Integrating M&E data into Microplanning Processes to Optimize the Reach and Impact of Targeted Testing Efforts

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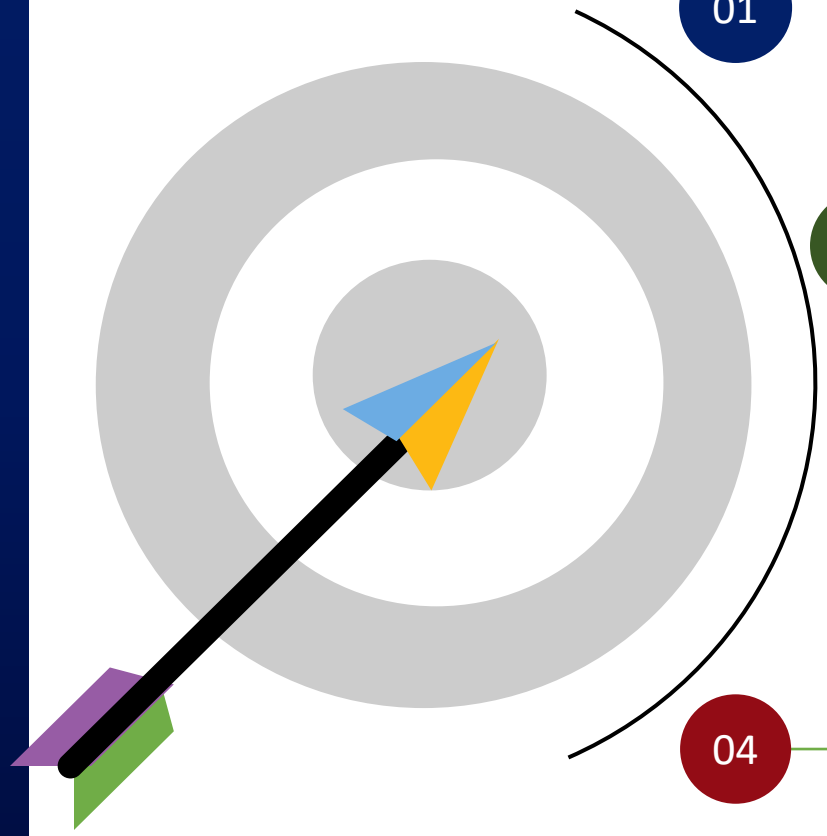
Objectives

1) Gain insights into the methods for integrating M&E data into microplanning processes to optimize the reach and impact of targeted testing efforts: Case study of Index Testing from Kenya
2) Understand the importance of comprehensive data collection and analysis in informing strategic decisions and improving the overall effectiveness of dHTS programs

What is Microplanning?

"..Microplanning is the process of creating detailed, delivery-level operational plans for reaching target populations with health interventions.."



