

# dHTS and Linkage to Treatment

*A case study from 2 Counties of Nairobi & Homabay in Kenya*

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**Leveraging DSD Strategies to Optimize HIV Testing and Linkage Services**

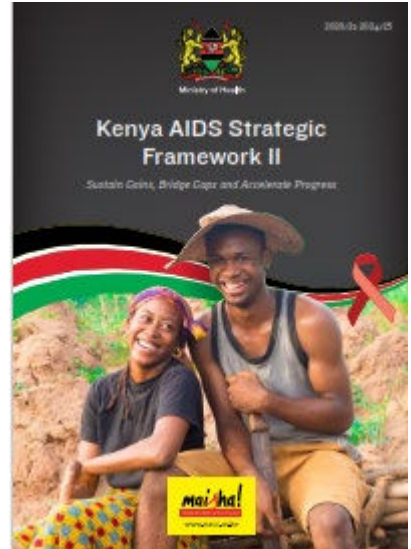
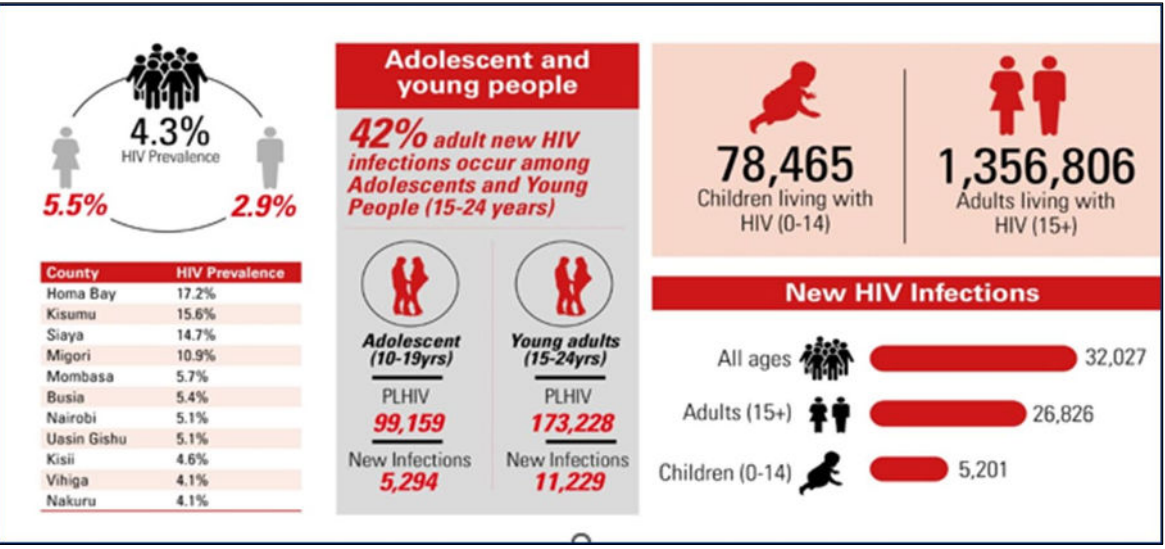
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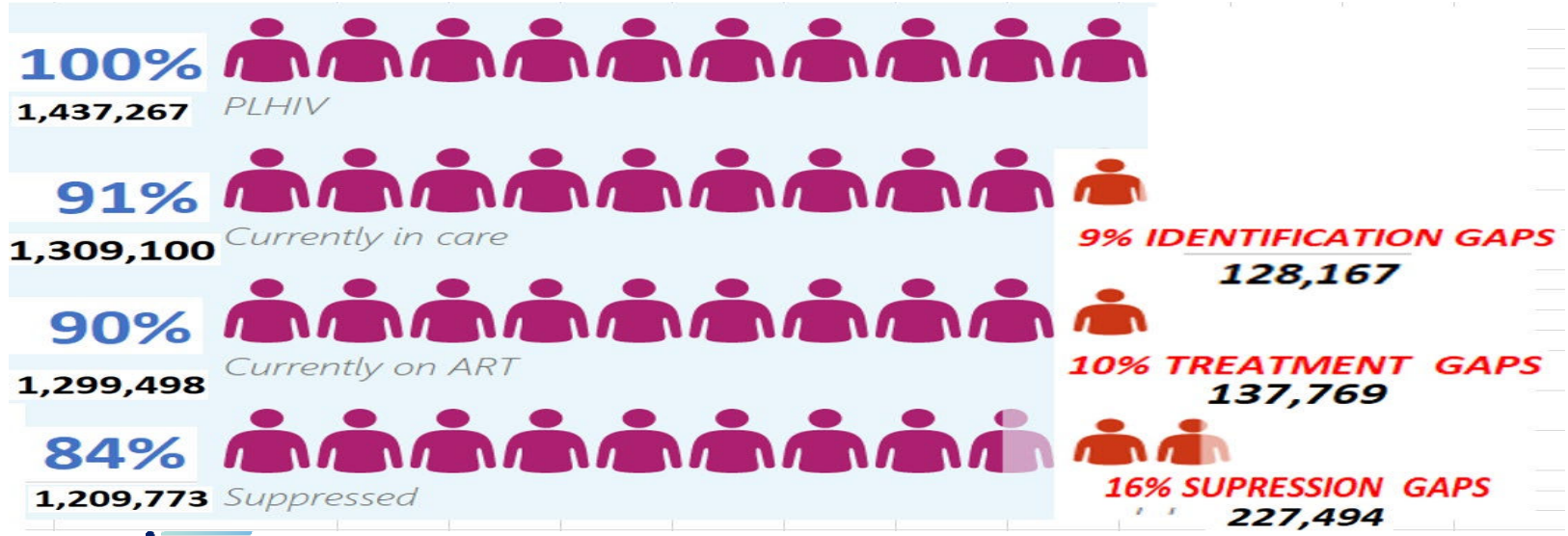
# Presentation Outline

