February 2017

Oral PrEP Introduction Kenya Rollout Scenario Analysis

LVCT Health in partnership with FSG

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PEPFAR

OPTIONS
OPTIMIZING PREVENTION TECHNOLOGY INTRODUCTION ON SCHEDULE

The rollout analysis aims to support the PrEP TWG's implementation planning processes

GOAL

Inform planning for oral PrEP by defining several scenarios that differ by target counties or target population groups to scale-up PrEP beyond current and planned demonstration projects

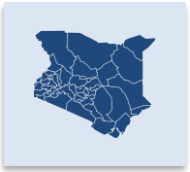
KEY FINDINGS

- In general, there is a **tradeoff between impact and cost** – greater access to PrEP will stem further new infections but will also cost more to implement
- A **focus on key populations (FSW, MSM) is insufficient** as they comprise less than 30% of new infections; **adolescent girls and young women and sero-discordant couples** will be important to consider as they are more significant contributors to new HIV infections (35.2% and 44.1% of new infections respectively)
- The HIV epidemic is **concentrated in several counties** that would benefit most from PrEP access – these 11 counties account for 65% of annual new HIV infections in Kenya
- Initial analysis suggests that rollout of PrEP to counties with the highest **incidence** or the **largest numbers of new infections** would be most cost-effective.
- In some high-incidence counties (e.g., Homa Bay, Siaya, Migori), a **general population rollout** that would reach sero-discordant couples and adolescent girls and young women would be impactful
- In other high-incidence counties (e.g., Kisumu, Mombasa), targeting PrEP access more specifically to **key populations** (e.g., making PrEP available in DICES) would more effectively balance cost and impact

NEXT STEPS

Further analysis planned for 2017 will build on this work, to improve understanding of county level readiness and necessary costs and cost-effectiveness comparisons for these rollout scenarios

This analysis includes data on 4 key factors for PrEP rollout to define eight potential scenarios for PrEP scale-up



Which **counties** in Kenya would benefit most from access to PrEP?

Which **populations** would benefit most from access to PrEP and how do these populations differ by county?

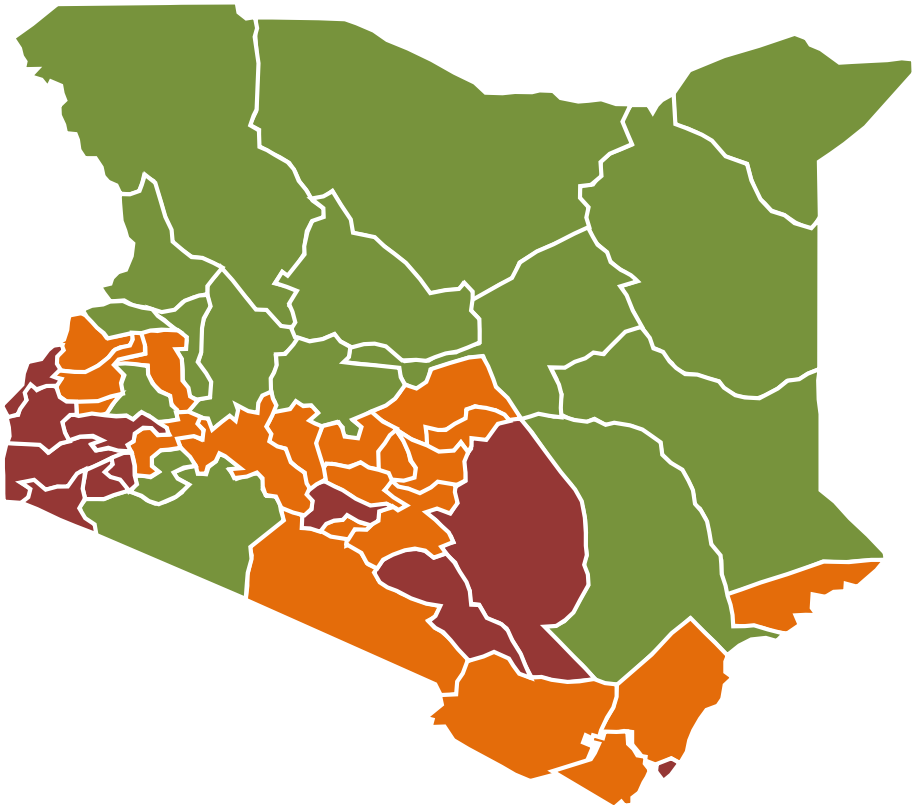
What **delivery approach** (e.g., generalized for full population or targeted to key populations) is most appropriate for each county?

What are the cost and impact implications of different **scenarios** for national PrEP rollout?

Further detail on these four areas is included in the following slides

Planned research and analysis will strengthen this analysis in 2017

Kenya's HIV epidemic is concentrated in several counties that would benefit most from PrEP access



HIV Incidence Clusters

1. **High Incidence -** **Incidence rates equal to or above the national average (0.27)**
   (*Homa Bay, Siaya, Kisumu, Migori, Nyamira, Kiambu, Busia, Mombasa, Makueni, Kisii, Kitui)*

2. **Medium Incidence -** **Incidence rates of 0.1-0.27**
   (Machakos, Muranga, Kwale, Nyeri, Taita Taveta, Isiolo, Nyeri, Vihiga, Tharaka- Nithi, Kakamega, Kilifi, Kirinyaga, Embu, Meru, Nairobi, Bungoma, Lamu)

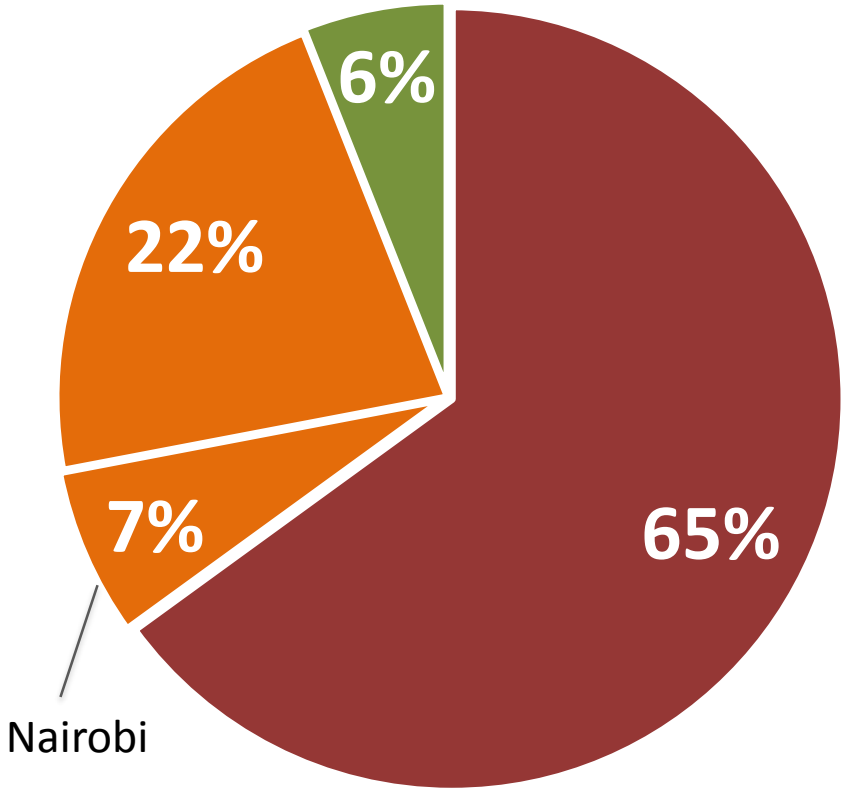
3. **Low Incidence -** **Incidence rates below 0.1**
   (Trans Nzoia, Marsabit, Uasin Gishu, Kajiado, Turkana, Tana River, Nakuru, Kericho, Narok, Laikipia, Bomet, Samburu, Nandi, Baringo, Elegeyo-Marakwet, West Pokot, Garissa, Mandera, Wajir)

The high incidence counties are aligned with the Kenya Prevention Revolution Roadmap and the Kenya Aids Strategic Framework's geographic prioritization strategy

Sources: Kenya HIV Estimates, NACC, NASCOP, UNAIDS, 2015

The high and medium incidence county clusters comprise ~95% of all new HIV infections in Kenya

Proportion of National Adult New HIV Infections by Cluster, 2015



Incidence Cluster		# of Counties	Total Population (15+)	# of New Infections (15+)
1	High Incidence	11	7M	46K
2	Medium Incidence	17	11M	20K
3	Low Incidence	19	8M	5K

PrEP delivery should be prioritized in the high and medium incidence county clusters

Sources: Kenya HIV Estimates, NACC, NASCOP, UNAIDS, 2015

General population groups contribute significantly to new HIV infections and should be able to access PrEP in some counties

Additional detail in appendix

Populations	Contribution to Total HIV Infections			
High risk general population groups	**Discordant Couples**	**Adolescent Girls and Young Women**		***Highest numbers of new infections, should be a focus for HIV prevention including PrEP***
	44.1%	**35.2%**		
Key populations	**FSW & Clients**	**MSM & Prisoners**	**PWID**	***High-risk and will benefit from PrEP, but not sufficient to stem majority of new infections***
	14.1%	**15.2%**	**3.8%**	
Bridging populations	**Fisher Folk**	**Truck Drivers**		***High-risk and likely overlap with other populations; good PrEP target if targeted delivery channels exist***
	Unknown *26.2% HIV Prevalence*	**Unknown** *18% HIV Prevalence*		

Note: AGYW proportion calculated by assuming 70% of 2015 young adult infections among females

Sources: HIV Modes of Transmission Study, 2008; Kenya Prevention Revolution Roadmap, 2015; IBBS 2012; PEPFAR COP, 2016; NACC Progress Report, 2016.

Bringing incidence and population factors together provides a framework to consider PrEP rollout by county

Two-Step Delivery Approach Framework

HIV Incidence

1

HIV incidence (rate and absolute number of new HIV infections) determines a county's need for investment in new HIV prevention solutions including oral PrEP and **prioritizes counties for PrEP rollout**.

Counties with higher HIV incidence are higher priority for PrEP rollout.

Source: 2015 NACC HIV data

2

Size of key populations (FSW, MSM) determines ***how*** **a county should rollout PrEP**.

Counties with epidemics driven by key populations should consider a **targeted rollout** to those groups while counties with low key populations but high HIV incidence should consider **rollout to the general population**, including sero-discordant couples, adolescent girls & young women, and bridging populations (e.g., fisherfolk).