01 Mapping

Mapping stakeholders, National/Global Policies, data, resources

02 Engagement

Communities, and stakeholders, identify gaps/challenges

03 Target

Geographies, Sub Populations, interventions

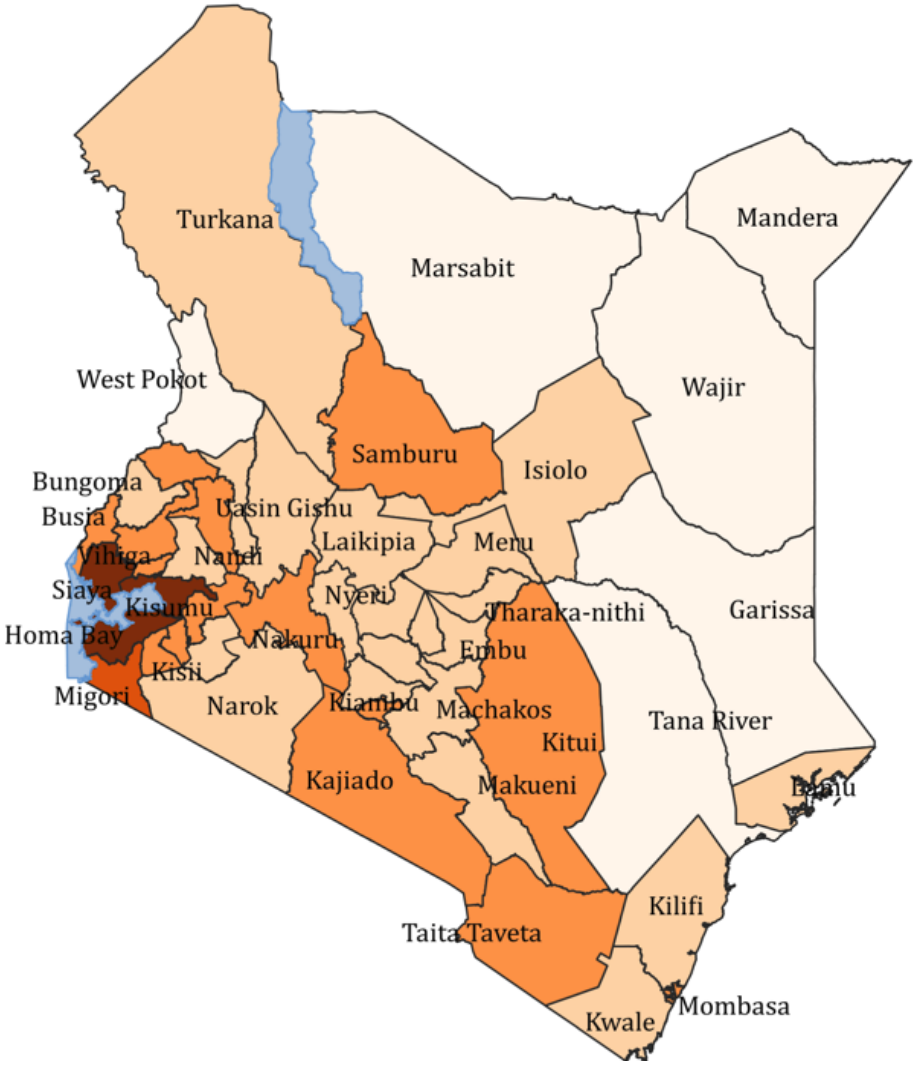
04 Interventions

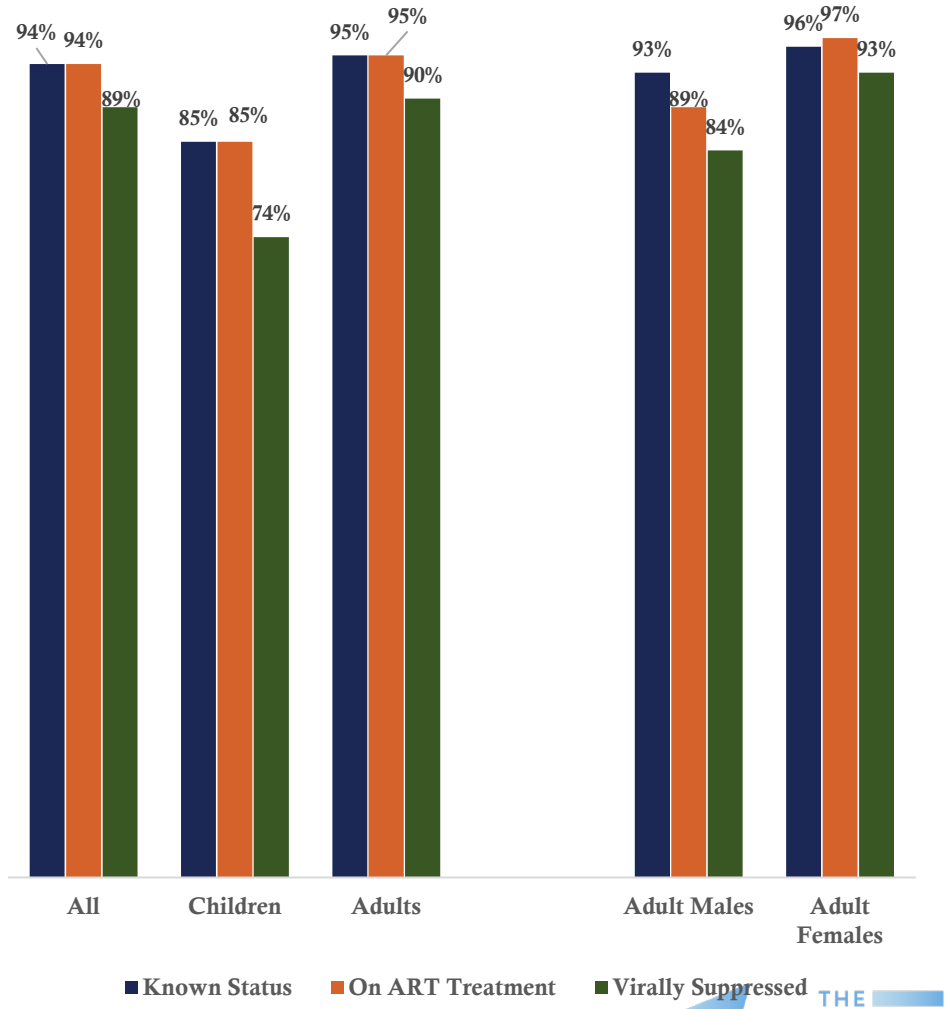
Adapt Interventions, track implementation, M&E.

