

Non-Communicable Disease Integration

The Kenya Experience

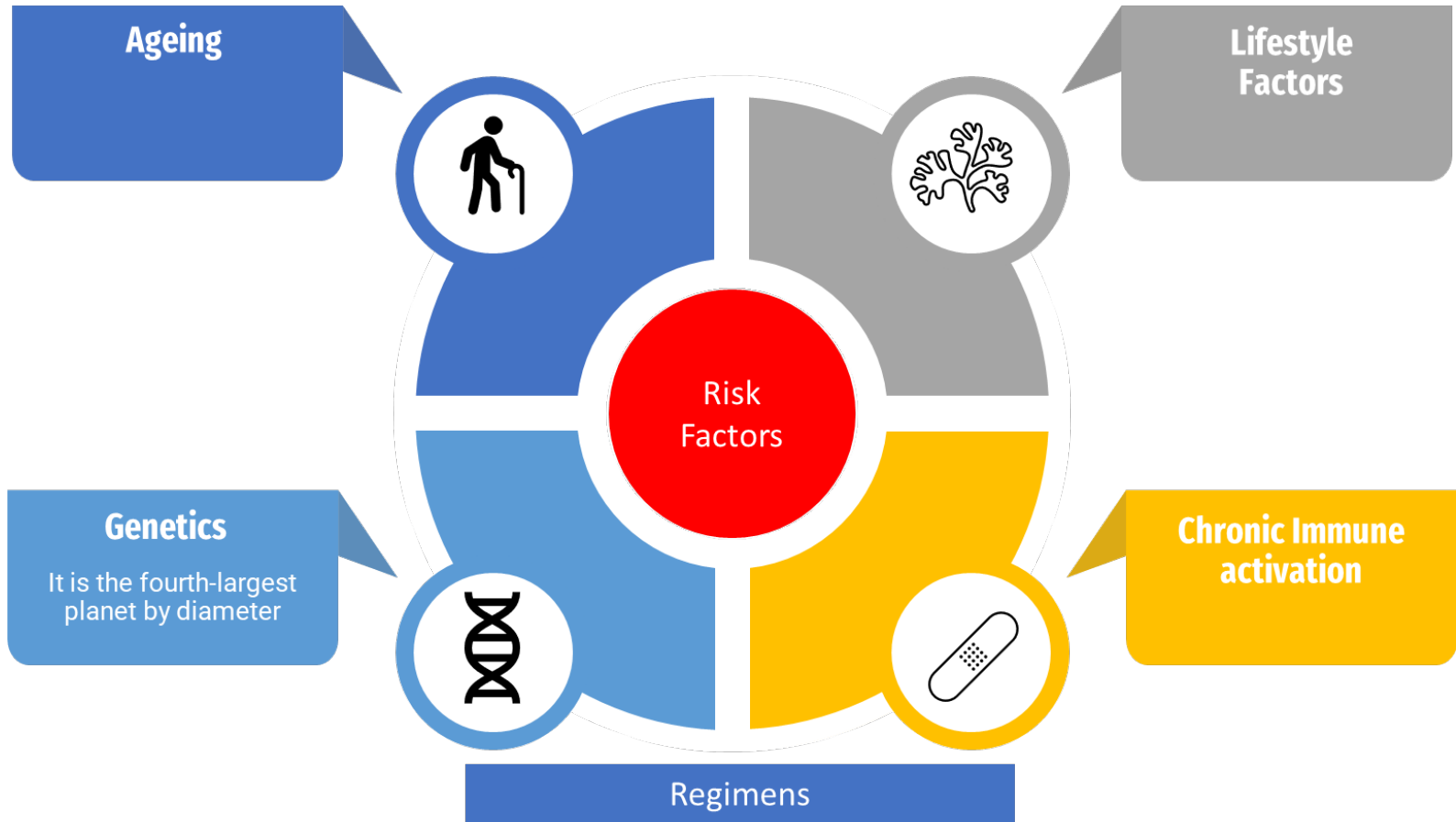
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CDC PEPFAR Kenya
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Integrating non-HIV Services into HIV Programs

April 15-18, 2024 | Nairobi, Kenya



NCD Burden in Kenya is significant: 4th 95



NCD burden among PLHIV

- Significant progress towards 95-95-95 targets
- 16 -23.2% of people living with HIV also have hypertension*
- According to the AFRICOS** study, among the 50+,
 - Hypertension- 31%**
 - Dysglycemia -15%**
 - Obesity-12%**
 - Renal insufficiency-5%**
- This comorbidity burden will increase with improved long-term HIV control and aging PLHIV population.