- Overview of Kenya's HIV Burden, progress towards 95-95-95
- Guiding policy, guidelines - linkage to treatment
- Analysis:
  - Linkage to treatment from HTS
  - Retention on care within a 12-month period following ART initiation
- Conclusion & recommendations

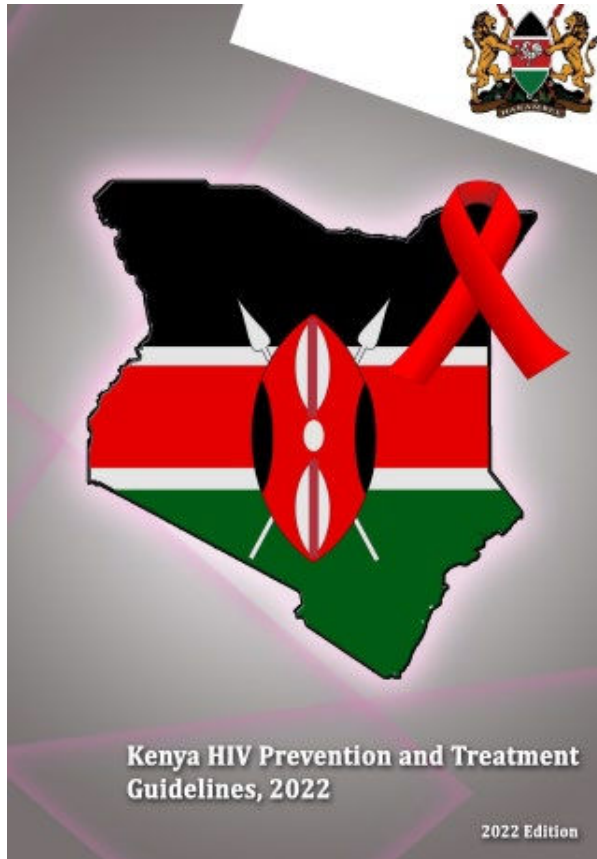
# Kenya Progress Towards The 95:95:95 Targets



- 1.4 Million estimated Persons Living with HIV in Kenya (*HIV estimates 2021*)
- > 1.29 Million on ART
- KASF II, 2020/21-2024/5 aims to reduce new HIV infections by 75% and AIDS-related mortality by 50%