Background: Kenya Epi Profile

- HIV Infections-**22,154**
- HIV Prevalence- **3.7%**
- Incidence- **0.059%**
- Mortality- **18,473**
- MTCT Rate- **8.6%**
- PLHIV- **1,377,784**

Source: HIV Estimates, 2023

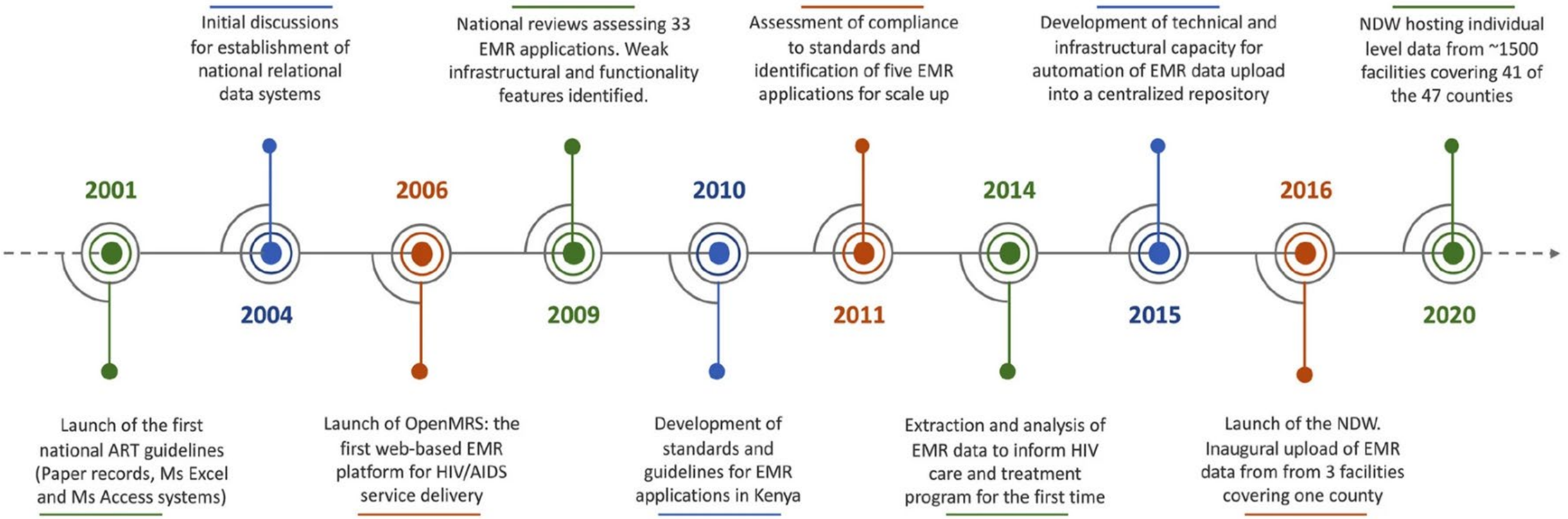




Source: *Published UNAIDS Estimates for Kenya, 2022*

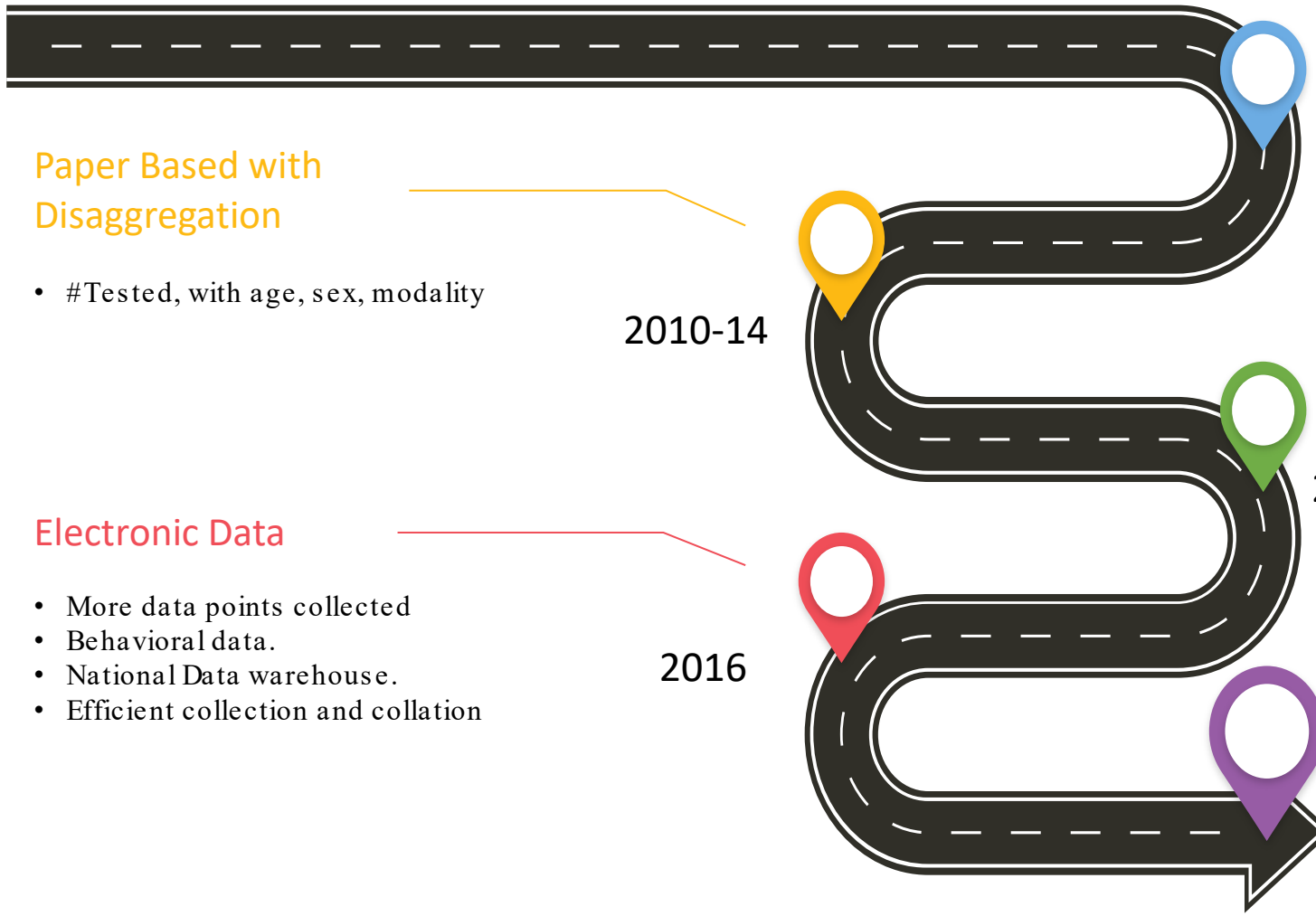
Evolution of the Kenya HMIS

From: Leveraging electronic medical records for HIV testing, care, and treatment programming in Kenya—the national data warehouse project



Ndisha, M., Hassan, A.S., Ngari, F. *et al.* Leveraging electronic medical records for HIV testing, care, and treatment programming in Kenya—the national data warehouse project. *BMC Med Inform Decis Mak* **23**, 183 (2023).