Preliminary Data from the national data repository shows a 6% prevalence of hypertension - Documentation gaps noted

Models of HIV-NCD Integration Considerations

Availability of guidelines

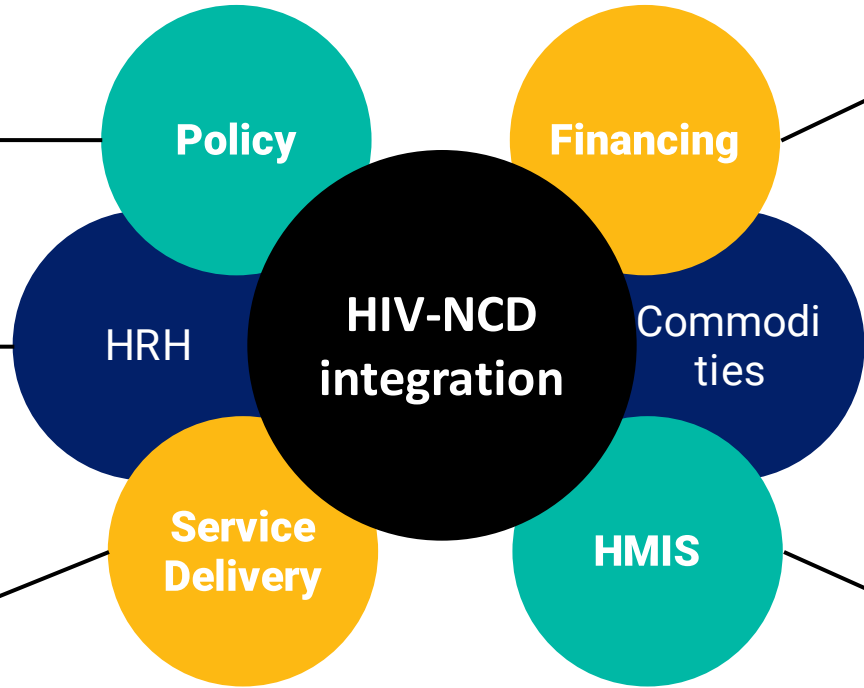


Facility and Community Engagement

Transformative Partnerships to finance diagnostics and treatment, expansion of social insurance

Specialists, capacity building of all providers

OSS (One Stop Shop) at HIV clinic, workflow between MOPC and HIV Clinic, Digital Health using teleconsultation, HRH rotation between clinics, Hub and Spokes model between different facilities



Availability of diagnostic and treatment products to the patients who need them

Integration of NCD patient management, metrics into the HIV platform-EMR and data collection and reporting systems, Interoperability Layer

Patient/Client Centric Models

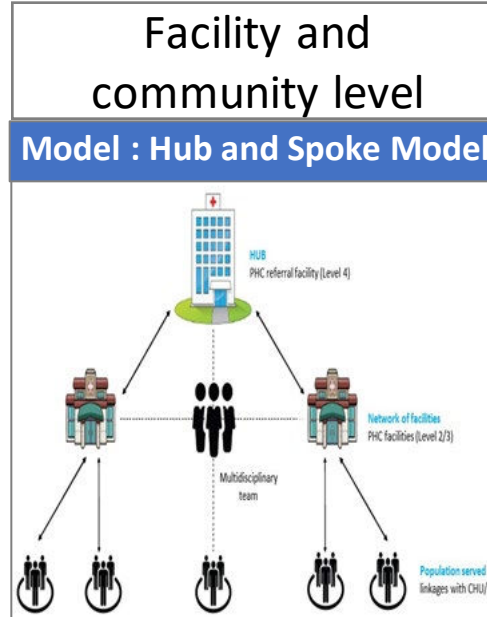
Opportunities for Integration: Primary Health Care (PHC) and UHC