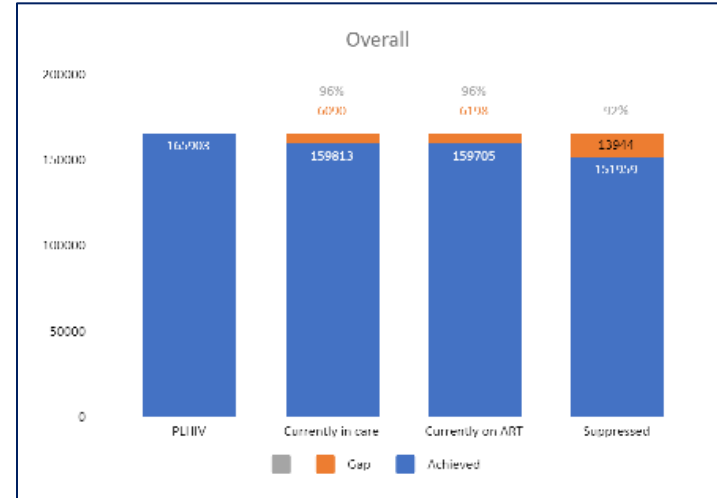
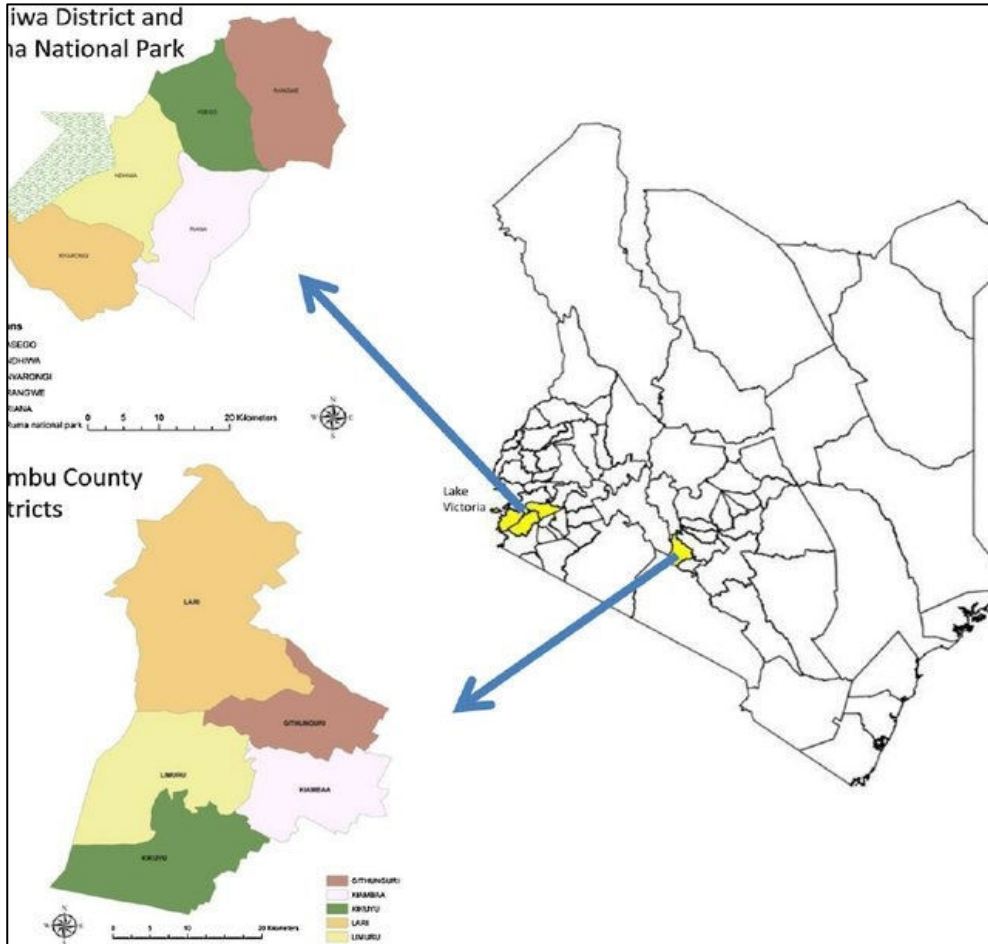


# Policy/Guidance for Linkage to Treatment in Kenya

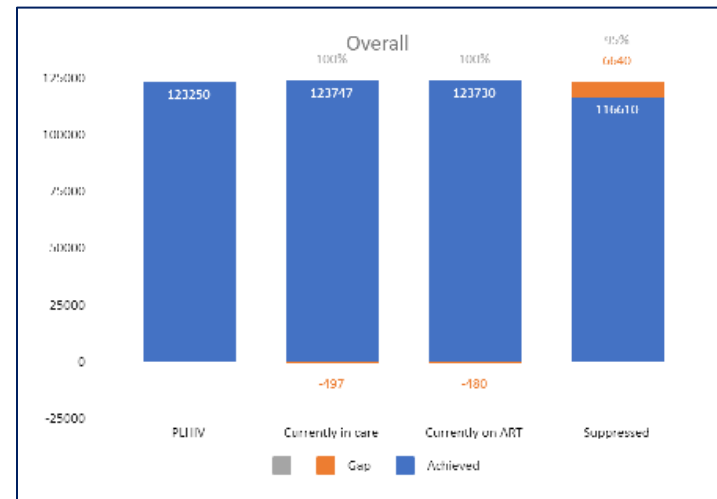


- Same-day enrolment to care is expected
- Monitor linkage to treatment initiation within 14 days of diagnosis
- Allow for the follow-up to 90 days of an HIV-positive diagnosis
- For HIV-negative clients, link to prevention based on risk assessment findings