Evolution of HTS SI Systems



Paper Based

- Simple, #Tested

2000's

Paper Based with Disaggregation

- #Tested, with age, sex, modality

2010-14

Aggregate Data Dashboards

- Visualize Trends.
- Useful for macro planning

2015

Electronic Data

- More data points collected
- Behavioral data.
- National Data warehouse.
- Efficient collection and collation

2016

Individual Level data

- Unique identificaion,
- Tailored Services
- Tracking Linkage
- Machine learning tools
- casebase survaillance

2023

Paper Based System have limitations- HTS Register

MOH362

Serial No	Date (DD/MM/YYYY)	Client Name (First, Middle, Last)	Date of Birth (DD/MM/YYYY)	Age	Sex (M/F)	Telephone Number	Marital status (S/M/M/P/D/W)	Key Population (KeyPOP) (SW/MSM/IDU)	Ever Tested? (Y/N)	Re-Testing (Record No of Months since last test)	Disability (NAD/BM/P/O)	Consent (Y/N)	Client tested as (I/C)	Strategy (HP/NP/VI/SHB/MO/O)	HIV Test 1 Kit Name: Lot No. Expiry / / (N,P,I)	HIV Test 2 Kit Name: Lot No. Expiry / / (N,P,I,NA)	Final Result (N, P, Ic)	Final Result Given? (Y/N)	Couple Discordant (Y/N/NA)	TB Screening (Pr TB/NS/ND/TBRX)	Linked to Care? (Enter CCC #)	Ever had an HIV self test this year (Y/N)	HTS Provider (name and sign)	Remarks
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)	(y)

Tested (r)	1-9	10-14	15-19	20-24	25+	Total
Male						
Female						
Total						

Total Negative

Tested Facility	
Tested Community	
Tested New	
Tested Repeat	

N: Negative P: Positive I: Invalid	N: Negative P: Positive I: Invalid	N: Negative P: Positive Ic: Inconclusive	Y: Yes N: No

HIV Test 1	Number	HIV Test 2	Number
N: Negative		N: Negative	
P: Positive		P: Positive	
I: Invalid		I: Invalid	

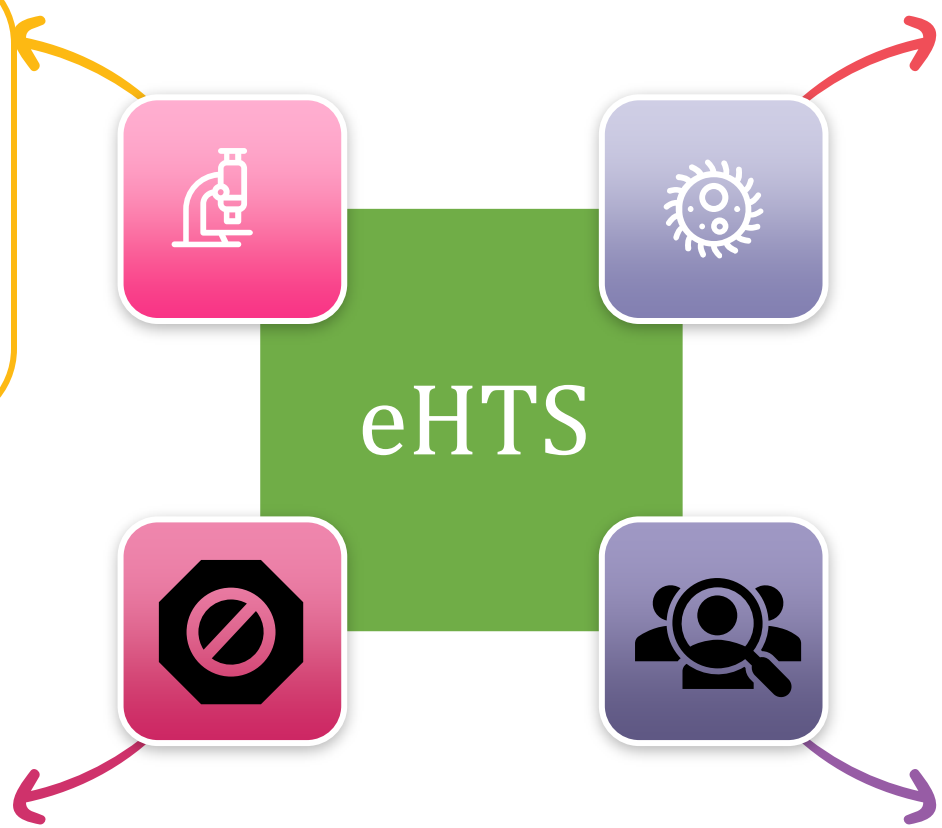
Why Electronic HTS (eHTS) for dHTS?