Kenya has adopted Universal Health Coverage model (UHC) to ensure:

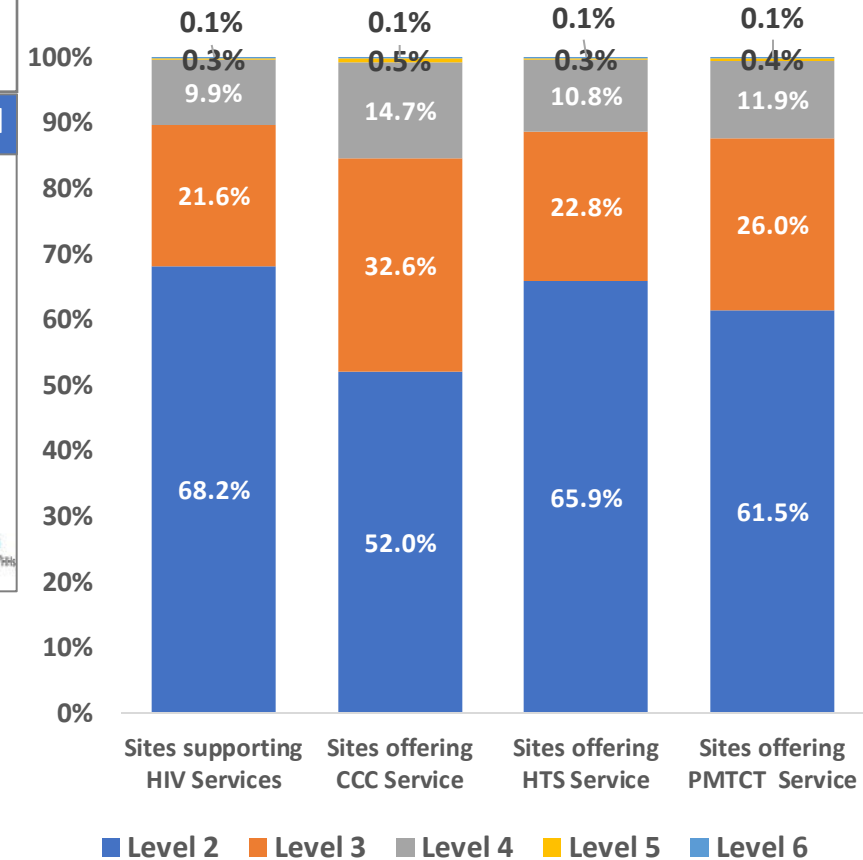
- *Affordable, Accessible, Acceptable, Available and **high-quality** health for all Kenyans.*