Source: FSW, MSM, PWID estimates, MARPS, 2012

Population-Driven HIV Epidemic → **Generalized HIV Epidemic**

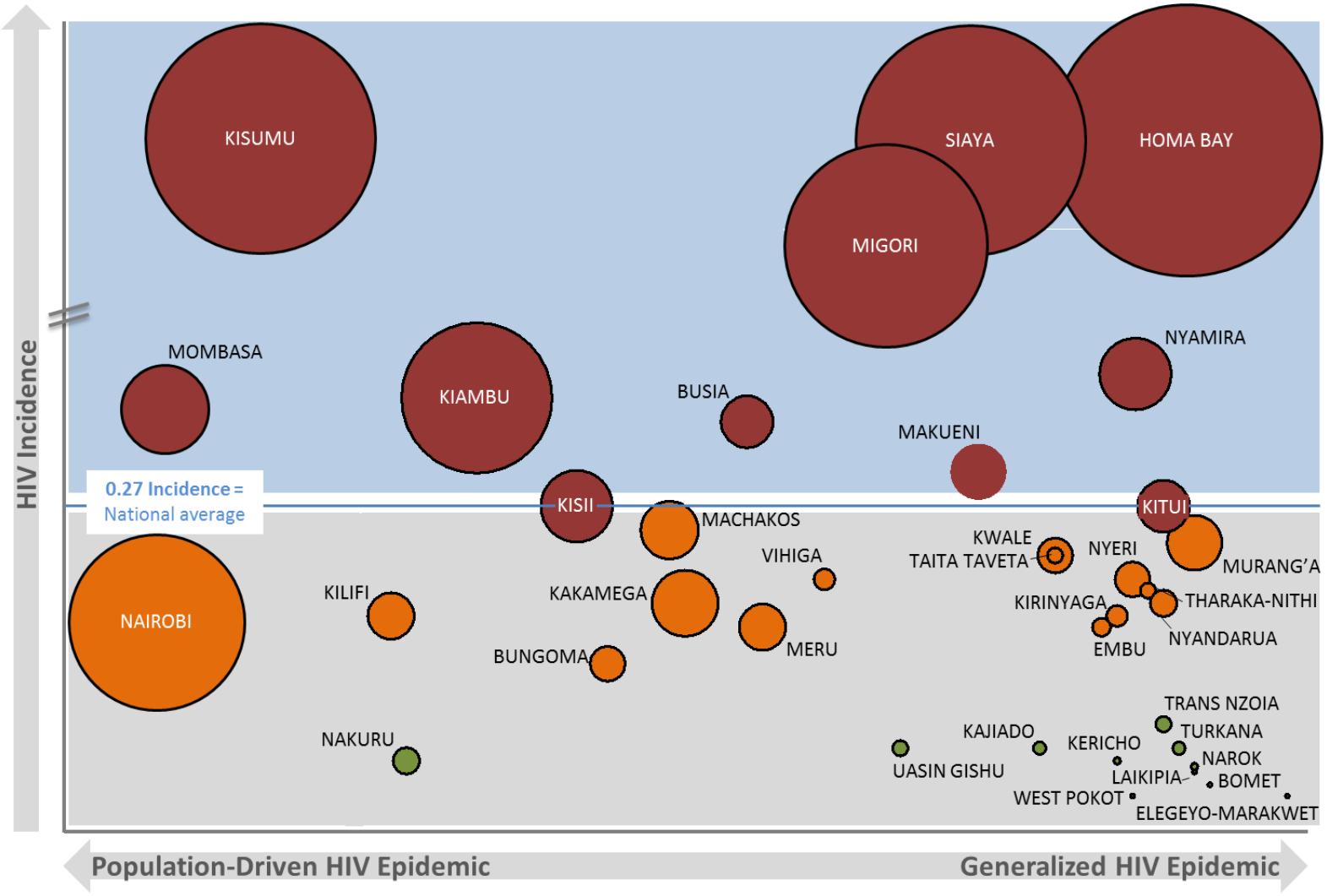
Counties are mapped to this framework in the following slides

Sources: Informed by Avenir, PrEP for Adolescent Girls and Young Women in Kenya, Preliminary Results Presentation, October 2016

High incidence counties are priorities for PrEP rollout

Counties mapped by incidence and presence of key populations, 2015

Circle size represents number of 2015 adult new infections



*Counties with high HIV incidence rates and large numbers of new infections should consider **large-scale PrEP rollout***

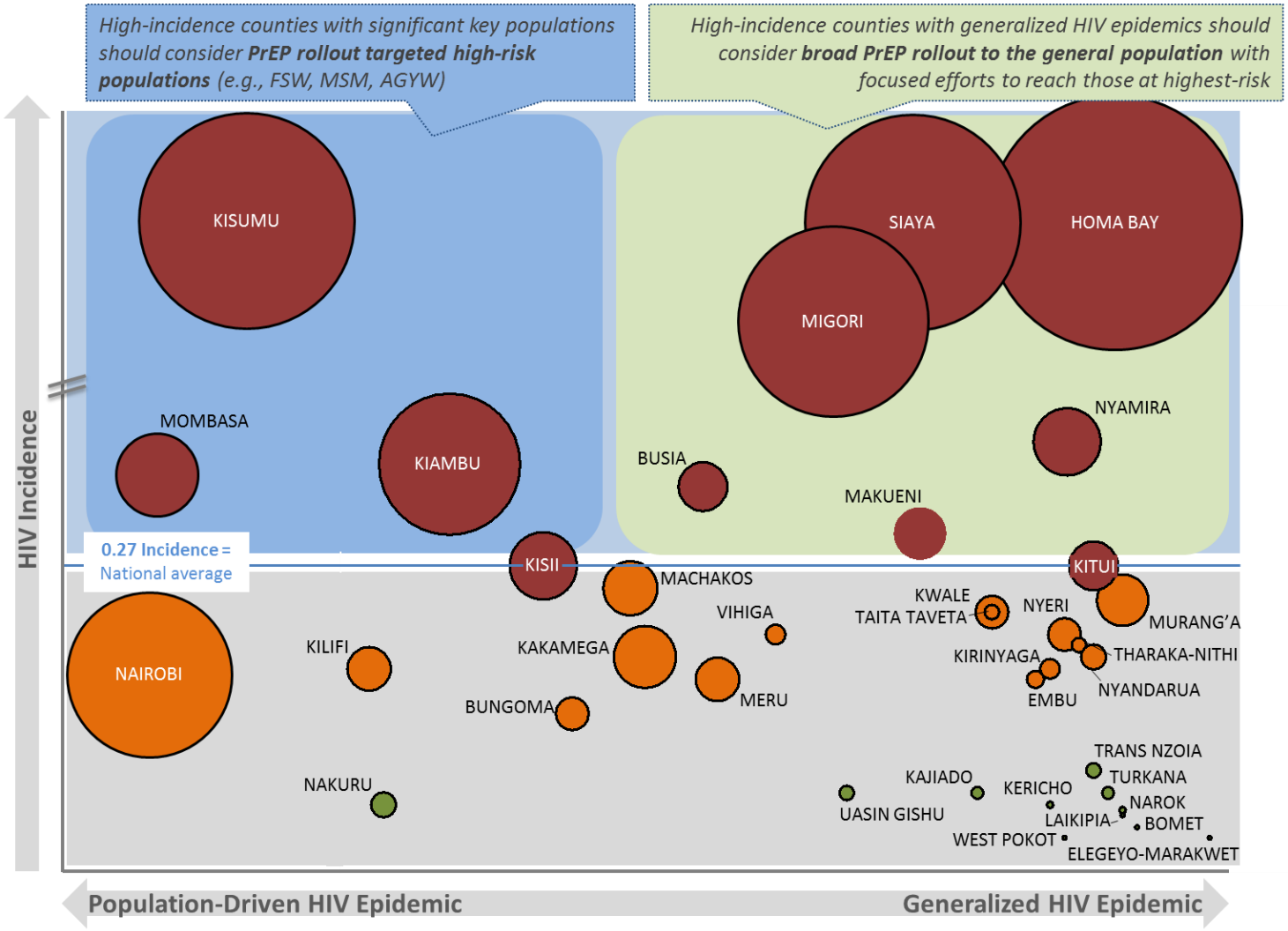
*Counties with low HIV incidence rates should consider **limited PrEP rollout** to specific hotspots or populations*

Note: Counties without key population estimates not included

Within high incidence counties, rollout may be targeted to specific populations or to the general population more broadly

Counties mapped by incidence and presence of key populations, 2015

Circle size represents number of 2015 adult new infections



Counties for "general population" rollout

- Homa Bay, Siaya, and Migori have few key populations but high rates of HIV incidence amongst ***sero-discordant couples, AGYW, and bridging populations***
- Nyamira, Makueni, Busia, and Kitui have similar profiles but comprise far fewer new infections

Counties for "targeted population" rollout

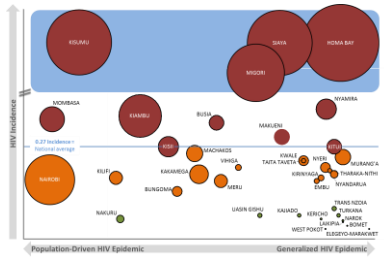
- Kisumu is a significant contributor of new infections driven by ***key populations (MSM, FSW) and bridging populations (e.g., fisherfolk)***
- Mombasa, Kiambu, and Kisii have similar profiles but comprise far fewer new infections
- Nairobi has a moderate rate of incidence, but contributes significantly to new infections and may also be prioritized for targeted PrEP rollout

Based on this analysis, we can define several possible scenarios for PrEP rollout

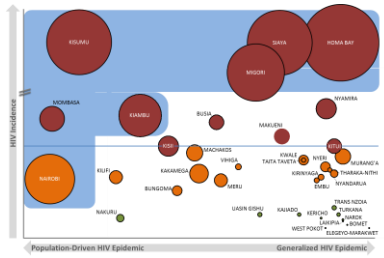
PrEP Rollout Scenarios

County Rollout

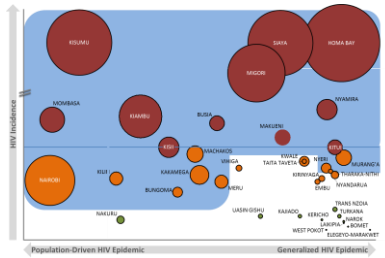
1 Highest incidence cluster



2 High new HIV infections

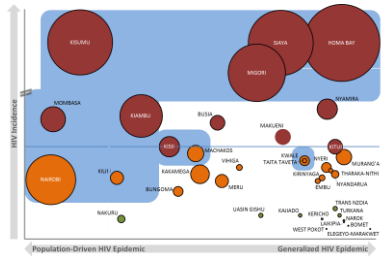


3 High + medium new HIV infections

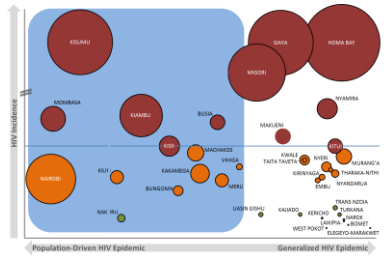


Population Rollout

4 High PLHIV to reach discordant couples



5 High and medium key populations



Note: This is not an exhaustive list of possible scenarios. These scenarios have been selected to highlight likely options for PrEP rollout and to illustrate the trade-offs between potential cost and impact across different options

Sources: FSG analysis

In these scenarios, PrEP could be rolled out across a county or targeted to specific populations in each county

	Scenario		Counties
County Rollout	1	**Highest incidence cluster** *4 counties*	• General population rollout (incl. SDC, AGYW and bridging populations) in Homa Bay, Siaya, Migori • Key population and high-risk AGYW rollout in Kisumu via DICES and NGO programs • All four counties have current demonstration projects and relatively high HTC and ARV uptake (range from 60 - 75%)
	2	**High new infections** *7 counties*	• General population rollout (incl. SDC, AGYW and bridging populations) in Homa Bay, Siaya, Migori • Key population and high-risk AGYW rollout in Kisumu, Kiambu, Mombasa, and Nairobi • All seven counties have current demonstration projects and relatively high HTC and ARV uptake, except Kiambu (range from 50 - 75%)
	3	**High + medium new Infections** *19 counties*	• General population rollout (incl. SDC, AGYW, and bridging populations) in Homa Bay, Siaya, Migori, Muranga and Nyeri • Key population and high-risk AGYW rollout in Kisumu, Nairobi, Kiambu, Mombasa, Kisii, Kakamega, Machakos, Makueni, Kitui, Nyamira, Kilifi, Meru, Bungoma, and Kwale • Some medium-incidence counties included in Bridge to Scale; lower rates of HTC and ARV uptake (range from 30 – 75%)
Population Rollout	4	**High PLHIV to reach discordant couples** *12 counties*	• Discordant couple rollout via CCCs in Nairobi, Homa Bay, Siaya, Kisumu, Migori, Kiambu, Mombasa, Kakamega, Nakuru, Busia, Kisii and Machakos • Partners study focused on sero-discordant couples will inform delivery • *Note: This scenario uses PLHIV as a proxy for discordant couples*
	5	**High + medium key populations** *16 counties*	• Key population rollout via DICES in Busia, Migori, Kisumu, Kiambu, Kisii, Siaya, Mombasa, Nairobi, Kilifi, Nakuru, Bungoma, Kakamega, Machakos, Meru, Vihiga, and Uasin Gishu • Varied rates of HTC and ARV uptake; Bridge to Scale will inform rollout to medium-incidence counties

Note: Population rollout scenarios target only the specific population in each county via the relevant delivery channel .
Note: High- risk AGYW are those determined to be at substantial ongoing risk according to the Kenya PrEP indication guidelines.

