CQUIN 5th Annual Meeting

Virtual: November 16-19, 2021

Session 3b | Key Populations 1:

DSD for Men who have Sex with Men

Tuesday, November 16, 2021

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HIV Learning Network
The CQUIN Project for Differentiated Service Delivery

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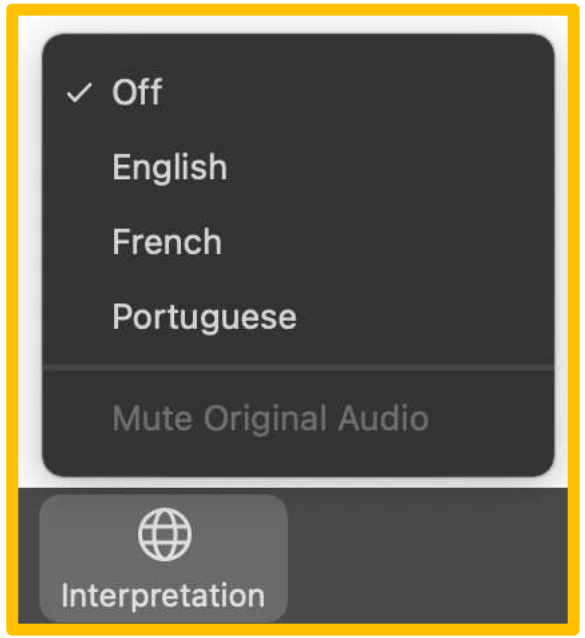

Moderators

Julie Franks
Senior Research Associate,
Clinical and Training Unit
ICAP New York

Jeffrey Walimbwa
Program Manager
ISHTAR Kenya

Panelists/Panélistes/Painelistas

Keith Sabin
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UNAIDS

Jeffrey Walimbwa
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Goma Nkhula
Livingston Wellness Center
Zambia