Primary Health Care (PHC) approach will be a key driver to attain UHC

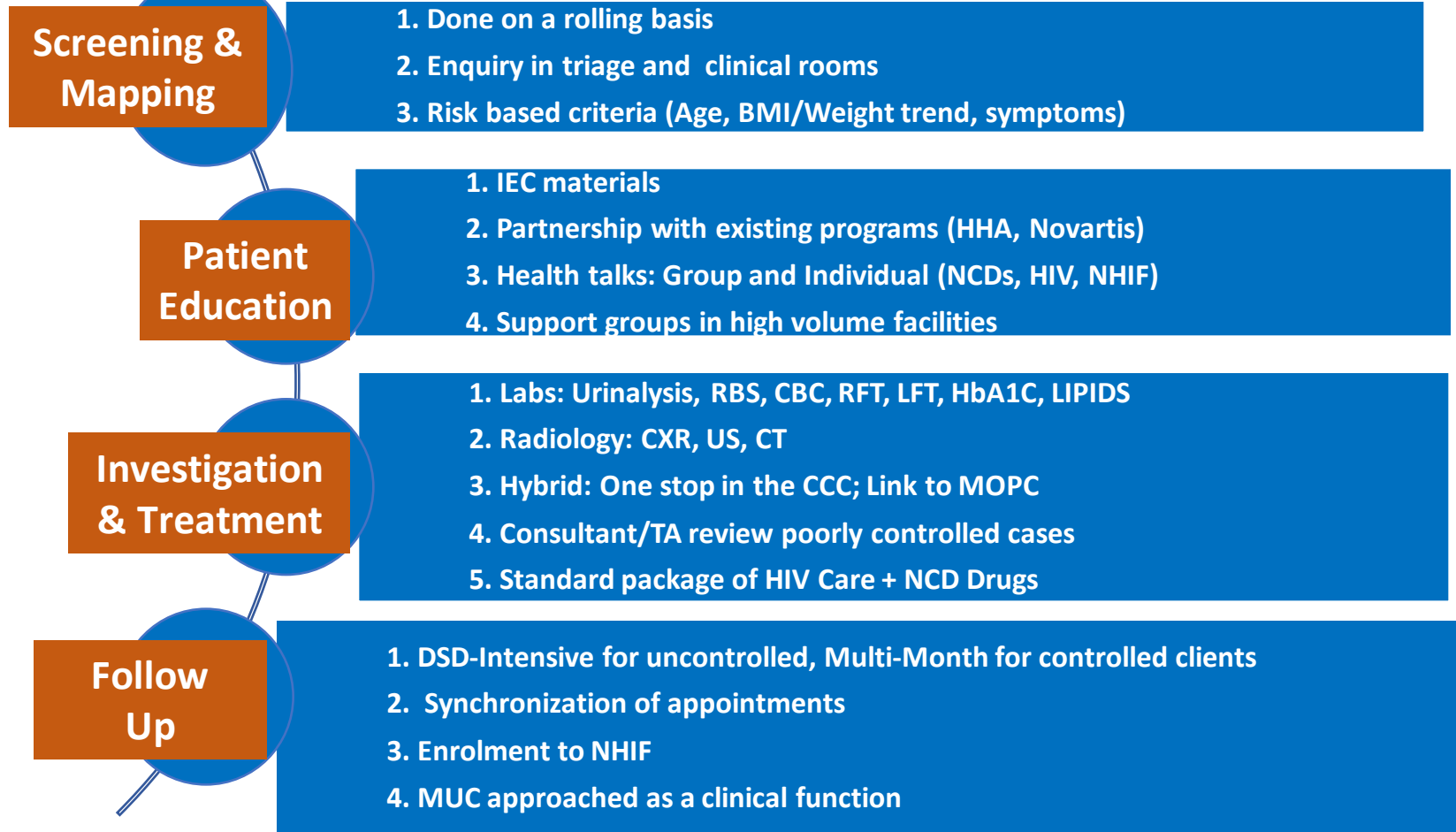
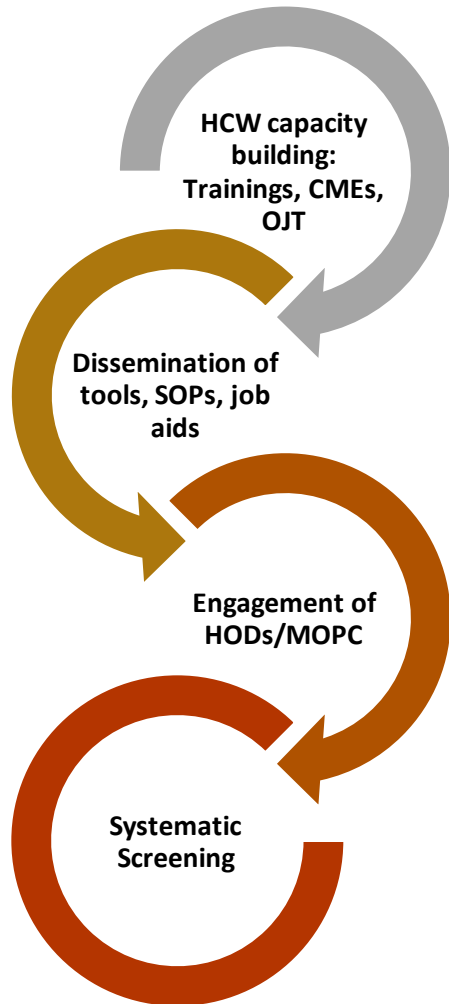
- *Approach is the **most efficient and cost-effective** way to organize a health system.*