Sources: FSG analysis

These scenarios differ by potential impact and cost

	Scenario		Potential Impact	Potential Cost
County Rollout	1	Highest incidence cluster	**MODERATE IMPACT** Covers ~45% adult new infections	**LOWER TOTAL COST** 4 counties (2M 15+ population) | good demo project coverage
	2	High new infections	**MODERATE IMPACT** Covers ~60% adult new infections	**MODERATE TOTAL COST** 7 counties (7M 15+ population) | good demo project coverage
	3	High + medium new Infections	**HIGHER IMPACT** Covers ~90% adult new infections	**HIGHER TOTAL COST** 19 counties (16M 15+ population) | some demo project coverage
Population Rollout	4	High PLHIV to reach discordant couples	**LOWER IMPACT** Covers ~30% adult new infections (based on SDC proportion)	**LOWER TOTAL COST** 12 counties | 946K PLHIV (15+) | good demo project coverage
	5	High + medium key populations	**LOWER IMPACT** Covers ~20% adult new infections (based on key pop. proportion)	**MODERATE TOTAL COST** 16 counties |101K key populations | some demo project coverage

Providing PrEP beyond key populations will require larger-scale rollout, however, it is necessary to **address the majority of new infections.**

Scenarios 1 and 2 offer the best balance of impact and cost.

Impact and cost hypotheses are directional, only based on factors above and will need to be refined and validated with planned modeling sites and learning on risk assessment from demo projects

Four next steps will help inform decision-making

This analysis relied primarily on available secondary research, existing data sources, and preliminary modeling analysis results. Further analysis in 2017 will refine these recommendations and implications for Kenya's PrEP implementation plan.

How do the counties and populations compare in terms of cost-effectiveness and impact?

How will PrEP be rolled out (e.g., risk assessment, delivery approach, etc.) to different populations and delivery channels?

What is PrEP rollout expected to cost for different populations and delivery channels?

What assets and gaps exist in each county for effective PrEP delivery? Where are the implications for costs at a county level?

Details on initial findings and planned next steps are included on the following slides. Additional information will be available in 2017.

Modeling will enable more robust cost-effectiveness comparisons across scenarios

Summary Initial Modeling Findings

Initial Implications

- There is generally a trade-off between cost-effectiveness and impact
- To achieve higher infections averted, PrEP should be provided to high-risk AGYW in addition to key populations – especially in Homa Bay, Kisumu and Siaya
- In Kisumu, a focus on FSW is highly cost-effective and impactful
- *Note: These are only initial results, further analysis and validation will refine results in 2017*

.

Note: Medium- risk AGYW are those determined to have 2 or more sexual partners.

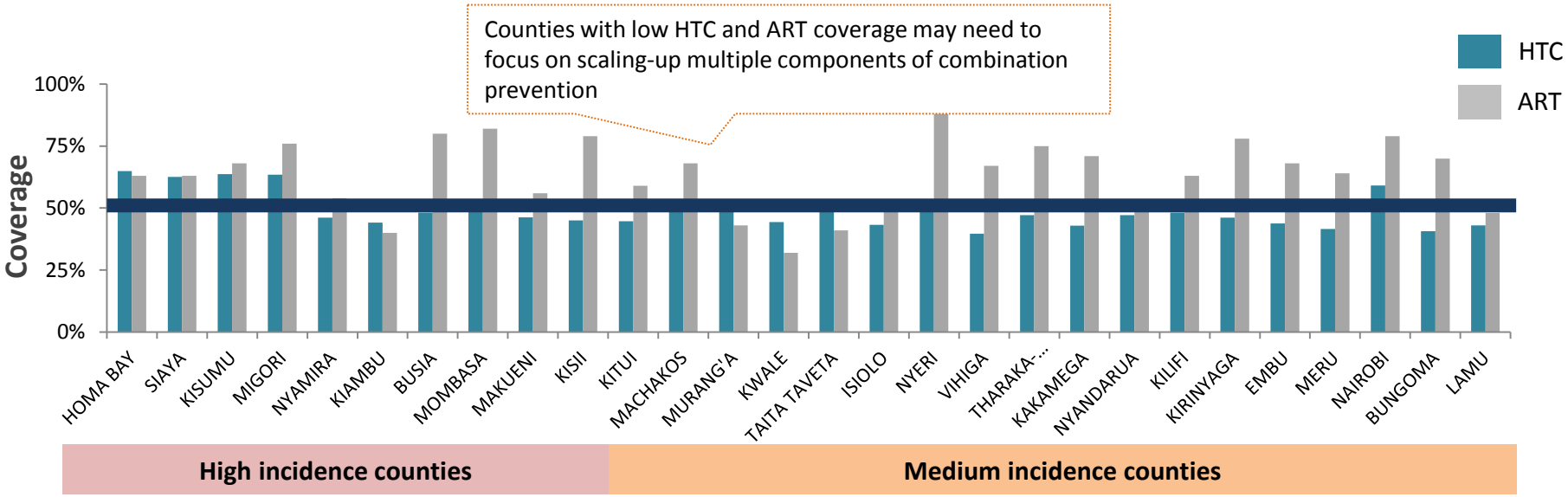
Sources: Avenir, PrEP for Adolescent Girls and Young Women in Kenya, Preliminary Results Presentation, October 2016

Considering PrEP within combination prevention will also guide HIV prevention resource allocations across scenarios

Initial Implications from Combination Prevention Modeling Results

- HTC, ART VMMC and behavior change interventions are more cost-effective than PrEP in most regions
- Scaling up PrEP should never come at the expense of scaling up other more cost-effective interventions
- PrEP should be introduced into the combination prevention strategy as incidence trends warrant and funding allows
- Additional modeling analysis will refine these results in 2017

HIV Testing (HTC) and ART Coverage by County (Counties in order of incidence rate)



Sources: NACC, 2016.

Demonstration projects have already started PrEP delivery in counties with the highest new infections

Kisumu – Good coverage
- 4 AGYW projects, incl. DREAMS
- 2 MSM projects
- 2 FSW projects
- 1 SDC project

Siaya – Moderate coverage
- 1 AGYW projects (DREAMS)
- 1 project for SDC (Partners)

Homa Bay – Good coverage
- 4 AGYW projects, incl. DREAMS
- 1 project for SDC
- 1 project on general pop >15
- 1 project for FSW and MSM

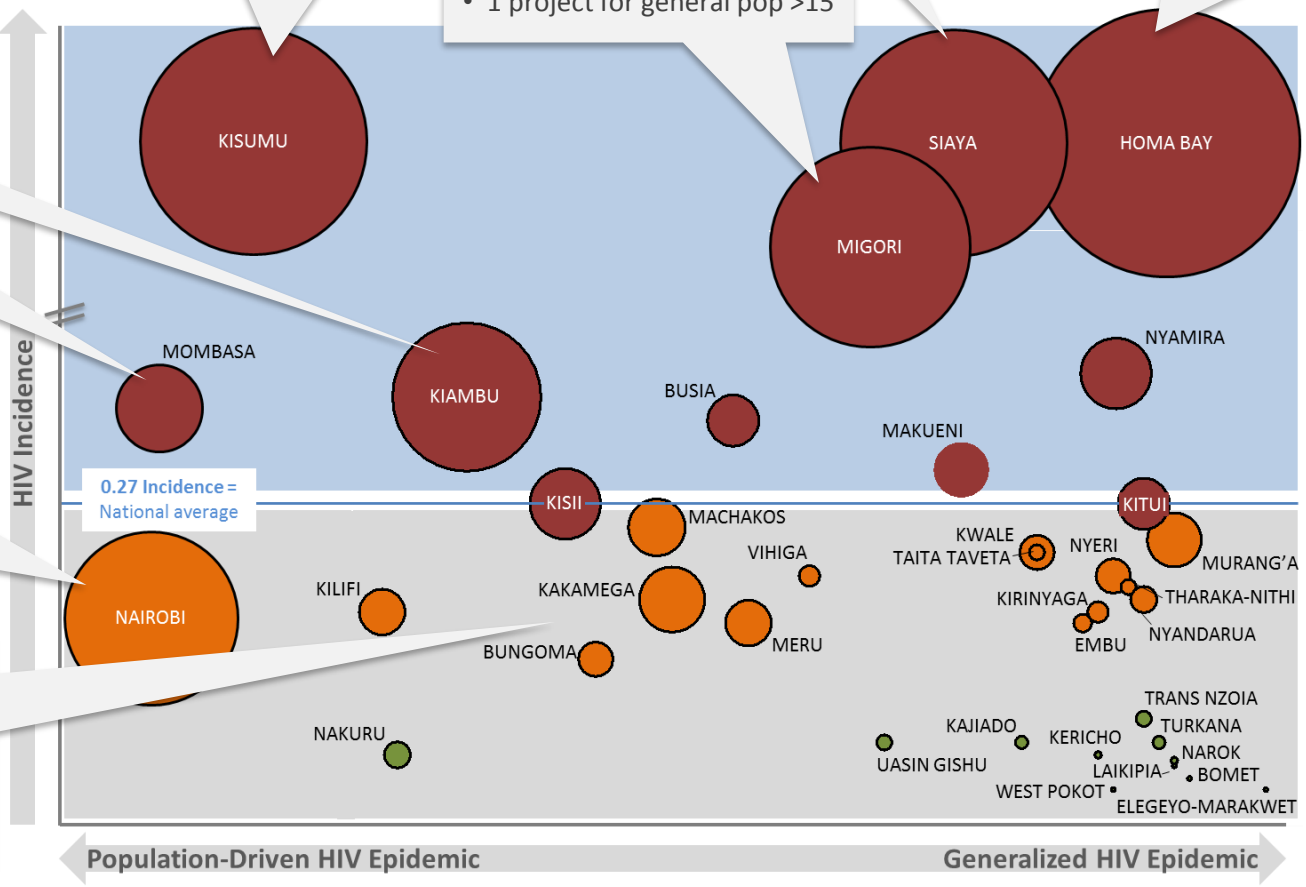
Migori – Moderate coverage
- B2S project for FSW, MSM, and AGYW
- 1 project for general pop >15

Kiambu – Some coverage
- Bridge to Scale project for FSW, MSM, and AGYW
- Partners project for SDC

Mombasa – Some coverage
- Included in Bridge to Scale for MSM, FSW, and AGYW

Nairobi – Moderate coverage
- Bridge to Scale and IPCP study for MSM, FSW, and AGYW
- DREAMS for AGYW
- Partners for SDC

Middle Incidence Cluster – Moderate coverage
- Bridge to Scale for MSM, FSW, and AGYW in Mchakos, Kilifi, Kwale, Taita Taveta, and Kisii
- Partners SDC study in Nyeri



Learning from demonstration projects will further inform delivery to improve targeting, uptake and adherence

Key Population

IPCP

***Delivery:* approach:** Key population and AGYW focus

Channels: DICES, health prevention sites, NGOs

***Illustrative learning*:**

- Tools, strategies and messaging to promote uptake and adherence
- Best practices on effective delivery of PrEP as part of a combined prevention package
- Validated tools for risk identification