CQUIN 5th Annual Meeting

Virtual: November 16-19, 2021

Estimating the size of the population of men who have sex with men

Keith Sabin

UNAIDS

Strategic Information Department

16 November 2021

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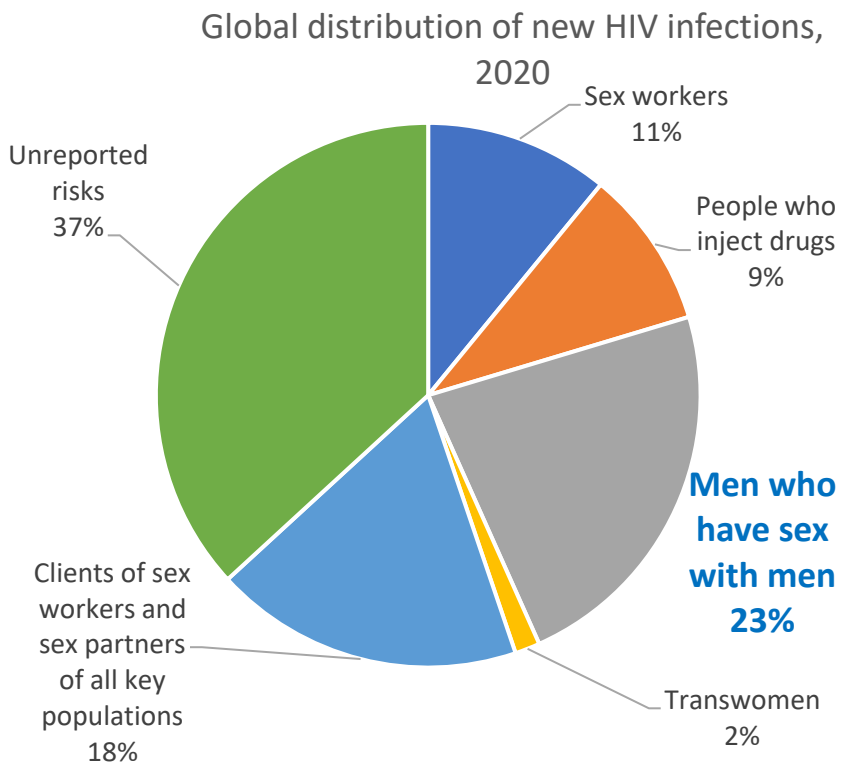
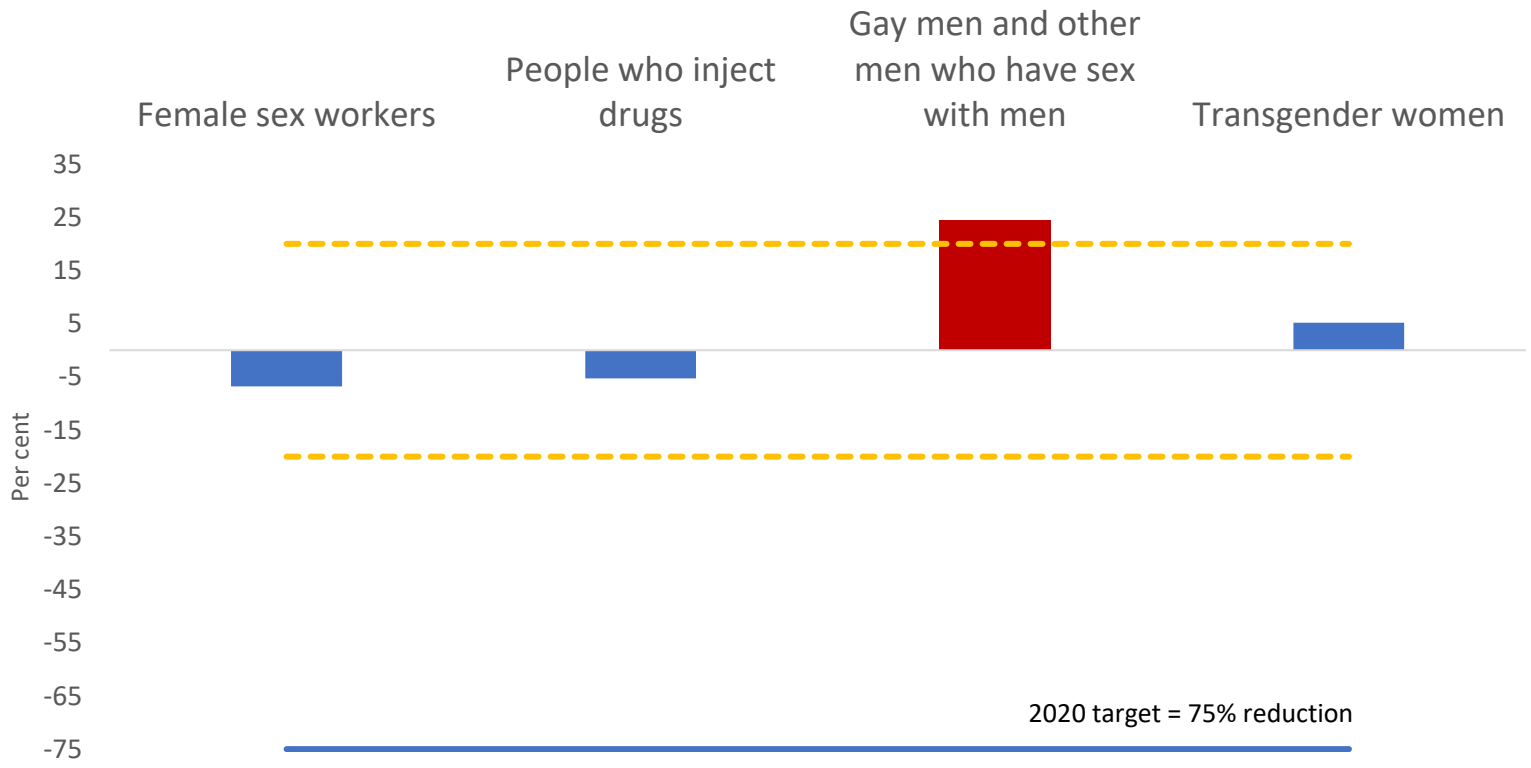
Why are population size estimates important?

- **Human Rights - right to highest level of health achievable**
  - Uncounted people are invisible and ignored
- **Epidemic response**
  - Cannot control epidemic without addressing epidemiologically key and vulnerable communities
  - Setting and measuring meaningful targets
- **HIV estimates from Spectrum**
  - New models in development will require key population data (HIV prevalence and size estimates)
    - As epidemics among wider population come under control, focus will need to shift