# Introduction: HIV Landscape, Nairobi & Homabay Counties



**Homabay**  
Prevalence: 19.6%  
Current on ART:  
123,730



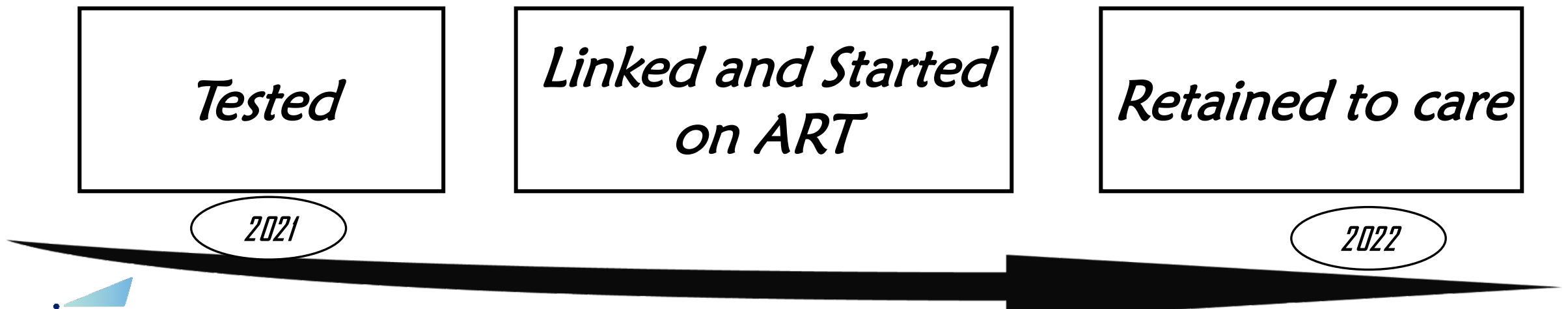
**Nairobi**  
Prevalence: 5.1%  
Current on ART:  
159,705



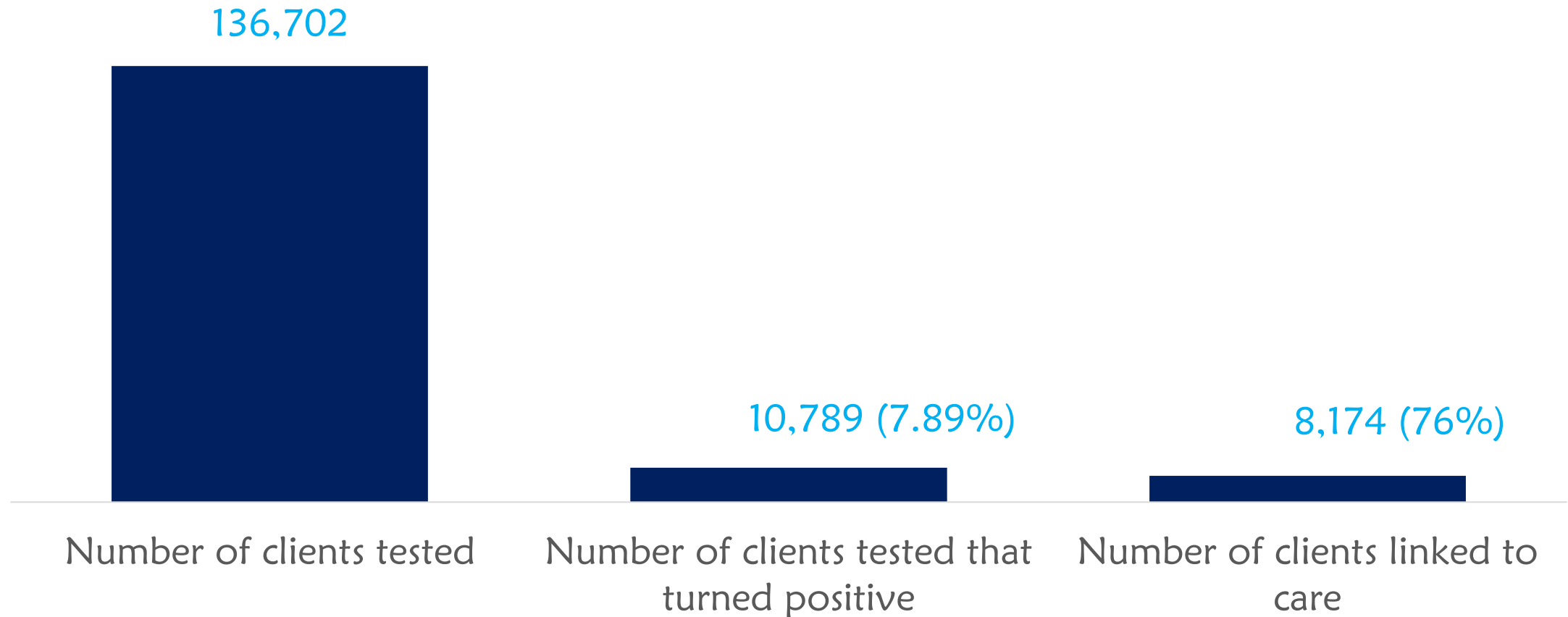
# Analysis - Longitudinal follow up from testing to 12 months retention