BRIDGE TO SCALE

***Delivery:* approach:** Key population and AGYW focus

Channels: DICES, public clinics, youth friendly centers, FP/ STI clinics, NGOs/ Models sites

***Illustrative learning*:**

- Implementation toolkit for effective launch and scale up of an affordable, sustainable model of delivering PrEP

Generalized

SEARCH

Delivery approach: Generalized

Channels: Public hospitals and clinics

***Illustrative learning*:**

- Best practices for providing PrEP to individuals at substantial ongoing risk of HIV infection from a community model approach

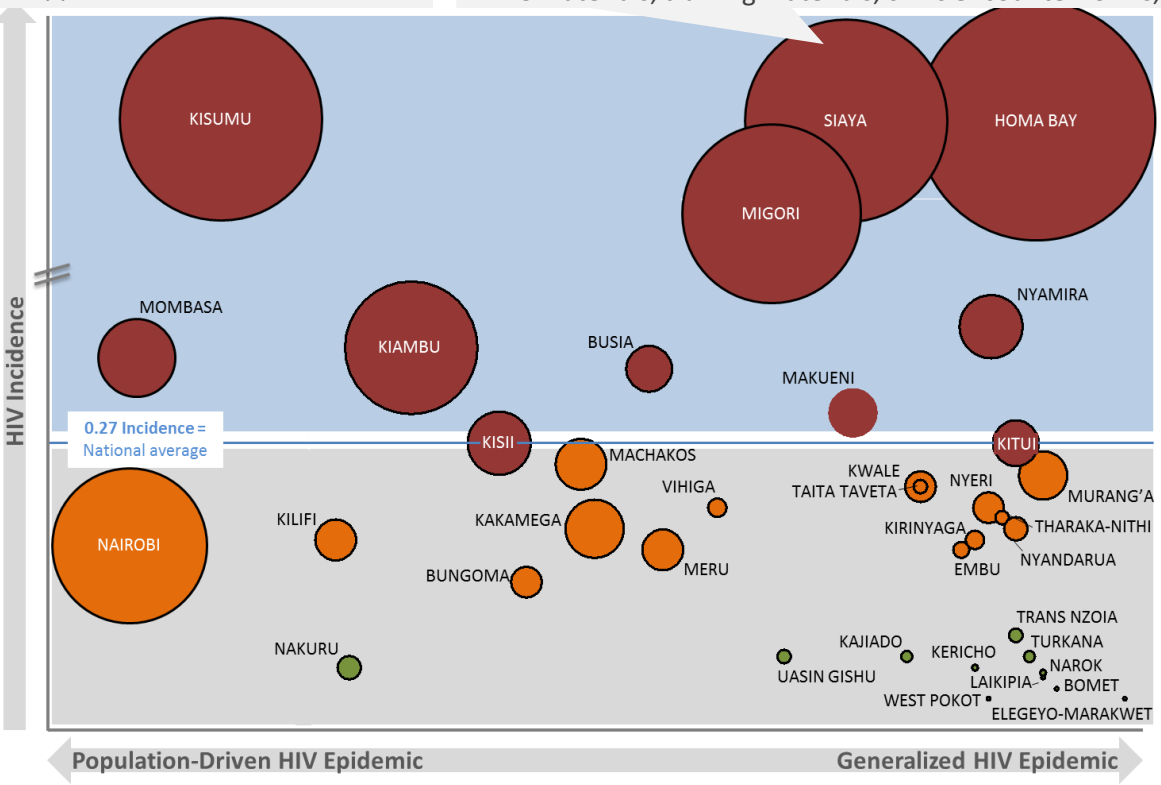
PARTNERS KEMRI

Delivery approach: Generalized (focus on discordant couples)

Channels: Public hospitals and clinics

***Illustrative learning*:**

- Best practices on delivering integrated PrEP and ART for HIV-1 sero-discordant couples at scale in public HIV-1 care centers
- Operational tools to deliver integrated PrEP and ART, including IEC materials, training materials, clinic encounter forms, etc.



Sources: LVCT Health demonstration project mapping; Program websites; AVAC PrEPWatch demonstration project portal.

With input from costing studies, we will be able to develop high-level budget estimates for the scenarios in late 2017

Scope: CHAI is collaborating with LVCT health to develop a limited study of the unit cost of providing PrEP to SW, MSM and AGYW in ~3 of LVCT health's facilities

Objective:

- Better understand the **"real-world" costs** of delivering PrEP
- Understand the **key cost drivers** across different populations
- **Inform resource needs estimates for national PrEP scale up** by sharing data with Bridge to Scale as an input to the project's cost-effectiveness modeling

Status:

- Preliminary results available in early 2017

Scope: JHPIEGO is collaborating with Avenir Health to develop a comprehensive study of the cost and cost-effectiveness of providing PrEP to individuals reached by ~40 facilities in the Bridge to Scale project

Objective:

- Determine the **unit costs** of providing PrEP by delivery channel, key populations and geographic region
- Estimate **direct costs incurred by clients**
- Analyze the **incremental costs** associated with adding PrEP to Kenya's existing prevention strategy among key populations and AGYW
- Determine the **willingness to pay** for PrEP services

Status:

- Preliminary results available in 2018/2019

County-level assessments will also help clarify need for investment and cost expectations to deliver PrEP

The framework below provides a range of factors that can be used to assess county readiness for PrEP introduction and to aid county level planning. This framework has been shared with the TWG.

PLANNING AND BUDGETING	SUPPLY CHAIN MANAGEMENT	PREP DELIVERY PLATFORMS	INDIVIDUAL UPTAKE	EFFECTIVE USE & MONITORING
• **County political will to introduce PrEP** • *County engagement in the PrEP planning process* • *Funding for HIV prevention and treatment*	• **HIV prevention commodity management** (stockouts) • *Plan for integration of PrEP into the local supply chain*	• **Experience with PrEP delivery** (# of PrEP users involved in demo projects) • **Sufficient PrEP delivery capacity (**HTC site coverage) • **Capacity to reach target populations** • *Coverage of SRH and family planning services* • *Healthcare worker training and support*	• **Likely PrEP demand** (Uptake of HIV testing) • **Likely PrEP demand** (Uptake of ART services) • *Presence of HIV communication* • *Knowledge of HIV prevention methods* • *Uptake of PEP* • *Uptake of STI services* • *Uptake of family planning services*	• **Likely PrEP adherence** (Viral load suppression) • **Environment conducive to effective use of PrEP** (Stigma Index) • Presence of NGO *programs* • *Monitoring system to support data collection and ongoing learning*

Bold indicators represent key indicators to assess county PrEP delivery readiness

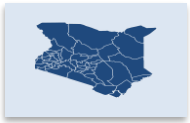
Italicized indicators represent additional indicators to aid county level PrEP planning

Please see readiness assessment materials for additional information

Sources: FSG analysis

Appendix

The analysis used the following publicly available data

	What data is included?	What data is not included?
	✓ Adult (15+) incidence and new infections data by county from the 2016 NACC progress report	× Modelled impact and/or cost-effectiveness of PrEP within a specific county
	✓ Size estimates of key populations (FSW, MSM, PWID) by county from 2012 MARPS study ✓ Young adult new infections by county from 2016 NACC progress report ✓ National population contributions to new infections from 2012 HIV mode of transmission study	× Size estimates of SDC, PWID, bridging populations by county × Prevalence and/or incidence of FSW, MSM, SDC, PWID, bridging populations by county
	✓ High level delivery approach and potential mix of delivery channels for different subsets of the county clusters ✓ Adult incidence rate, size estimates of key populations and number of new infections by county	× Modelled impact and/or cost effectiveness of PrEP by delivery channel
	✓ List of demo projects with project name, target counties, target populations, # of people targeted, research objectives, potential learning generated for subset of projects by delivery approach, and timeline	× Prevalence and/or incidence of key populations reached by each demonstration project × Current and/or planned demonstration project implementation science research insights
	✓ Initial results from OPTIONS AVENIR impact modeling ✓ Initial results from Imperial modeling	× Full impact modeling analysis (available 2017) × Analysis on how PrEP should be integrated with other components of the combination prevention package (available 2017)
	✓ Overall objectives and timeline for costing analysis	× Full costing analysis for introduction of PrEP in specific counties (available 2017)
	✓ A framework, list of factors and data sources for assessing PrEP county readiness ✓ Completed readiness assessments for three counties	× Completed county readiness assessments for all 47 counties × PrEP facility assessment tool

Explanation of high, medium, low categorization thresholds included in appendix slides

Indicator	High	Medium	Low
Incidence Rate	≥ national average of .27	0.1 - national average of .27	< 0.1
New Infections (15+)	>2,000 total per county or ~3% of national total	1,000-2,000 total per county or ~1-3% of national total	<1,000 total per county or <1% of national total
% Change New Infections	Increase of 50% or more	Increase of 1-50%	Stable or percentage decrease from 2013-2015
FSW	>2,000 total per county or ~ 2% of national total	1,000-2,000 total per county or ~1-2% of national total	<1,000 total per county or ~<1% of national total
MSM	>250 total per county or ~ 2% of national total	100-250 total per county or ~ 1-2% of national total	<100 or ~<1% of national total
PWID	>200 total per county or ~ 2% of national total	100-200 total per county or ~ 1-2% of national total	<100 or ~<1% of national total
AGYW (young adult-15-24- new infections)	>1,000 total young adult (15-24) new infections per county or ~3% of national total	250-1,000 total young adult (15-24) new infections county or ~1-3% of national total	250 total young adult (15-24) new infections per county or <1% of national total
PLHIV (15+)	>30,000 total PLHIV 15+ per county	10,000-20,000 total PLHIV 15+ per county	<10,000 total PLHIV 15+ per county

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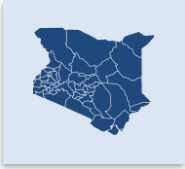
The high incidence cluster accounts for 65% of HIV infections



1 High incidence counties HIV data

	Incidence (%)	New Infections (#, 15+)	~ % Change in New Infections (2013-15)
HOMA BAY	2.00	9,629	- 20
SIAYA	1.68	7,700	- 20
KISUMU	1.62	8,790	- 15
MIGORI	1.00	5,093	- 25
NYAMIRA	0.38	1,484	- 30
KIAMBU	0.36	4,273	+ 50
BUSIA	0.34	1,467	+ 3,000*
MOMBASA	0.31	2,426	+ 50
MAKUENI	0.30	1,571	+ 30
KISII	0.27	2,072	- 60
KITUI	0.27	1,547	+ 60

Key Conclusions

- While new infections and incidence rates have decreased in **Homa Bay, Siaya, Kisumu, and Migori,** they still make up ~45% of new infections
- Urban counties and those along transport corridors like **Kiambu, Makueni, Busia, and Mombasa** comprise ~10% of new infections and have seen substantial increases from 2013-2015
- **Kisii** has seen a decrease in new infections but still represents a target county for PrEP rollout

** Busia's very high % increase is likely due to incomplete capturing of HIV infections in 2013; Incidence and new infections are for 15+ population*

Sources: Kenya HIV Estimates, NACC, NASCOP, UNAIDS, 2015

The medium incidence cluster accounts for 29% of HIV infections

2 Medium incidence counties HIV data

	Incidence (%)	New Infections (#, 15+)	~ % Change in New Infections (2013-15)
MACHAKOS	0.25	1,744	+ 20
MURANG'A	0.24	1,640	-15
KWALE	0.23	1,068	+70
TAITA TAVETA	0.23	527	+60
ISIOLO	0.23	193	+30
NYERI	0.21	1,124	-15
VIHIGA	0.21	737	+3,000*
THARAKA-N	0.20	486	+20
KAKAMEGA	0.19	1,935	+ 1,000*
NYANDARUA	0.19	768	-15
KILIFI	0.18	1,413	+ 70
KIRINYAGA	0.18	742	-10
EMBU	0.17	596	+15
MERU	0.16	1,392	+ 25
NAIROBI	0.15	4,719	+ 50
BUNGOMA	0.14	1,145	+ 1,000*
LAMU	0.13	104	+140