Case Finding

- Effective monitoring of each HTS modality and linkage to Treatment services.
- Tracking re-diagnosis

Prevention

- Tracking linkage to prevention services



Casebase surveillance

*Longitudinal tracking to assess incidence

Targeted Services

- Differentiated services based on risk profiles

eHTS Coverage Among Sites with EMR in Kenya: FY 24Q1

County	Number of Active EMR Sites as of December 2023	EHTS Uptake		Tests in KHIS Within FY24 Q1	Tests in NDW Within FY24 Q1	%
		n	%			
MARSABIT	11	-	0.00%	-	-	-
MERU	52	38	73.08%	21,177	9,693	46%
MIGORI	100	78	78.00%	48,987	21,480	44%
MOMBASA	75	47	62.67%	39,529	21,218	54%
MURANG'A	47	36	76.60%	24,967	16,830	67%
NAIROBI	237	148	62.45%	148,670	119,489	80%
NAKURU	123	44	35.77%	54,533	13,205	24%
NANDI	40	31	77.50%	14,122	3,264	23%
NAROK	49	33	67.35%	28,723	6,541	23%
NYAMIRA	51	30	58.82%	11,845	3,821	32%
NYANDARUA	41	31	75.61%	12,004	9,615	80%
NYERI	42	35	83.33%	18,939	15,683	83%
SAMBURU	23	7	30.43%	4,368	2,003	46%
SIAYA	143	139	97.20%	69,944	46,048	66%
TAITA TAVETA	51	22	43.14%	9,363	6,930	74%
TANA RIVER	10	-	0.00%	-	-	-
THARAKA-NITHI	31	19	61.29%	8,706	6,093	70%
TRANS NZOIA	49	35	71.43%	24,454	6,807	28%
TURKANA	47	12	25.53%	11,710	1,024	9%
UASIN GISHU	39	26	66.67%	38,078	18,277	48%
VIHIGA	36	24	66.67%	13,539	7,818	58%
WAJIR	6	-	0.00%	-	-	-
WEST POKOT	15	13	86.67%	13,465	4,277	32%
TOTAL	**2,756**	**1,755**	**63.68%**	**1,145,335**	**649,155**	**57%**