## Methodology:

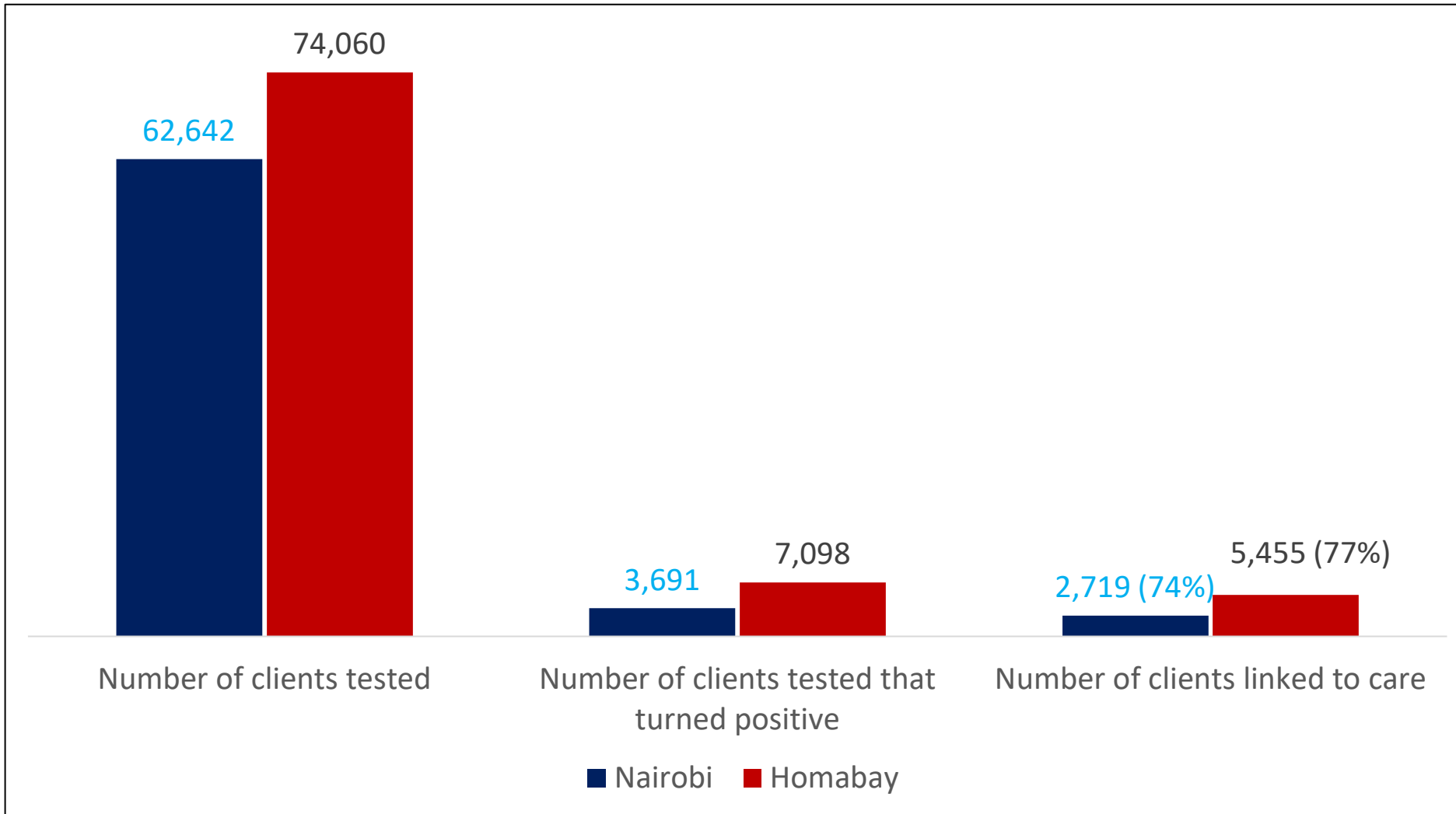
- Used patient-level data, from the National Data Warehouse (NDWH) to measure longitudinal linkage to treatment
- Used a cohort of clients who tested 2021 and were linked to care, the rate of retention within a 12-month period (from ART initiation) was assessed