Persistent challenges to reduce HIV among men who have sex with men





Percent change in estimated incidence, 2010-2020, Global

UNAIDS, Special analyses 2021

Criminalization impacts size estimates

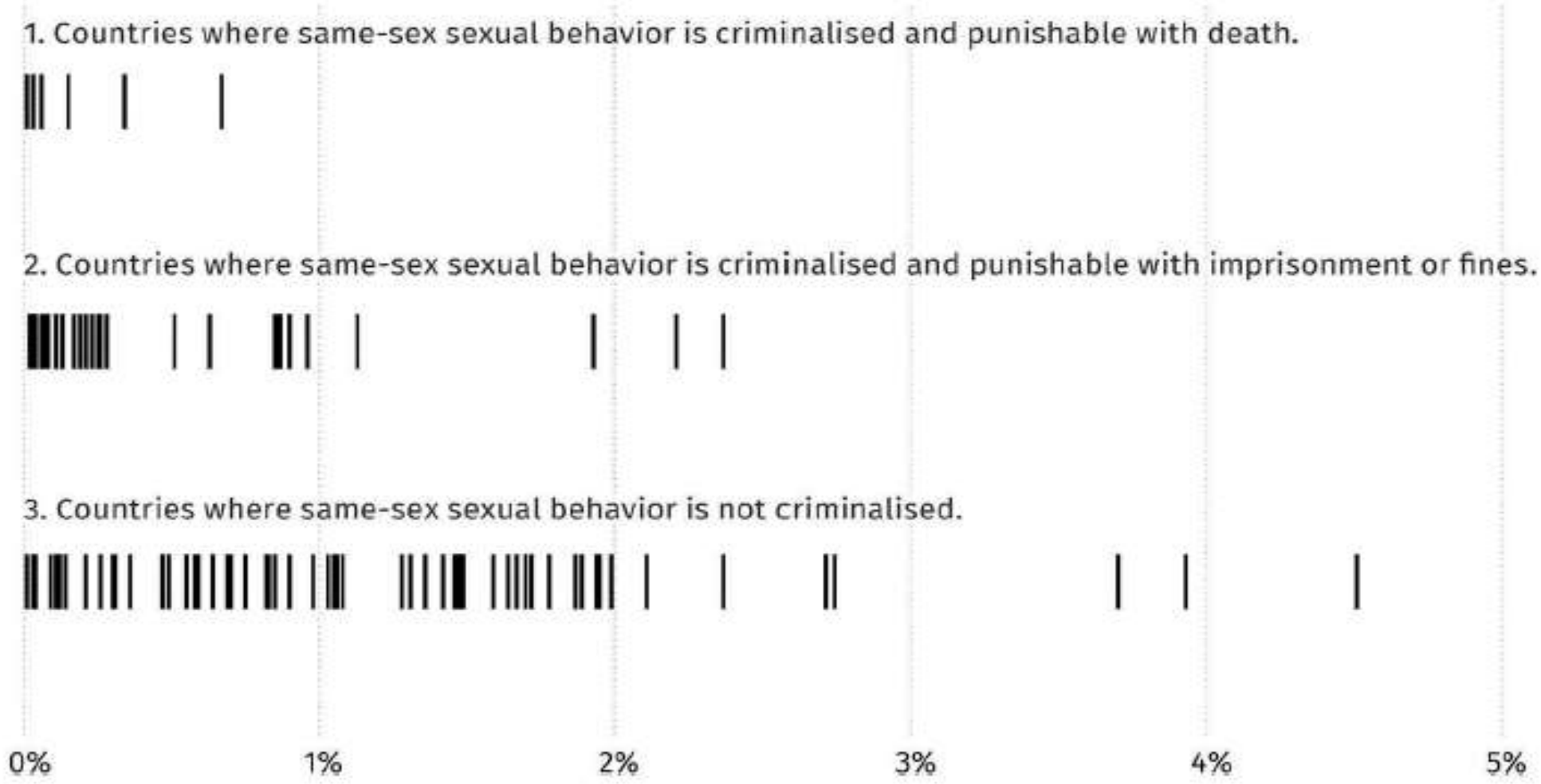


Figure 1. Relation between criminalization of same-sex sexuality and country-reported population size estimates for men who have sex with men (2007–14).

