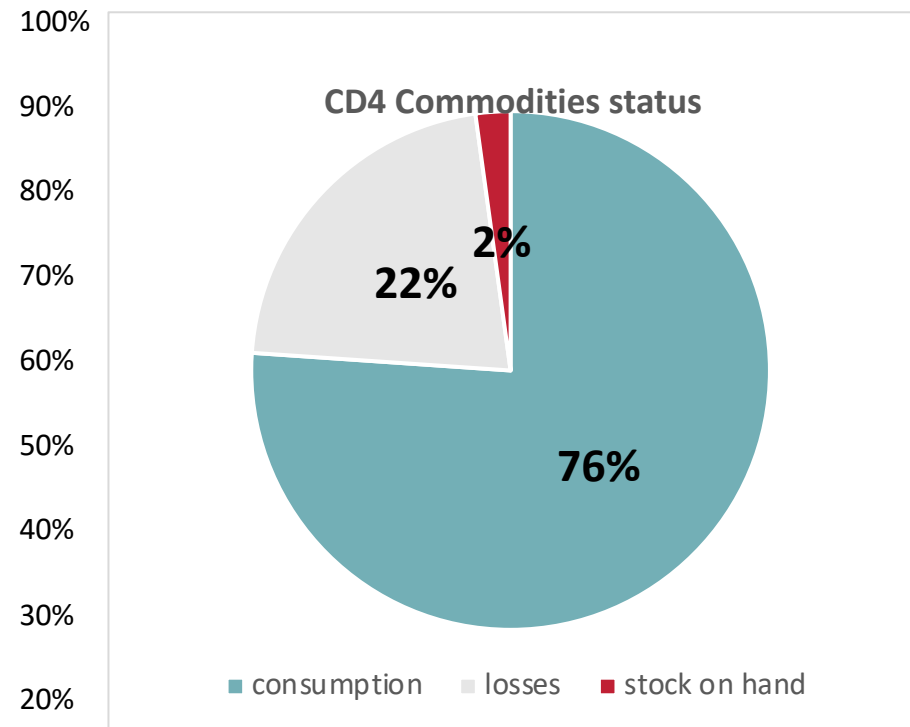
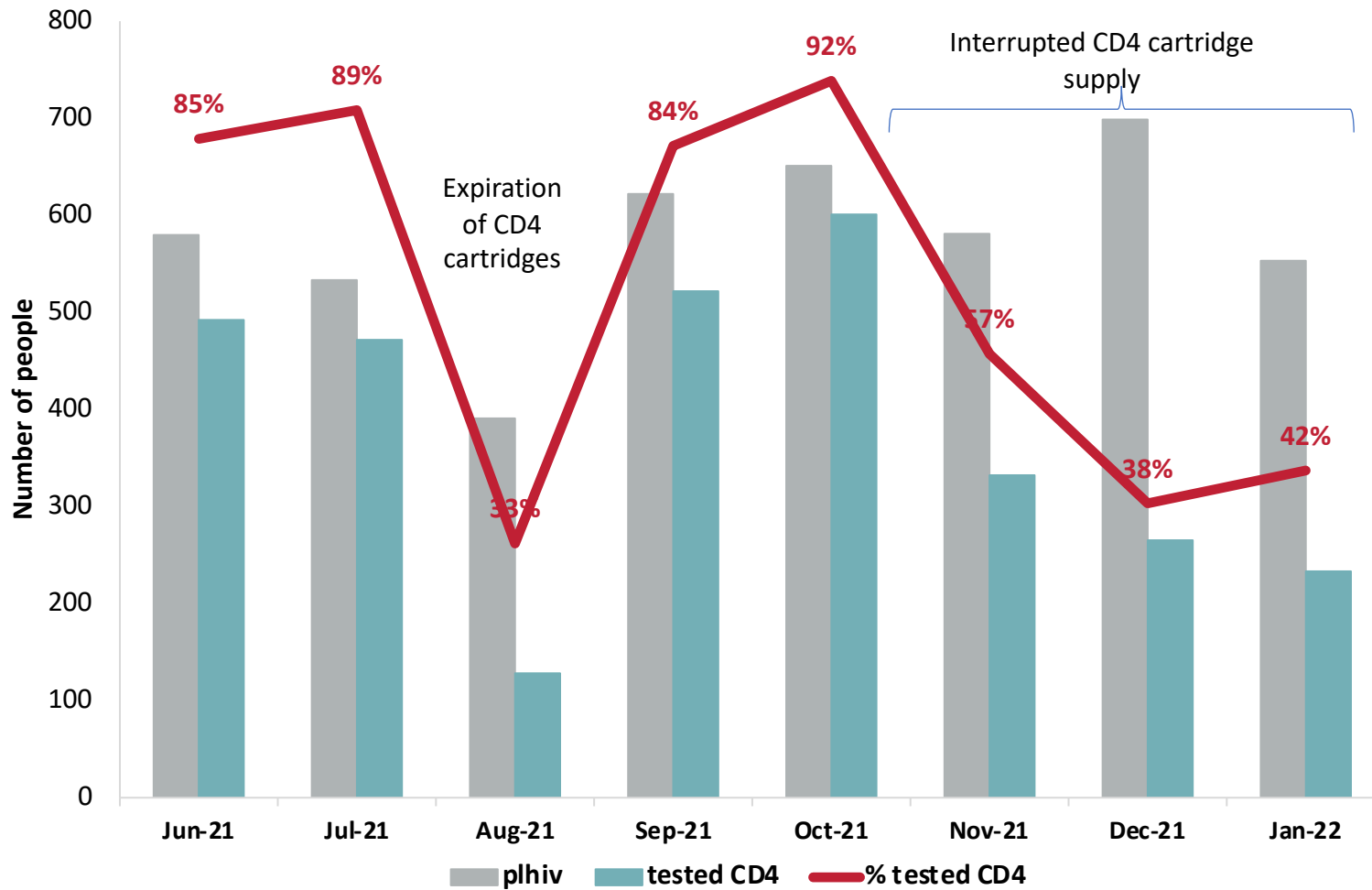
- Provision of intensive adherence counseling using adherence support officers
- Flagging the AHD client Mastercard with VL eligibility stickers and keeping cards in separate Arc lever file
- AHD clients getting one month supply for easy follow



CHALLENGES



AHD Diagnostics: Inconsistency in supply chain interrupted client identification



- Advocate usage of AHD Commodities tracking tools to improve commodity forecast
- Advocate with DHA and other implementing partners on shelf life of commodities

- Overall CD4 uptake at 66%
- Average losses 22% (Expiry)
- Average consumption per month 275
- Estimate remaining stock to last 1 month
- Estimate at 90% uptake = 370 monthly
- Gap = 968 tests annually



Moving forward

- Need to accelerate greater adoption to Electronic systems to support monitoring of patients and AHD program: **Project currently using electronic dashboards to monitor AHD and QI implementation**
- Monthly commodity tracking (therapeutics and diagnostics), minimize stockouts and improve uptake of services
- Integration of AHD into existing MOH district Quality improvement support team activities.
- Harvesting best practices of AHD service delivery through multi-district quality improvement learning sessions