# Clients tested and linked in 2021



# Clients tested and linked in 2021: Nairobi Vs Homabay



Linkage was slightly better in Homabay compared to Nairobi



# Demographic Characteristics of Positive Vs linked

Variable	Clients Tested	Positive clients	Clients linked
<b>Gender</b>			
Female	85,459	6,910	5,263 (76%)
Male	51,243	3,879	2,911 (75%)
TOTAL	136,702	10,789	8,174 (76%)
<b>Age Categories</b>			
<15yrs	10,517	397	267 (67%)
15-24yrs	43,919	1,846	1,418 (77%)
25-50yrs	75,620	7,861	5,955 (76%)
50+yrs	6,646	685	534 (78%)
TOTAL	136,702	10,789	8,174 (76%)

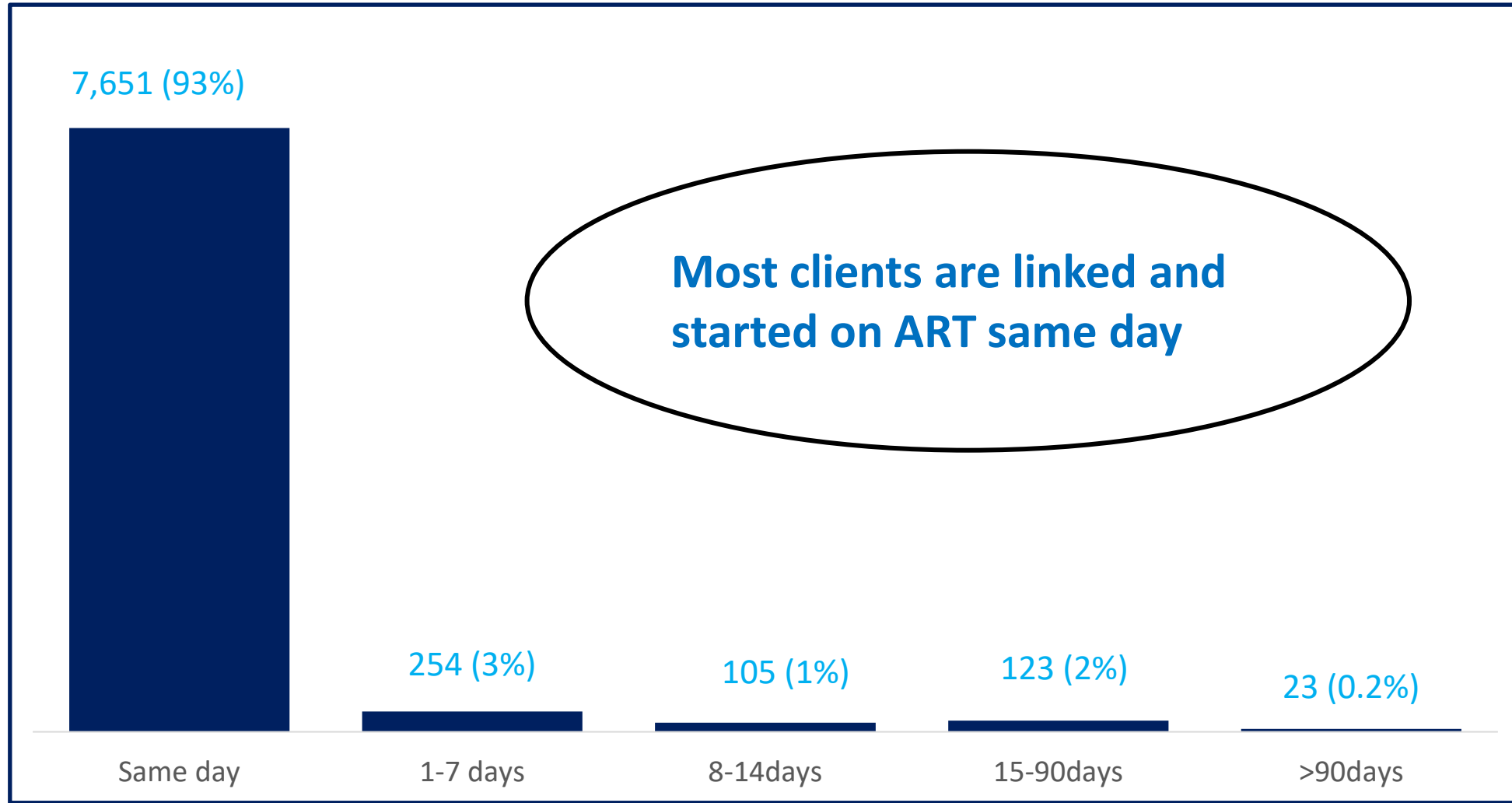
- No significant difference in linkage rates between males and females
- Poorer linkage in children < 15 years of age