Distribution of HIV services per KEPH level



Package of Care



Accelerating Sustainable, High-Quality, and Comprehensive HIV Prevention, Care and Treatment Services

MINISTRY OF HEALTH



**DIABETES AND HYPERTENSION
COMPREHENSIVE CARE**

MONTHLY SUMMARY FORM - MOH 740

Integration of Non-Communicable Disease (NCD) with HIV services

Kenyatta National Hospital HIV Clinic - Level 6

CO-LOCATION

Both Services (HIV and NCD) offered at HIV Clinic Complex

SERVICE DELIVERY FLOW

PLHV screened for NCDs at the CCC including diabetes mellitus, hypertension and chronic kidney disease

DATA SYSTEMS

Need for completion of development of an NCD module on the Kenya Electronic Medical Record System
Interoperability with other hospital systems



Non-PLHIVs with NCDs not integrated into this HIV clinic

HRH

Recipients of care with NCDs receive clinical consultations from clinical officers, a medical officer and physician for the complex cases

COST OF SERVICE

The consultation is offered without additional cost while it is charged in the medical outpatient clinic (MOPC)

All Client caters for costs of additional diagnostic evaluation and cost of treatment

Mission Hospital (FBO) - Kitui County



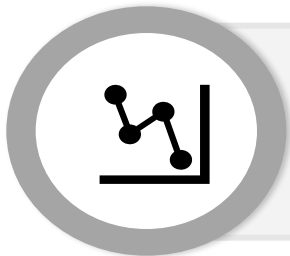
One Stop Shop

Clinical review, lifestyle modification counseling and medical management



ARV and NCD dispensing

Dispensing of both ARV and NCD medicines integrated



Appointment Synchronization

ART and NCD review visits; integrated IIT tracking



Differentiated Care

For new and uncontrolled patients; less intense and MMD for controlled patients



Partnerships

Healthy Hearts Africa project for access to subsidized antihypertensives and antidiabetics



Referrals

Kitui County Referral Hospital for complicated cases



Documentation done in KeEMR, customized tools for Diabetic/Hypertension data capture

Kiambu County Referral Hospital - Level 5

1) Initial Model

HIV and MOPC clinics synchronization on same dates with PLHIV with NCDs visiting both clinics

2) HRH

Health Facility NCD focal person and clinician to review PLHIVs with DM and/or HTN jointly in the CCC at no extra cost HIV clinic clinician has been assisting in review of PLHIVs in MOPC/DOPC thus is well capacity built in hypertension and diabetes management.



3) COSTS

Baseline RBS for all clients >18 years supported by Implementing Partner starting 31/03/23 (costs approx. Kshs 30 for an RBS). Clients have been encouraged to take up NHIF as it covers drugs and consultation fee. Laboratory tests are paid for out of pocket