Case Study Index Case Testing-

PARTNER NOTIFICATION SERVICES TRACKING LOG

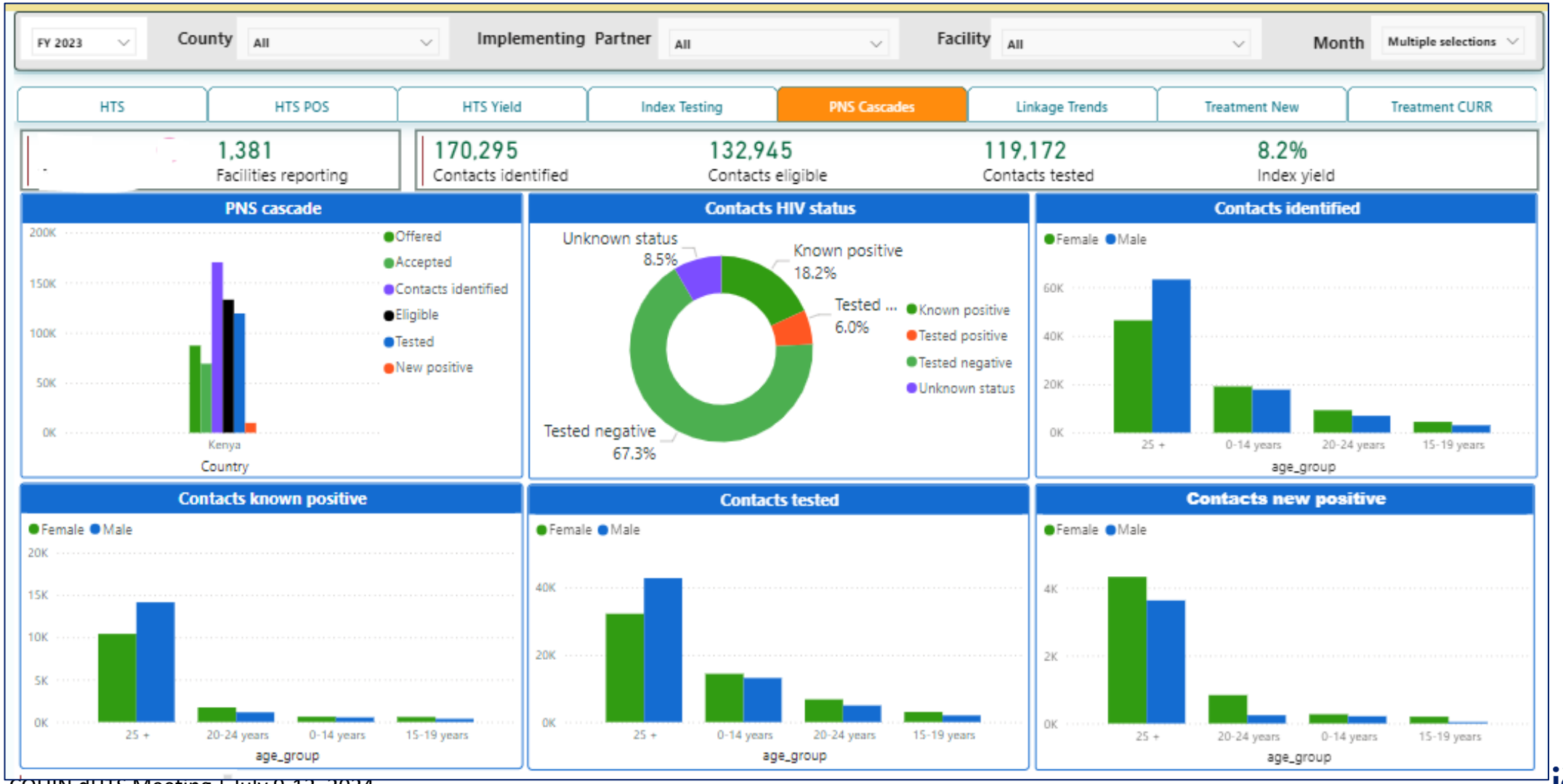
Index Client Information					Information about Contacts (sexual/needle sharing partner(s) and biological children)						Contact Tracing and Outcome				Contacts HIV Testing		Linkage to Treatment		
No. (a)	HTS Number (b)	Date (dd/mm/yyyy) (c)	Index Client Name (First and Last Name) (d)	Index Testing Accepted? (Y/N) (e)	Name of Contact (First and Last Name) (g) *Indicate the nick name in bracket where applicable*	Age (Years) (h)	Relationship to index client (SP/PWID/C)	IPV Risk Assessment Conducted (Y/N/NA) (l)	Knowledge of HIV status [KP/Neg/Unk] (n)	Preferred PNS Approach (Contract/ Duel/Provider/Client) (p)	First Attempt By Phone/Physical (dd/mm/yyyy) Outcome (C/NC) (q)	Second Attempt By Phone/Physical (dd/mm/yyyy) Outcome (C/NC) (r)	Third Attempt By Phone/Physical (dd/mm/yyyy) Outcome (C/NC) (s)	Contact Consented for Testing Y/N/NA (t)	Date booked for testing [dd/mm/yyyy] (u)	Tested [Y/N/D] (w)	Linked [Y/N] (y)	Facility Linked to Treatment (aa)	Comments (ac)
				If No, Please Indicate Why? (f)		Sex (M/F) (i)	Cell phone No. Primary/Alternate (k)	IPV Risk Assessment Outcome 1-Physical 2-Emotional 3-Sexual 4-No IPV 5-N/A-CHILD (m)	If KP, on treatment? Y/N Record ART Number (o)						Date HIV testing done (dd/mm/yyyy) (v)	HIV Test Outcome (Pos/Neg/I) (x)	Date Linked to Treatment (dd/mm/yyyy) (z)	ART Number (ab)	

Paper Based System:

- In addition to HTS register
- Difficult to track contacts tested.
- Difficult to create and track cascades of contacts elicited and tested.
- Potential Missed opportunities