# Demographic Characteristics of Positive Vs linked

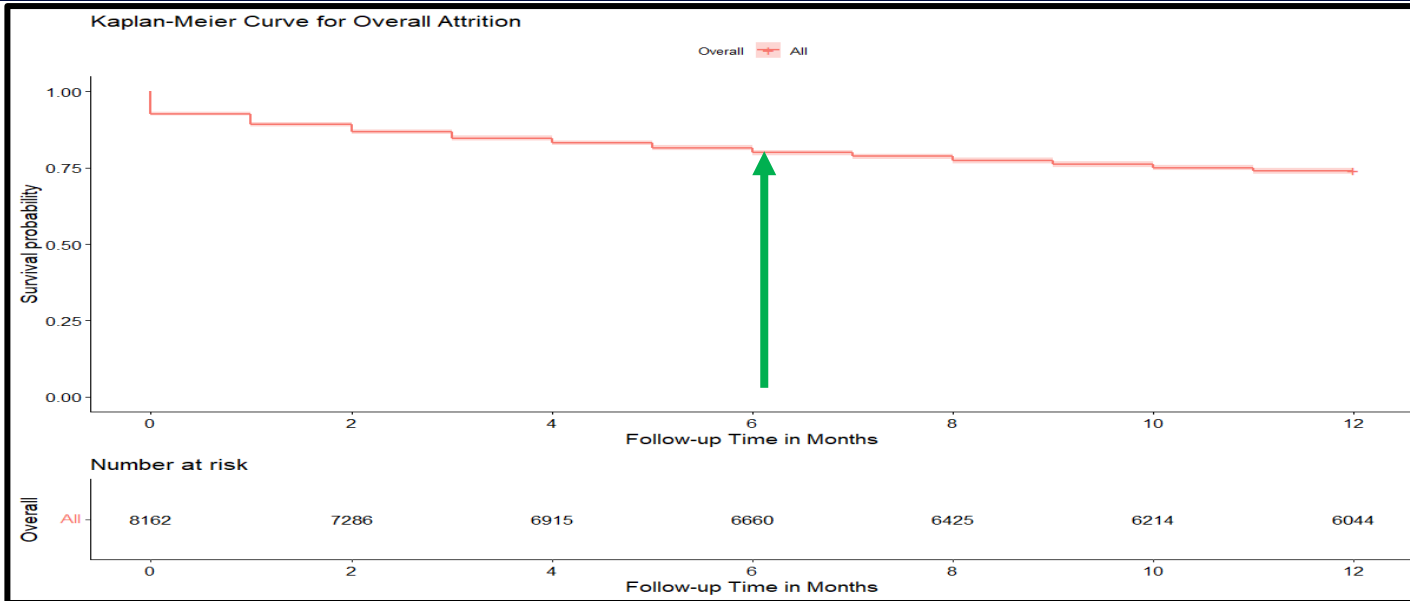
Variable	Clients tested	Positive clients	Clients linked
<b>Marital Status (age &gt;15 years)</b>			
Married	65,910	4,866	3,712 (76%)
Single	37,099	1,923	1,462 (76%)
Other	15,877	3042	2,306 (76%)
Missing	7,299	561	427 (76%)
TOTAL	126,185	10,392	7,907 (76%)
<b>County</b>			
Nairobi	62,642	3,691	2,719 (74%)
Homabay	74,060	7,098	5,455 (77%)
TOTAL	136,702	10,789	8,174 (76%)

- No significant difference in linkage rates based on marital status
- Slightly better linkage in Homabay compared to Nairobi