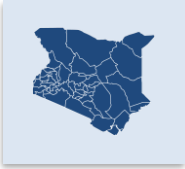
Key Conclusions

- **Nairobi**'s high number of new infections (7% of the national total) and substantial increase from 2013-2015 demonstrates the importance of the county for PrEP rollout
- Coastal counties like **Kwale, Taita Taveta, and Kilifi** exhibit incidence rates close to the national average and saw substantial increases in new infections
- Counties near Nairobi, along the Kampala-Nariobi highway and near the Uganda border, like **Machakos, Muranga, Bungoma, and Kakamega** have high new infections

** Vihiga, Kakamega, Bungoma's very high % increases are likely due to incomplete capturing of HIV infections in 2013; Incidence and new infections are for 15+ population*

Sources: Kenya HIV Estimates, NACC, NASCOP, UNAIDS, 2015

The low incidence cluster accounts for 6% of HIV infections



3 Low incidence counties HIV data

	Incidence (%)	New Infections (#, 15+)	~ % Change in New Infections (2013-15)
TRANS NZOIA	0.09	528	-75
MARSABIT	0.09	152	+90
UASIN GISHU	0.07	520	-75
TURKANA	0.07	438	-85
KAJIADO	0.07	394	-75
TANA RIVER	0.07	125	+135
NAKURU	0.06	801	-80
KERICHO	0.06	318	-75
NAROK	0.05	309	-85
LAIKIPIA	0.05	151	-80
BOMET	0.04	217	-90
SAMBURU	0.04	58	-90
NANDI	0.04	218	-85
WEST POKOT	0.03	93	-85
BARINGO	0.03	109	-85
ELEGEYO-M	0.03	85	-80
GARISSA	0.02	55	-50
MANDERA	0.02	73	-50
WAJIR	0.01	28	+50

Key Conclusions

- **Turkana** has seen remarkable changes in incidence from 2013-2015 (0.36-0.07)
- **While Nakuru** has a relatively high number of new infections, it has seen substantial decreases
- Counties that are in close geographic proximity to high-incidence counties like **Trans Nzoia, Bomet, Nandi, Kericho, and Uasin Gishu** should be monitored closely for any changes in incidence and new infections

Sources: Kenya HIV Estimates, NACC, NASCOP, UNAIDS, 2015

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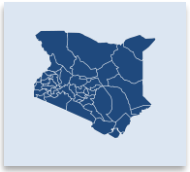


Which counties in Kenya would benefit most from access to PrEP?

Which populations would benefit most from access to PrEP and how do these populations differ by county?

What delivery approach (e.g., generalized for full population or targeted to key populations) is most appropriate for each county?

In which counties and for which populations is PrEP delivery already occurring through demonstration or pilot projects?

County Profile: What does the opportunity for PrEP rollout and overall readiness to deliver PrEP look like for specific counties?

Note: All key population estimates use *point estimates* based on town counts and extrapolated to county level

The following populations could benefit from access to PrEP

		How is this population currently prioritized?	What are the key indicators?
Key Populations	**FSW**	• Included in national plans as **priority population for prevention in all incidence clusters** • Mentioned as targets for **PrEP delivery in all incidence clusters** combination prevention strategies	• **~100,000 FSW** nationally (26% in Nairobi; 35% in high incidence cluster) • **29.3%** HIV prevalence; **~14%** of new adult infections • **67%** service coverage (decrease from 70% in 2015)
	MSM	• Included in national plans as **priority population for prevention in all incidence clusters** • Mentioned as targets for **PrEP delivery in all incidence clusters** combination prevention strategies	• **~10,000 MSM** nationally (16% in Nairobi; 50% in high incidence cluster) • **18.2%** HIV prevalence; **~15%** of new adultinfections • **69%** service coverage (increase from 55% in 2013)
	PWID	• Included in national plans as **priority population for prevention in all incidence clusters** • Mentioned as targets for **PrEP delivery in all incidence clusters** combination prevention strategies	• **~8,000 PWID** nationally (22% in Nairobi; 35% in the coastal region) • **18.3%** prevalence; **3.8%** of new adult infections • **74%** service coverage (increase from 24% in 2013)
Target Pops	**High risk AGYW**	• Included in national plans as **priority populations for prevention in the high and medium incidence clusters** • Mentioned as targets for **PrEP delivery in the medium incidence cluster** combination prevention strategy	• **~4.4M** AGYW nationally (10% in Nairobi) • New infections **increased by 17% from 2013-2015** among 15-24 • **4.6%** prevalence; young people comprise **51%** of new infections; AGYW likely **~40%** of new infections given that ~70% ni = women • HIV prevalence is **4X higher for AGYW** than 15-24 men and boys
	Discordant couples	• Included in national plans as **priority population for prevention in all incidence clusters** • Mentioned as targets for **PrEP delivery in all incidence clusters** combination prevention strategies	• **~260,000 couples or 5-6%** of couples are HIV sero-discordant • **44.1%** of new adult infections from sero-discordant couple • **Low awareness of partner status** (48% for women; 61% for men)
Other	**Bridging Pops.**	• **Truck drivers, migrants, fisher folk included as priority populations for prevention in all incidence clusters** • Mentioned as targets for **PrEP delivery in the high incidence cluster** combination prevention strategy	• **~122,000 fisher folk according to KEMRI RCTP 2013** • 2014 counting exercise estimated **43% of fisher folk in Homa Bay and 28% of fisher folk in Siaya County** • **~26% prevalence of fisher folk; 18% for truck drivers**

Sources: 2015 Prevention Revolution Roadmap; 2016 Progress Report, NASCOP; OPTIONS Situation Analysis, 2016.

These populations are concentrated in a subset of counties and can be reached via specific delivery channels

Populations

General population

Discordant couples

- **~60% of people living with HIV**, which indicates a high number of sero-discordant couples, are in the high incidence cluster and Nairobi
- **75% occurred in counties above and** Kakamega, Nakuru, Machakos, Kilifi and Bungoma

AGYW

- **~ 60% of young adult new infections occurred in** Homa Bay, Siaya, Kisumu, Migori, Nairobi, and Mombasa
- **~80% occurred in counties above and** other high incidence counties/Machakos

Key populations

FSW and MSM

- Highest priority in **Nairobi, Mombasa, Kiambu and Kisumu**
- **Significant emphasis** in high incidence **Siaya, Migori, Busia and Kisii;** medium incidence **Kilifi**
- Additional targeting in several **Western and Central region** medium and low incidence counties

PWID

- Highest priority in the urban centers of **Nairobi, Mombasa and Kiambu**; coastal county of **Kilifi** and lake region counties of **Kisumu, Migori and Busia**
- **Additional potential targeting in Meru, Bungoma and Kakamega**

Bridging populations

Truck Drivers

- Likely influencing the high number of new infections in the high and medium incidence counties in the **lake region and along major transport routes**

Fisher folk

- Likely driver of new infections in the high incidence **lake region counties and Mombasa**

Implications for Delivery Channels

Require general access, but targeting highest-risk via specific channels (e.g., public health facilities, family planning, youth friendly, and comprehensive care centers for SDC)

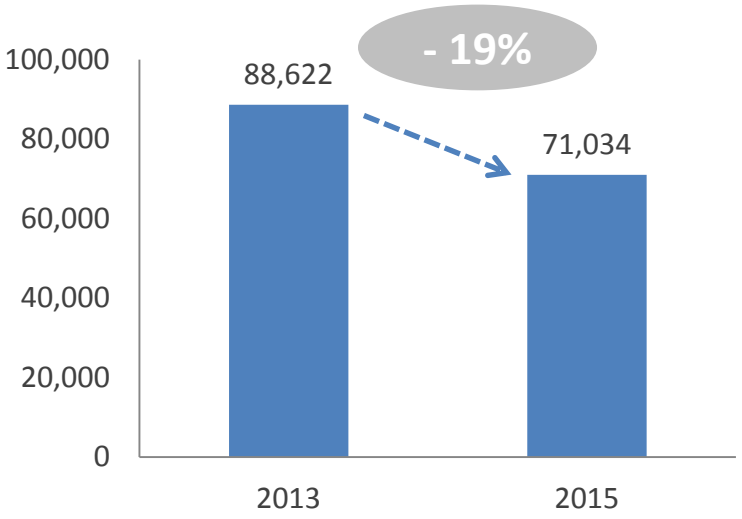
Require targeting of key population channels (e.g., DICES and NGO programs)

Require targeting of channels along transport corridors and in areas of fish trading activity (e.g., mobile clinics)

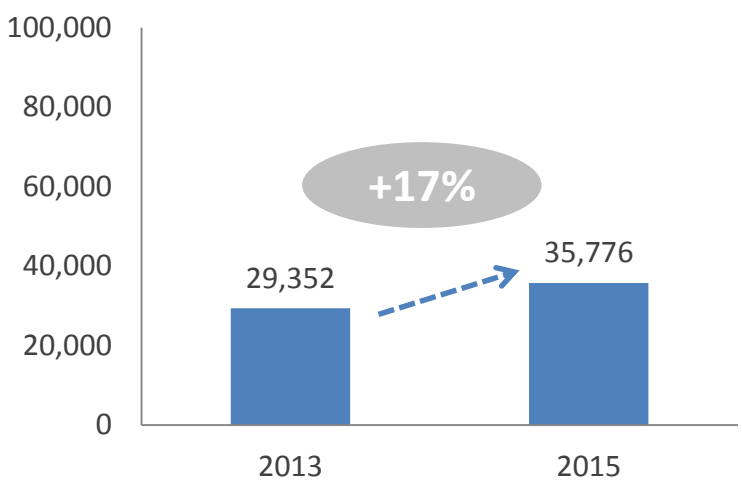
Sources: Geographic Mapping of Most at Risk Populations for HIV (MARPs) in Kenya, NASCOP; NACC 2015 Estimates Report; NACC 2016 Progress Report

Young adult new infections have increased and are concentrated in a subset of counties

While Kenya has significantly reduced its adult new infections in the past two years…



…. Young adult new infections have increased at a rapid rate



51% of all new adult infections in 2015 occurred among young adults 15-24

- 60% of all young adult new infections were found in just six counties (Siaya, Homa Bay, Kisumu, Migori, Nairobi, and Mombasa)
- Each of these counties saw increases in young adult new infections of 50-150% from 2013-2015
- Other counties with sizable numbers of young adult new infections include Kiambu (3%), Kisii (3%) and Machakos (3%). Each of these counties also saw increases of 50-200% from 2013-2015.

Sources: 2016 Progress Report, NACC.