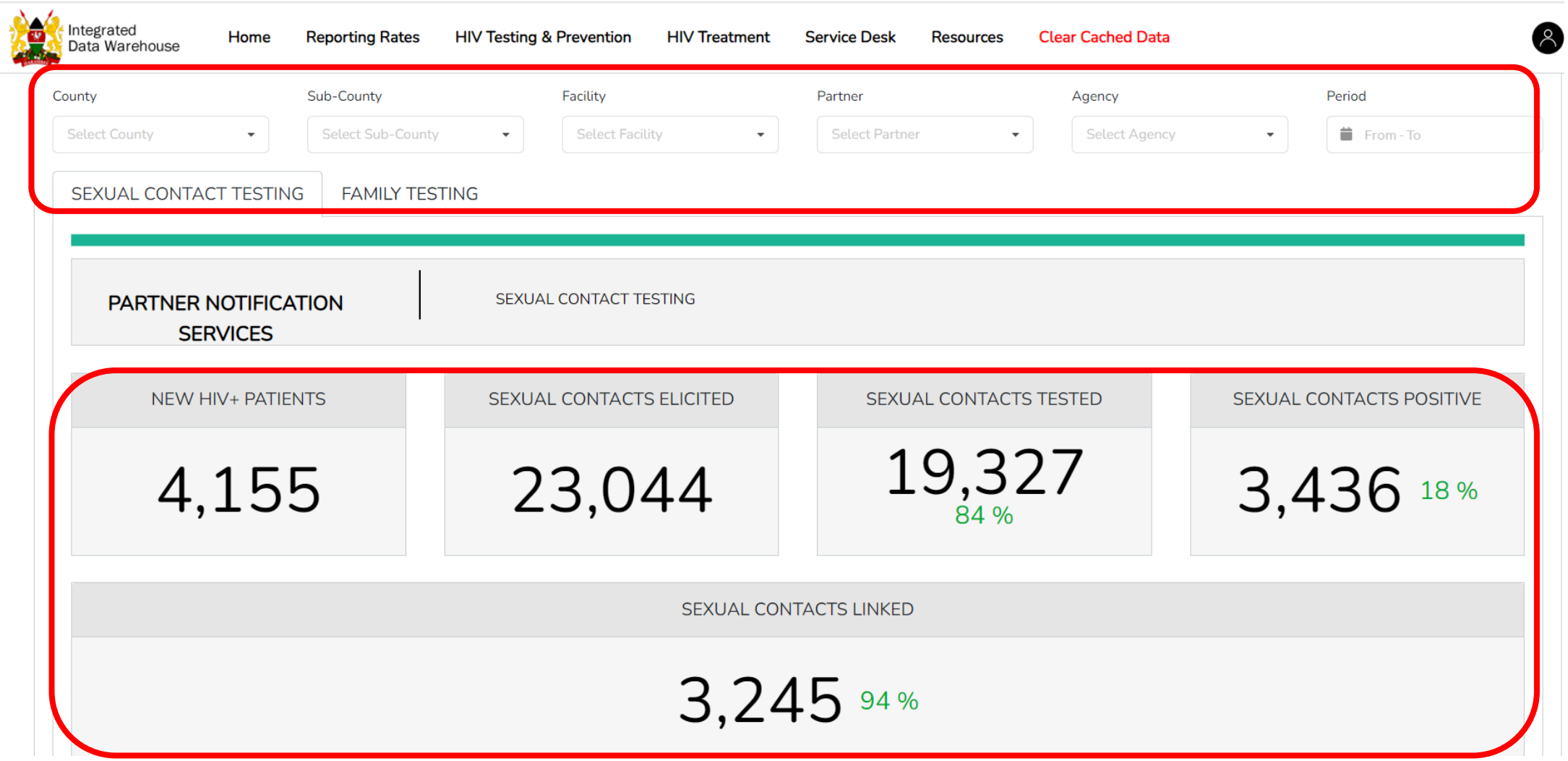
Resolved to overcome these challenges by shifting to electronic HTS(eHTS)

Improved Data Aggregation and Visualization Enhances Micro Planning



Source: 3PM dash board

Next Frontier: Using Individual-level data for Micro Planning



Data tracked by County, sub-county, Facility, Partner, Agency, Period

Improved outcome measures of sexual contacts Tested, and linked to Rx.

Source: National Data warehouse

Conclusion

- M&E systems are crucial to effective program monitoring
- Data is critical in Micro planning
- Electronic data systems are versatile tools for microplanning
- Challenges with Electronic data
    - Data privacy
    - Data Governance
- M& E systems should continuously collaborate with programs to evolve

Acknowledgments

- Implementing Partners
- Stakeholders
- PEPFAR
- MoH

icap Global Health

THE CQUIN NETWORK
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Thank You!