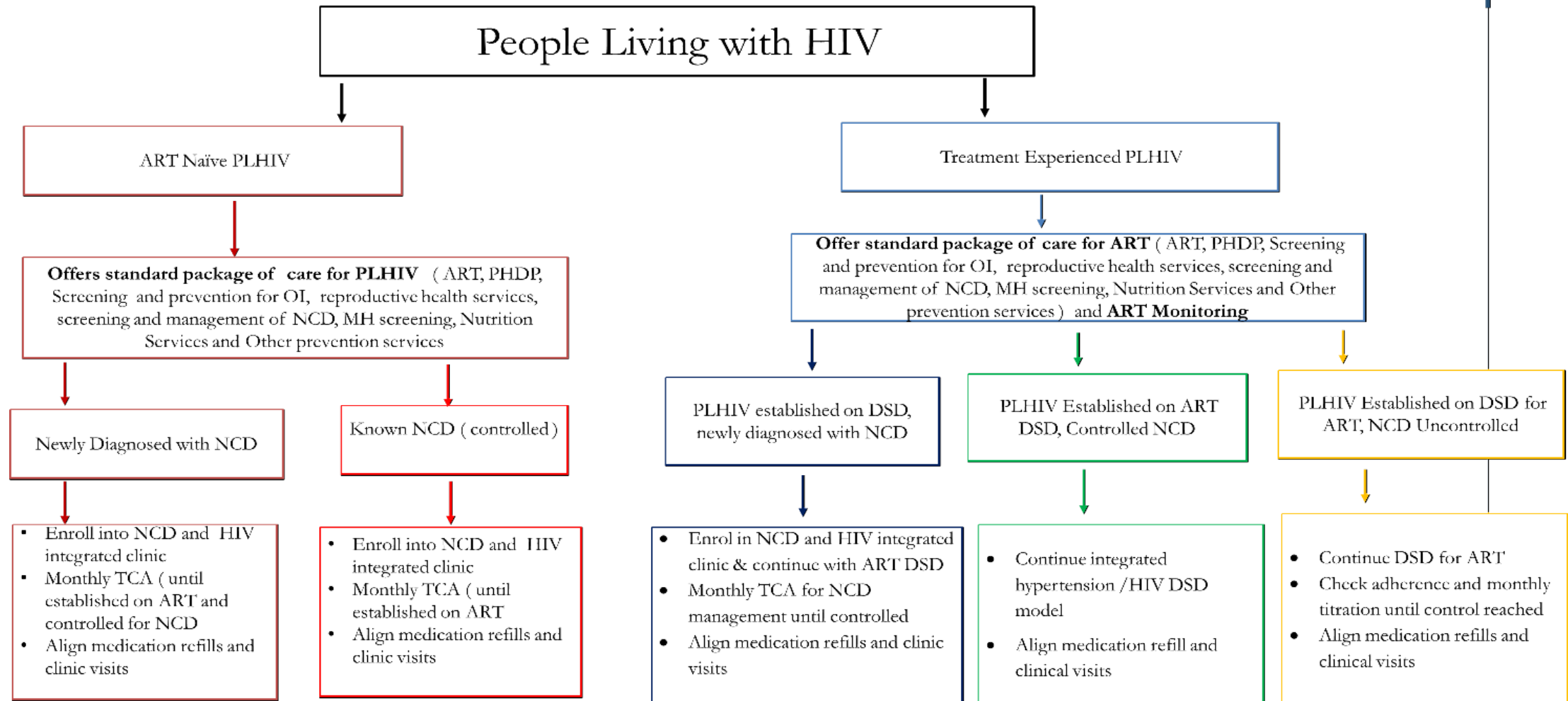
4) Leadership

Facility leadership and focal SCHMT members engagement key in NCDs integration. Ownership and model to take up should be facility-led

5) Drugs and Commodities

Facility has novel oral glucose lowering drugs such as DPP4 and SGLT2 inhibitors through negotiated rates to improve patient access

DSD Models for PLHIV with Non-Communicable Diseases



Adapted from MOH, PATH and Resolve to Save Lives

KenyaEMR Data Collection Collation - Migosi HC

KenyaEMR 1.8.1.2, powered by OpenMRS
Migosi Sub County Hospital (13807)

Government of Kenya
Ministry of Health

Home DM/HTN Logged in as EUJAH OKOK My Profile Log Out Help

Facility Summary Dashboard

Diabetes/Hypertension												
Age Group	New DM Patients		Known DM Patients		New HTN Patients		Known HTN Patients		New Co-morbid Patients		Known Co-morbid Patients	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0 to 5	0	0	0	0	0	0	0	0	0	0	0	0
6 to 18	0	0	0	0	0	0	0	0	0	0	0	0
19 to 35	0	0	3	1	12	0	3	0	0	0	0	1
36 to 60	2	0	3	6	8	25	5	16	0	0	1	4
>60	0	0	4	0	3	7	3	5	0	0	2	3
Totals	2	0	7	9	12	44	8	24	0	0	3	8

BMI Index Measures		
BMI	Male	Female
<= 18	0	1
18.5 - 24.9	1	5
25 - 29.9	1	5
>= 30	1	5