High incidence counties should aim for general PrEP access

1 High incidence counties population data

	FSW (#)	MSM (#)	PWID (#)	AGYW (# of 15-24 new infections)	Bridging Populations
MOMBASA	9,288	782	2,101	1,283	Fisher folk, truck drivers, migrants
KIAMBU	4,603	310	328	>1.0 incidence rate (1,199 new infections)	Truck drivers, migrants
KISII	4,063	426	64	<1.0 incidence rate (1,118 new infections)	Fisher folk, truck drivers, migrants
KISUMU	4,041	1,630	424	>1.0 incidence rate (4,996 new infections)	Fisher folk, truck drivers, migrants
BUSIA	3,182	145	157	497	Fisher folk, truck drivers, migrants
MIGORI	2,272	673	309	>1.0 incidence (2,895 new infections)	Fisher folk, truck drivers, migrants
SIAYA	2,149	618	57	>1.0 incidence (4,377 new infections)	Fisher folk, truck drivers, migrants
MAKUENI	1,966	46	No data	831	Truck drivers, migrants
HOMA BAY	995	339	67	>1.0 incidence (5,473 new infections)	Fisher folk, truck drivers, migrants
NYAMIRA	856	118	8	843	Truck drivers, migrants
KITUI	794	No data	No data	818	Truck drivers, migrants

Key Conclusions

- **Given the high incidence levels of all counties, all target populations would need to be prioritized**
- **Mombasa, Kiambu, Kisumu, Migori, and Siaya** might prioritize FSW, MSM and AGYW
- **Mombasa** might prioritize PWID
- **Homa Bay** might emphasize targeting AGYW and the general population
- **Kisii and Busia** might prioritize FSW
- **Makueni, Nyamira and Kitui** might prioritize local hotspots with significant target populations
- The **lake region** might benefit from outreach to fisher folk

Sources: Geographic Mapping of Most at Risk Populations for HIV (MARPs) in Kenya, NASCOP ; NACC 2016 Progress Report

Medium incidence counties should target specific populations

2 Medium incidence counties population data

	FSW (#)	MSM (#)	PWID (#)	AGYW (# of 15-24 new infections)	Bridging Populations
NAIROBI	27,620	1,570	1,495	2,812	Truck drivers, migrants
KILIFI	4,676	640	509	747	Fisher folk, truck drivers, migrants
BUNGOMA	3,984	211	237	388	Truck drivers, migrants
KAKAMEGA	3,405	314	230	656	Truck drivers, migrants
MACHAKOS	3,385	617	214	923	Truck drivers, migrants
MERU	2,831	332	284	736	Truck drivers, migrants
VIHIGA	2,749	177	109	250	Truck drivers, migrants
T. TAVETA	1,524	6	0	278	Truck drivers, migrants
KWALE	1,112	257	134	565	Fisher folk, truck drivers, migrants
EMBU	1,032	29	117	315	Truck drivers, migrants
NYERI	988	9	0	315	Truck drivers, migrants
NYANDARUA	801	25	0	216	Truck drivers, migrants
KIRINYAGA	739	0	0	208	Truck drivers, migrants
THARAKA	560	177	151	257	Truck drivers, migrants
MURANGA	442	184	0	460	Truck drivers, migrants
ISIOLO	No data	No data	No data	102	Truck drivers, migrants
LAMU	No data	No data	No data	55	Fisher folk, truck drivers, migrants

Key Conclusions

- **Nairobi** would likely require a concerted focus on all target populations, with significant emphasis placed on FSW/MSM
- **Kilifi, Kakamega, Machakos and Meru** might prioritize both FSW and MSM
- **Bungoma and Vihiga** might prioritize FSW
- Given relatively high young adult new infections, PrEP could also be targeted to AGYW in all medium AGYW new infections counties (**Kilifi, Bungoma, Kakamega, Machakos, Meru, Kwale, and Muranga**)

Sources: Geographic Mapping of Most at Risk Populations for HIV (MARPs) in Kenya, NASCOP ; NACC 2016 Progress Report

Several low incidence counties may target PrEP to key pops.

3 Low incidence counties population data

	FSW (#)	MSM (#)	PWID (#)	AGYW (# of 15-24 new infections)	Bridging Populations
NAKURU	5,309	259	0	455	Truck drivers, migrants
UASIN GISHU	2,442	95	0	295	Truck drivers, migrants
KAJIADO	1,564	26	0	224	Truck drivers, migrants
KERICHO	1,116	0	0	181	Truck drivers, migrants
WEST POKOT	1,004	8	0	53	Truck drivers, migrants
TRANS NZOIA	815	13	0	289	Truck drivers, migrants
TURKANA	724	0	0	249	Truck drivers, migrants
NAROK	576	4	7	175	Truck drivers, migrants
LAIKIPIA	554	4	0	86	Truck drivers, migrants
BOMET	550	0	0	123	Truck drivers, migrants
ELEGEYO-M	0	0	32	48	Truck drivers, migrants
MARSABIT	No data	No data	No data	80	Truck drivers, migrants
SAMBURU	No data	No data	No data	33	Fisher folk, truck drivers, migrants
NANDI	No data	No data	No data	124	Truck drivers, migrants
TANA RIVER	No data	No data	No data	66	Truck drivers, migrants
BARINGO	No data	No data	No data	62	Truck drivers, migrants
GARISSA	No data	No data	No data	31	Truck drivers, migrants
MANDERA	No data	No data	No data	42	Truck drivers, migrants
WAJIR	No data	No data	No data	16	Truck drivers, migrants

Key Conclusions

- **Nakuru and Uasin Gishu** could potentially benefit from focus on FSW and MSM; both counties have ~500-800 adult new infections per year
- To a lesser extent, **Kajiado, Kericho and West Pokot** could also benefit from a focus on FSW, considering the relative high numbers of this key population
- **Nakuru, Uasin Gishu, Trans Nzoia and Turkana** could potentially also benefit from an emphasis on targeting AGYW

Sources: Geographic Mapping of Most at Risk Populations for HIV (MARPs) in Kenya, NASCOP ; NACC 2016 Progress Report

We have also included PLHIV by county as a proxy for discordant couples

1 High incidence counties

	PLHIV (#, 15+)
Homa Bay	148,657
Kisumu	135,703
Siaya	118,877
Migori	78,621
Kiambu	68,349
Mombasa	50,328
Busia	35,588
Kisii	31,987
Makueni	27,495
Kitui	27,072
Nyamira	22,905

2 Medium incidence counties

	PLHIV (#, 15+)
Nairobi	163,287
Kakamega	46,939
Machakos	30,529
Kilifi	29,311
Bungoma	27,780
Muranga	26,238
Meru	24,358
Kwale	22,149
Nyeri	17,973
Vihiga	17,892
Nyandarua	12,283
Kirinyaga	11,868
Taita Taveta	10,924
Embu	10,430
Tharaka	8,512
Lamu	2,149
Isiolo	3,385

3 Low incidence counties

	PLHIV (#, 15+)
Nakuru	37,324
Uasin Gishu	24,243
Trans Nzoia	23,693
Turkana	20,396
Kajiado	18,354
Kericho	14,835
Narok	14,390
Nandi	10,155
Bomet	10,092
Laikipia	7,036
Baringo	5,059
West Pokot	4,338
E-M	3,968
Mandera	2,884
Samburu	2,685
Marsabit	2,659
Tana River	2,587
Garissa	2,159
Wajir	1,089

Key Conclusions

- Discordant couples **contribute ~44% of all new HIV infections**
- **Delivering PrEP through CCCs** could reach HIV negative partners and **reduce new infections**
- Counties with **large urban populations outside the lake region**, such as Nairobi, Kakamega, Machakos and Nakuru have large populations of PLHIV and potentially could provide opportunities to reach discordant couples

Sources: NACC 2016 Progress Report

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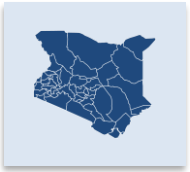


Which counties in Kenya would benefit most from access to PrEP?

Which populations would benefit most from access to PrEP and how do these populations differ by county?

What delivery approach (e.g., generalized for full population or targeted to key populations) is most appropriate for each county?

In which counties and for which populations is PrEP delivery already occurring through demonstration or pilot projects?

County Profile: What does the opportunity for PrEP rollout and overall readiness to deliver PrEP look like for specific counties?

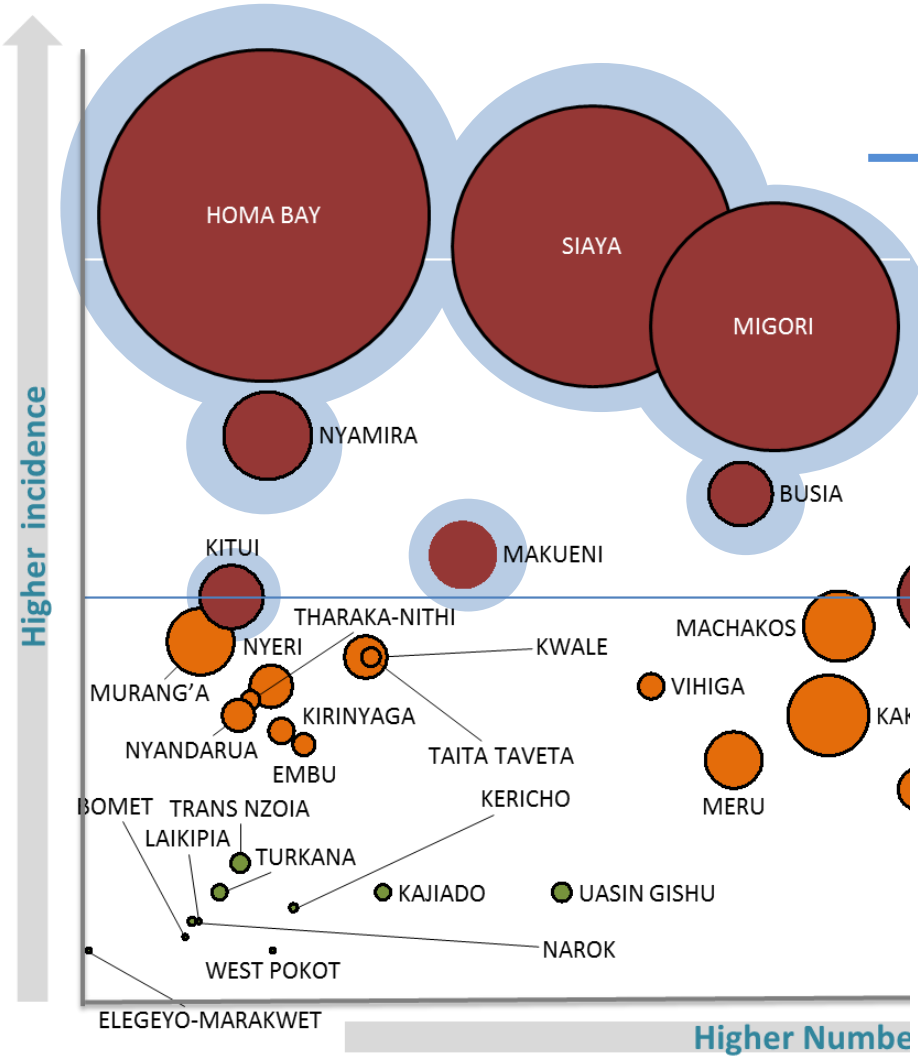
- Not Comprehensive-

A range of delivery channels could provide PrEP

	Definition	Considerations for PrEP
Drop in Centers (DICES)	• Largely NGO run clinics focused on **providing preventive services to key populations** such as FSW, MM and PWID (e.g., SWOP, LVCT, IMC, etc).	• Staff are **specifically trained to provide services to stigmatized populations** • Other populations may not feel comfortable accessing services at DICES
Comprehensive Care Centers (CCC)	• Provide **common set of core clinical HIV services (e.g., ART)** delivered through public health, NGO and .faith based facilities	• **High impact channel to reach sero-discordant couples;** may not be relevant for full HIV negative population
HIV Testing (VCT and HTS)	• Available in l**evel III and above public health clinics**, either integrated or as stand alone centers (VCT)	• **Low uptake** continues to be a challenge • **Healthcare worker training** will be critical to reduce potential stigma
Government Public Health Clinics	• **Provide a range of different types of services according to the levels of the Kenya essential health package (KEPH)**	• Provides broad health services coverage to the **general population** • **Healthcare worker training** will be critical to reduce potential stigma
Family planning and SRH clinics/services	• **Generally integrated into government, NGO and faith based health clinics**	• Provides **broad coverage to high-risk adult women and AGYW** • Potentially **less stigmatized than general public health facilities**
Youth friendly centers	• Provide **sexual and reproductive health education services** tailored to the needs of the AGYS population	• Provides services to young women with **reduced stigma** • However, **they may have lower overall geographic coverage** and may not have capacity to provide HIV related services

Sources: Assessing Physical Delivery of PrEP in Support of Proof of Deliverability, FHI, 2013.