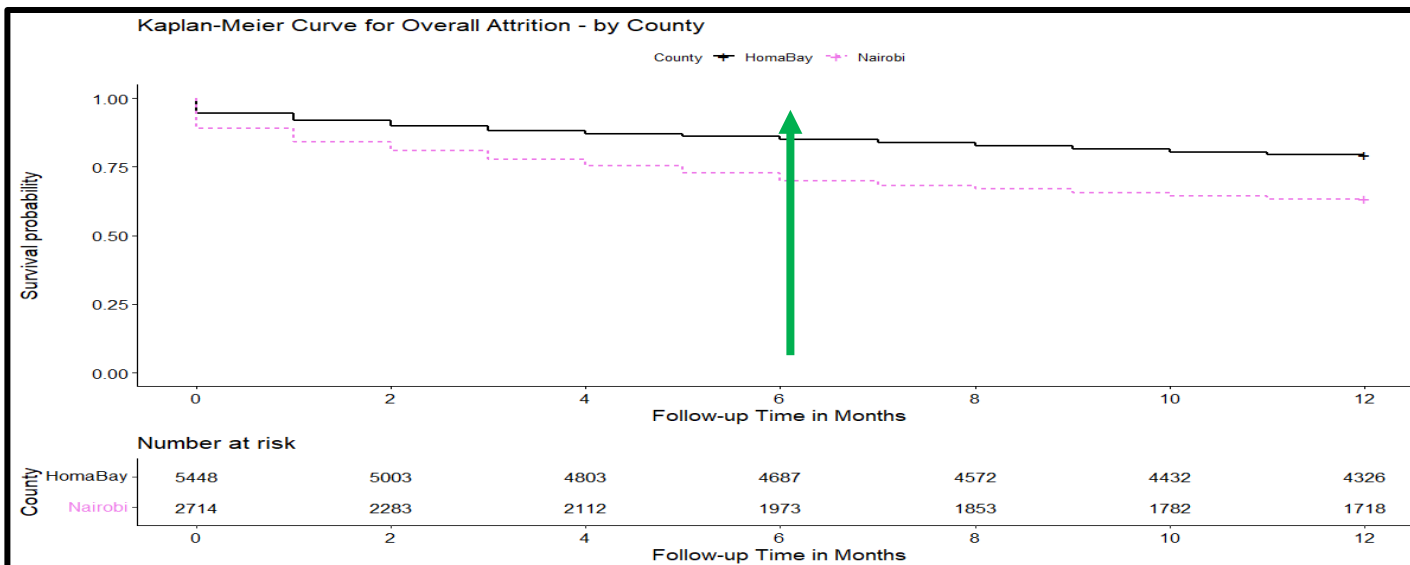
# Duration to ART Start (N=8,174)



# Retention in HIV Care among Linked Clients Overall



**Only 6,660 (82%) were still under care after a 6-month follow-up**



**The probability of retention was lower for Nairobi County as compared to Homa Bay County, at 73% and 86% respectively**

# Factors Associated with 6-month Retention

Variable	Crude Estimates		Adjusted Estimates	
	p-value	HR(95% CI)	p-value	aHR(95% CI)
<b>County</b>				
Homa Bay		1		1
<b>Nairobi</b>	<b>&lt; 0.0001</b>	<b>1.9950 (1.8320, 2.1730)</b>	<b>&lt; 0.0001</b>	<b>1.7594 (1.6066, 1.9267)</b>
<b>Gender</b>				
Female		1		1
Male	0.3570	0.9588 (0.8768, 1.0480)	0.8131	1.0113 (0.9214, 1.1100)
<b>Marital Status</b>				
Married		1		1
<b>Others</b>	<b>&lt; 0.0001</b>	<b>1.2610 (1.1546, 1.3770)</b>	<b>0.0011</b>	<b>1.1640 (1.0623, 1.2753)</b>
Missing	0.5620	0.9400 (0.7629, 1.1580)	0.3440	0.9039 (0.7332, 1.1143)
<b>BMI</b>				
Underweight		1		1
<b>Normal</b>	<b>&lt; 0.0001</b>	<b>0.5225 (0.4265, 0.6400)</b>	<b>&lt; 0.0001</b>	<b>0.5324 (0.4344, 0.6526)</b>
<b>Overweight</b>	<b>&lt; 0.001</b>	<b>0.4355 (0.3434, 0.5524)</b>	<b>&lt; 0.0001</b>	<b>0.3926 (0.3090, 0.4989)</b>
Invalid (< 18y)	0.0546	0.7669 (0.5851, 1.0052)	0.0157	0.5868 (0.3807, 0.9046)
Missing	0.1855	1.1433 (0.9377, 1.3939)	0.8655	0.9828 (0.8042, 1.2011)

County, marital status, and BMI were statistically significant.

One was likely to get lost if:

- He/she is in Nairobi County
- Not married
- Underweight

# Summary: Insights on Linkage and Early Retention

- The use of longitudinal patient-level data helps to map people from testing through linkage to treatment and retention
- Overall linkage to treatment in the two Counties was sub-optimal with poorer outcomes in children
  - *Need to re-evaluate and strengthen linkage strategies as well as*
- The country is moving towards the use of patient-level data; MOH is placing focus on improved documentation and concordance across the data system



Thank you!