Blood Pressure Metrics		
BP	Male	Female
Bp>140/90	6	14

	Male	Female
First visit	28	64
Revisits	8	22

Waist Circumference		
	Male	Female
Males with WC > 102cm	0	0
Females with WC > 88cm	0	0

TB		
	Male	Female
Screened for TB	5	22
TB positive	0	1

	Male	Female
Newly Diagnosed DM	2	0
Newly Diagnosed HTN	12	44

Diabetic foot		
	Male	Female
Yes	0	0
No	8	20

Number of patients done HbA1C		
	Male	Female
Number of patients done HbA1C	0	0
Number that met HbA1C target (<7%)	1	1

HTN/Diabetes electronic module developed by MOH DNCD, UON HealthIT, and PATH.

Integrated KenyaEMR version rolled out at Migosi HC.

Leveraged PEPFAR-procured EMR hardware infrastructure for HIV services.

Project supported NCD data migration from paper-based tools to EMR platform.

Includes capacity building for MOPC clinicians and HRIO.

Improved documentation and follow up of HIV/HTN ROC

HIV

Enrolled: 30-Jul-2021 (9 months ago)

Entry point: **Voluntary counseling and testing program**

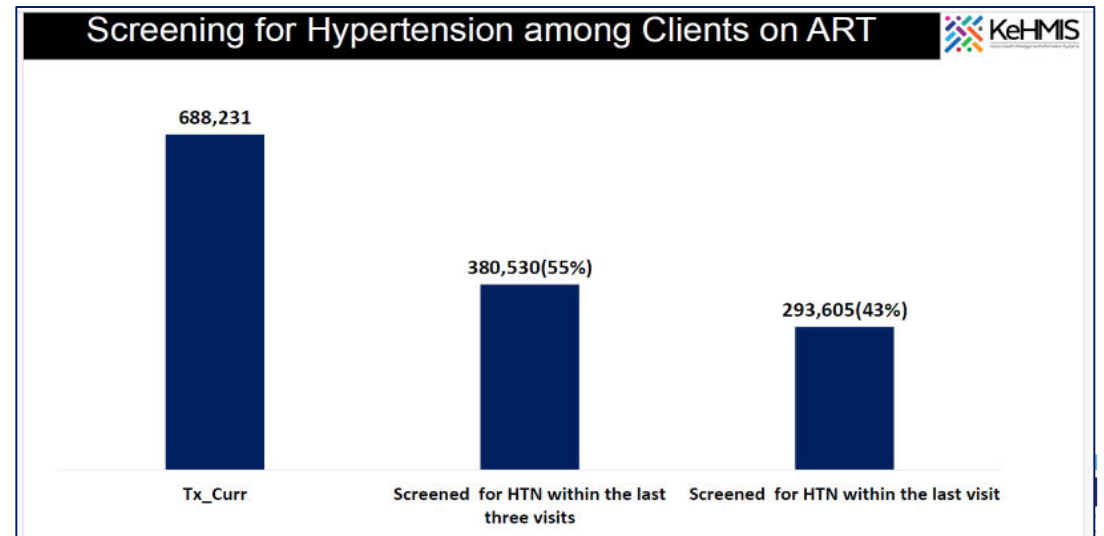
WHO stage: **WHO STAGE 1 ADULT**

DM/HTN Program

Enrolled: 10-Feb-2022 (3 months ago)