Seven high incidence counties require a general PrEP rollout; among these, Homa Bay, Siaya and Migori are priorities



***Profile*: High incidence, generalized epidemic**

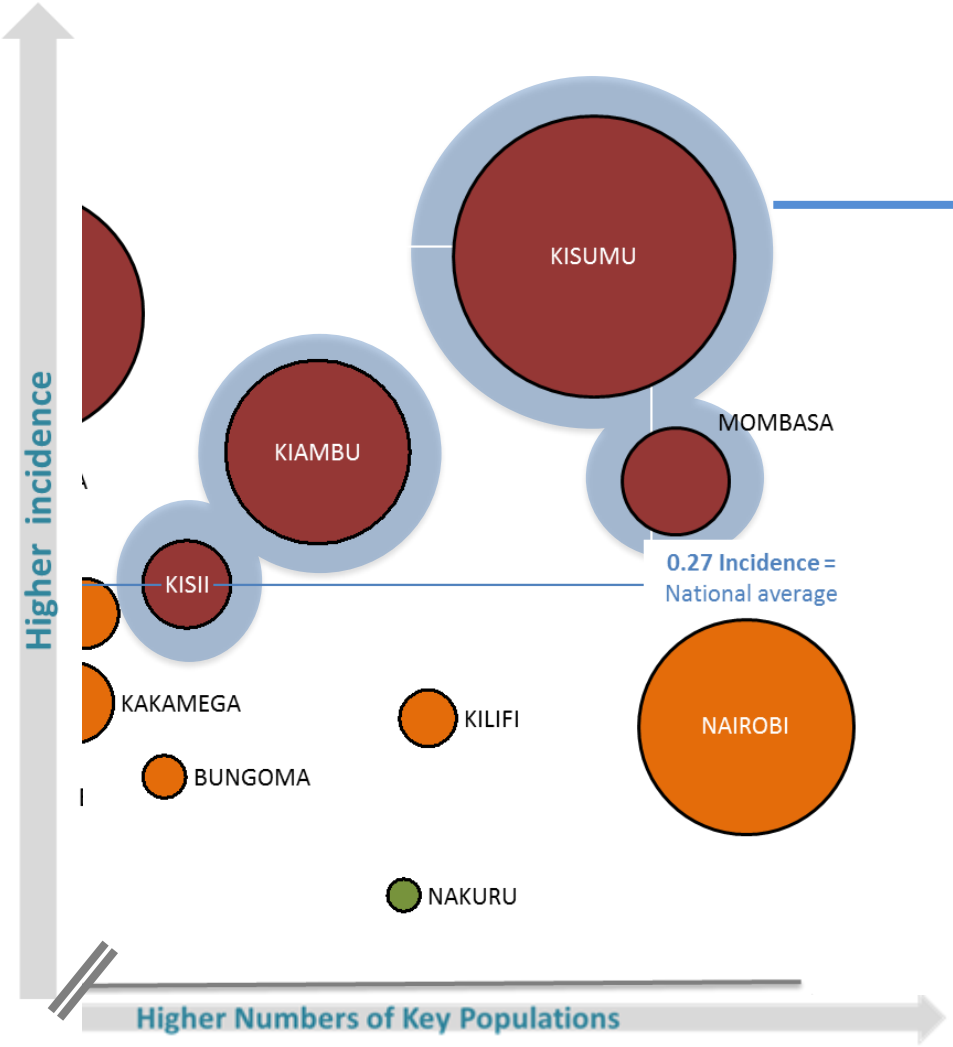
***Approach*: Comprehensive generalized rollout**

***Channels*: Government health facilities, HIV testing (VCT), Family Planning /SRH clinics, youth friendly centers**

- **Homa Bay, Siaya and Migori** drive **32%** of new infections and should be high priority for a comprehensive rollout
- **Counties with higher incidence and higher numbers of new infections (e.g., Homa Bay)** may benefit from a more comprehensive rollout to facilities that can reach the general population (e.g., gov't public health)
- **Counties with lower incidence and smaller numbers of new infections (e.g., Nyamira, Kitui, and Busia)** may benefit from a more tailored approach to facilities that can reach individuals at higher risk due to localized epidemic drivers

Sources: Geographic Mapping of Most at Risk Populations for HIV (MARPs) in Kenya, NASCOP; NACC 2015 Estimates Report; NACC 2016 Progress Report

Four high incidence counties require a general PrEP rollout targeted towards key populations



***Profile*: High incidence, generalized epidemic, high numbers of key populations**

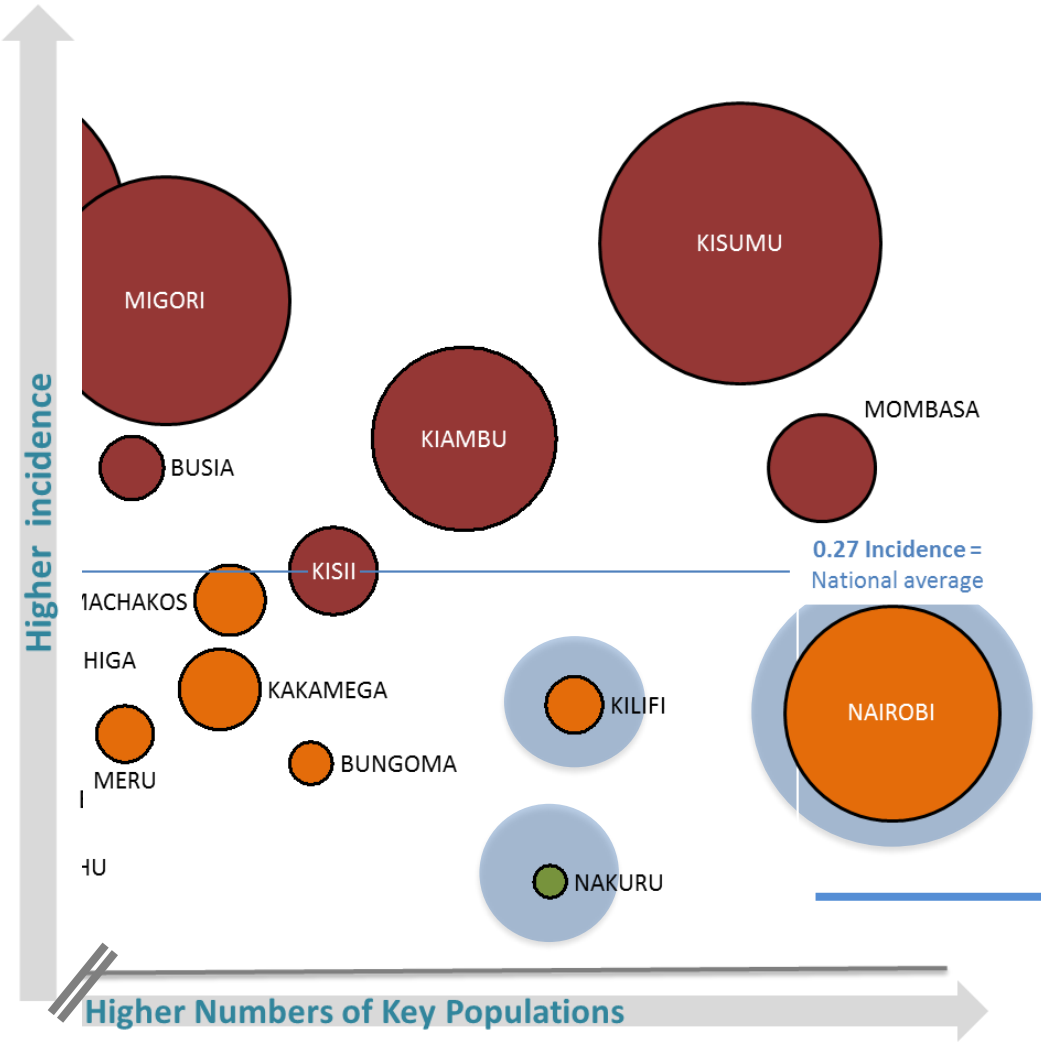
***Approach*: Comprehensive rollout across a range of facilities with greater focus on those that reach key populations**

***Channels*: Government health facilities, HIV testing (VCT), Family Planning /SRH clinics, youth friendly centers, facilities serving key populations (i.e., DICES and NGO programs)**

- **Kissi, Kiambu, Kisumu and Mombasa** drive **25%** of new infections and should be high priority
- **Kisumu** comprises ~15% of all young adult new infections
- **Higher incidence / new infections** may indicate a more comprehensive rollout to facilities that could reach the general population1

Sources: Geographic Mapping of Most at Risk Populations for HIV (MARPs) in Kenya, NASCOP; NACC 2015 Estimates Report; NACC 2016 Progress Report

Two medium incidence and one low incidence counties would benefit from a PrEP rollout targeted towards key populations



***Profile*: Low-medium incidence, high numbers of key populations**

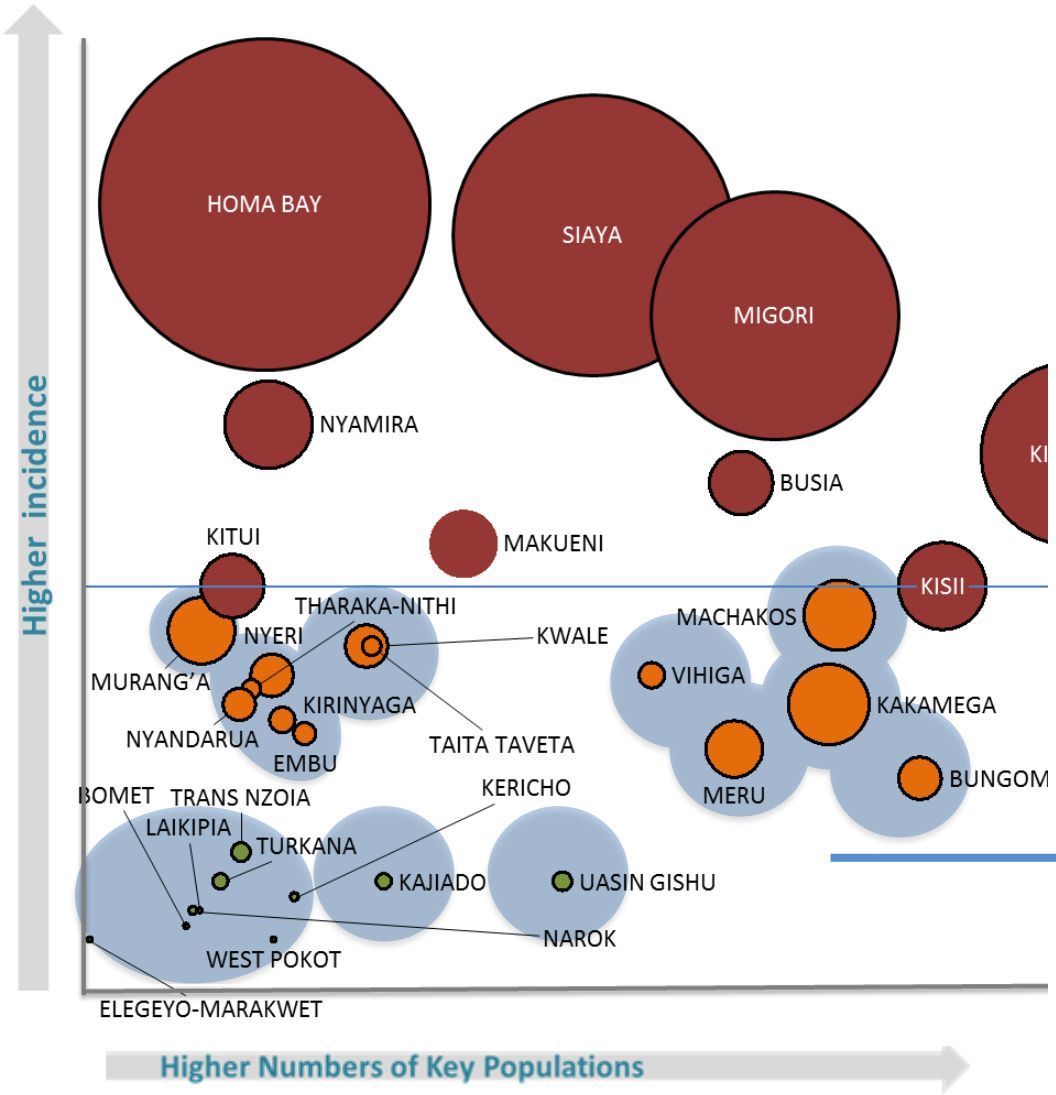
***Approach*: Tailored rollout to address localized drivers in each county, strong focus on key populations**