WHO stage: **WHO STAGE 1 ADULT**

Patient dashboard screenshot for a HIV/NCD co-enrolled patient in Kenya EMR



Tracking Progress Central Kenya

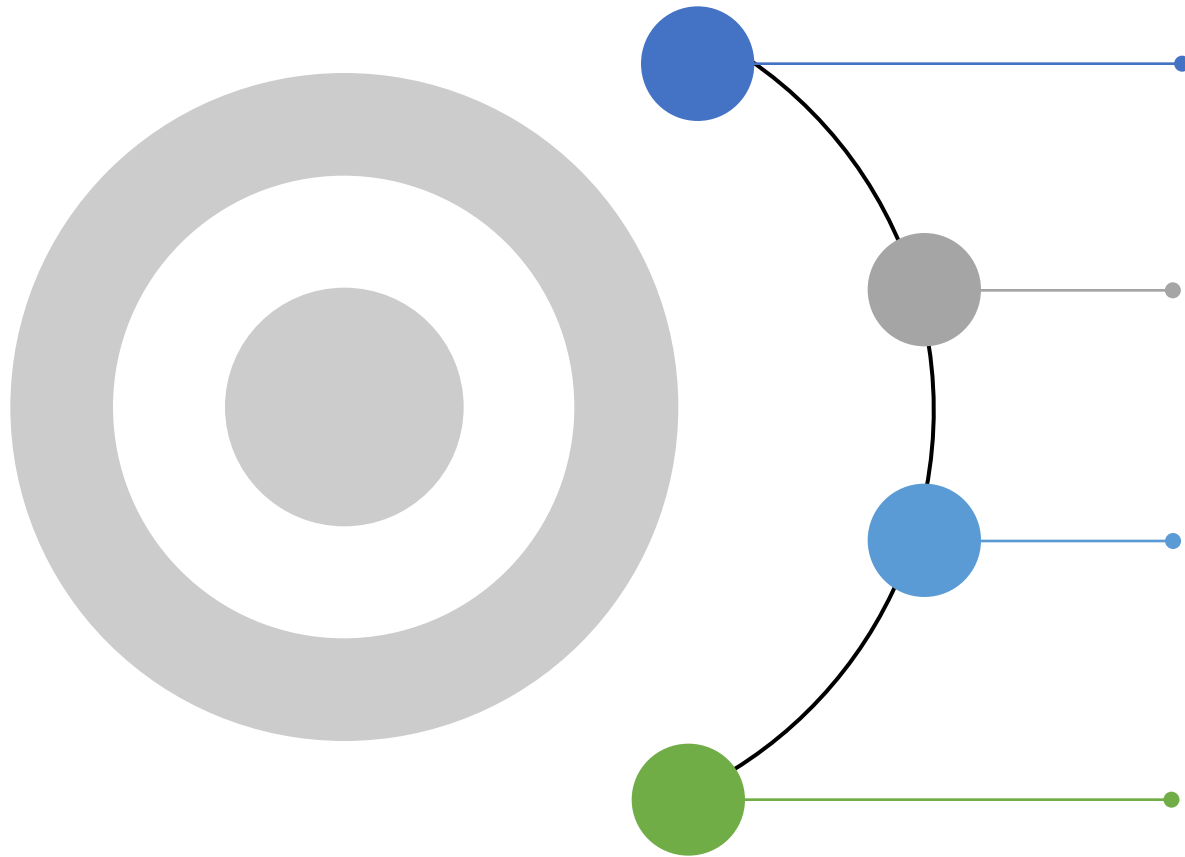
County	No of sites	Partial Integration	% Partial	Full Integration	% Full
Kiambu	52	46	88%	6	12%
Muranga	39	36	92%	3	8%
Nyeri	21	18	86%	3	14%
Kirinyaga	24	17	71%	7	29%
Dhibiti	136	117	86%	19	14%

Key Recommendations - Synergistic Convergence

- Financing: SHIF cover for PLWH to cover NCD treatment
- NCD Screening and lab diagnostics
- IEC materials for patient education
- Develop referral mechanisms and specialist access
- Module in the Kenya EMR to capture NCD indicators for PLHIV

- Early detection, pivotal for effective management and prevention
- Only a fraction of those affected are actively engaged in care at any given time-access
- Preventive strategies play a crucial role in mitigating impact, morbidity and mortality
- While treatment incurs substantial costs, consequences of neglecting intervention are more devastating and costly

Summary Conclusion



Implementing Structured Intergration

Large treatment portfolio and significant HTN burden

Burden

for hypertension is on the rise especially with an ageing HIV cohort

Varied Promising Integration Models

Need to be scaled up and reviewed through the lens of the health system and importantly measure outcomes

Cost

Cost allocation for diagnosis and treatment need to be factored

The Dual burden of Non-Communicable Diseases and HIV necessitates the integration of Healthcare systems to holistically address the needs of the population.

Thank You!

Better health with
Integrated care