***Channels*: Government health facilities, HIV testing (VCT), Family Planning /SRH clinics, youth friendly centers, facilities serving key populations (i.e., DICES and NGO programs)**

- These counties represent **10%** of all new infections
- **Nairobi, Kilifi, and Nakuru** have high concentrations of PLHIV, which could signal high concentration of discordant couples
- **Tailored rollout to facilities that would best serve the target populations present in each county** (e.g., DICES, NGO programs)
- In Nairobi it could also be helpful to **target youth friendly centers and family planning / SRH clinics** that could reach AGYW and the general population

Sources: Geographic Mapping of Most at Risk Populations for HIV (MARPs) in Kenya, NASCOP; NACC 2015 Estimates Report; NACC 2016 Progress Report

The remaining medium and low incidence counties should take a limited approach to PrEP rollout



***Profile*: Low-medium incidence, low-medium numbers of key populations**

***Approach*: Limited and tailored rollout to address localized drivers in each county**

***Channels*: facilities that would best serve the key populations present in each county (e.g., DICES, NGO programs)**

- These counties represent **33%** of all new infections
- The majority of these counties would **deprioritize PrEP rollout for the general population**

- However, some counties might **prioritize facilities that could reach the populations at risk in these counties**. For example:
  - Kakamega and Machakos might prioritize **discordant couples**
  - Kakamega, Machakos, and Meru might prioritize **FSW, MSM and PWID**
  - Bungoma, Vihiga, Uasin Gishu, Kajiado Kericho, Taita Taveta, and Kwale might prioritize **FSW**
  - Meru and Machakos might also prioritize **AGYW (both counties have >750 young adult new infections)**

Sources: Geographic Mapping of Most at Risk Populations for HIV (MARPs) in Kenya, NASCOP; NACC 2015 Estimates Report; NACC 2016 Progress Report

Appendix Delivery Approach Implications

General Implications:

- **Combining incidence rates with the estimated sizes of different key populations** surfaces considerations for the most effective approach for delivering PrEP
- **This analysis is not meant to be prescriptive** but provide a framework for how delivery approach decisions could be made. Final delivery decisions will need to take into account localized and changing epidemic drivers, resource availability and county capacity / readiness to deliver PrEP (see page xx).
- This analysis will be **strengthened with impact modeling from Avenir and Imperial**

Cluster Specific Implications:

1. While all **high incidence counties (especially Homa Bay, Siaya, Migori, Kiambu, Kisumu)** should be prioritized for PrEP rollout, the delivery approach varies. Counties with lower numbers of key populations should prioritize making PrEP available to the general population (e.g., gov't health facilities), while counties with higher numbers of key populations should proactively target facilities that reach these populations (e.g., DICES) and counties with high numbers of young adult / AGYW infections should proactively target family planning and youth friendly centers
2. **Nairobi and Kilifi would benefit from a PrEP rollout to targeted populations**. Other medium incidence counties should take a more limited and tailored rollout to the facilities that reach the key populations and discordant couples present in each county.
3. **Nakuru would benefit from a PrEP rollout to targeted populations**. Other low-incidence counties should take a more limited and tailored rollout to facilities that reach the key populations and discordant couples present in each county.

Sources: Geographic Mapping of Most at Risk Populations for HIV (MARPs) in Kenya, NASCOP; NACC 2015 Estimates Report; NACC 2016 Progress Report

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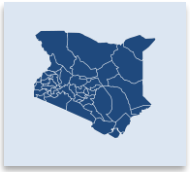


Which counties in Kenya would benefit most from access to PrEP?

Which populations would benefit most from access to PrEP and how do these populations differ by county?

What delivery approach (e.g., generalized for full population or targeted to key populations) is most appropriate for each county?

In which counties and for which populations is PrEP delivery already occurring through demonstration or pilot projects?

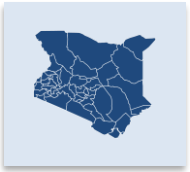
County Profile: What does the opportunity for PrEP rollout and overall readiness to deliver PrEP look like for specific counties?

Demonstration and Pilot Projects

Study	Location	Populations	Timeline	Key Aims
Anza Mapema	Kisumu	MSM	2017-2018	Research targeting MSM to see how many take up PrEP when offered
Bridge to Scale (Jilinde Project)	Nairobi, Kiambu, Machakos, Mombasa, Kilifi, Kwale, Taita Taveta, Kisumu, Kisii, and Migori	MSM, Female Sex Workers, Adolescent Girls and Young Wome 15-24	2016-2020	Scale up of PrEP roll out in real world scenarios. Project to be implemented in different delivery sites based in context and lessons drawn from other projects.
DREAMS	Homa Bay, Kisumu, Siaya, Nairobi	Adolescent Girls (<24)	2015-2017	Partnership to reduce HIV infections among AGYW; extends beyond health sector to address poverty, gender inequality, sexual violence, lack of education; PrEP implementation component included.
Global Evaluation of Microbicide Sensitivity (GEMS)	All counties where PrEP is implemented	Various	2015-2020	Project to characterize resistance risk from clinical trials and demonstration studies to understand the duration of time an infected person can be on product before is selected.
Gender-Specific Combination Prevention for Youth in Hugh Burden Settings (MP3-Youth)	Homa Bay	Adolescent Men and Women 15-24 (only enrolling adolescent female arms on PrEP)	2014-2016	A demonstration project to evaluate the feasibility and acceptance of a gender-specific combination HIV prevention package for youth in high burden settings.
IPCP Study	Nairobi, Kisimu, Homa Bay	Female Sex Workers 18 and older; MSM 18 and older; young women at high HIV risk 15-29	2014-2017	A feasibility study to assess consumer perceptions, cost, delivery options, potential barriers and opportunities for introduction and adherence completed.
Partners Demonstration Project	Kiambu, Nyeri, Nairobi, Migori, Kisumu, Siaya, Homa Bay	Sero-discordant Couples	2012-2016	Demonstration project to evaluate HIV prevention preferences of sero-discordant couples, testing PrEP adherence among HIV negative partner as “bridge “ to ARV
POWER	Kisumu	Adolescent Girls and Young Women 16-24; women 25-29	2015-2020	Project to develop cost-effective and scalable models for implementation of ARV-based prevention products for women, includes scalable microbicide and PrEP adherence support and delivery strategies.
SEARCH	Homa Bay, Migori	General population >15	2016-	Randomized community trial that quantifies the effect of providing PrEP to individuals at substantial ongoing risk of HIV infection from a community model approach

Sources: LVCT Health demonstration project mapping; Program websites; AVAC PrEPWatch demonstration project portal.

Appendix: Table of Contents



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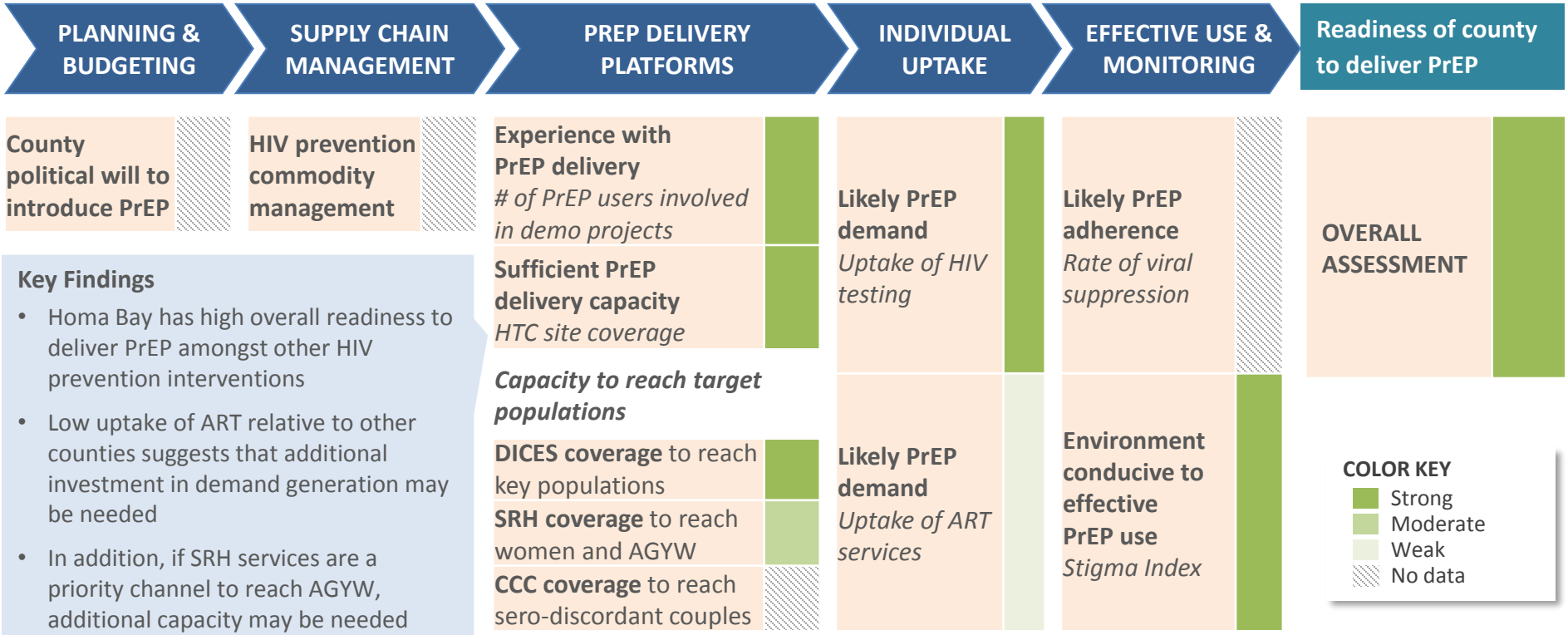
County Profile: Homa Bay

PrEP Rollout Approach

HIV Incidence	**HIGH** *(2% incidence, 9.6K annual new infections)*
County Readiness	**STRONG**
Delivery Approach	Comprehensive general population rollout

County Readiness Assessment



Key Findings

- Homa Bay has high overall readiness to deliver PrEP amongst other HIV prevention interventions
- Low uptake of ART relative to other counties suggests that additional investment in demand generation may be needed
- In addition, if SRH services are a priority channel to reach AGYW, additional capacity may be needed

Sources: Master facilities list; DHS, 2014; NACC, 2016; LVCT Health demonstration project mapping; Geographic Mapping of Most at Risk Populations for HIV (MARPs)