Davis SLM et al. Journal of the International AIDS Society 2017, 20:21386
http://www.jiasociety.org/index.php/jias/article/view/21386 | http://dx.doi.org/10.7448/IAS.20.1.21386

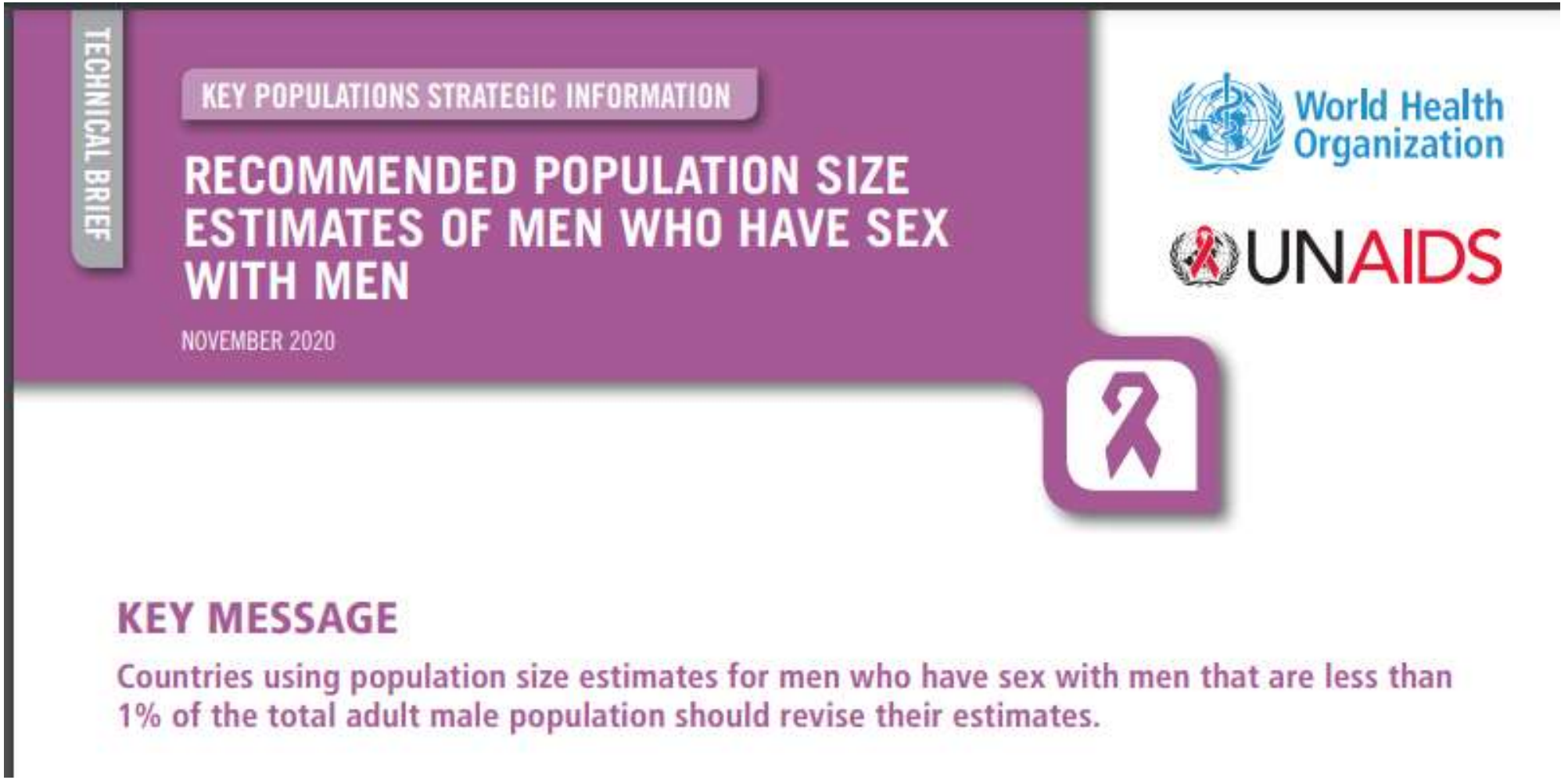
Criminalization affects coverage reporting

Table 2. Relation between laws criminalizing same-sex sexuality and country-reported HIV testing coverage of men who have sex with men (2007–14)

Country-reported HIV testing coverage among MSM	Countries where same-sex sexuality was legal	Countries where same-sex sexual behaviour was criminalized, punished with imprisonment/fines	Countries where same-sex sexual behaviour was criminalized, punished with death penalty
Less than 25·0% reported HIV testing coverage among MSM	16·3%	13·3%	66·7%
25·0–49·9% reported HIV testing coverage among MSM	54·3%	54·2%	16·7%
50·0–79·9% reported HIV testing coverage among MSM	22·8%	26·7%	16·7%
80·0% or greater reported HIV testing coverage among MSM	6·5%	17·8%	

$\chi^2(6) = 15{\cdot}904$, $p = {\cdot}014$.

Davis SLM et al. Journal of the International AIDS Society 2017, 20:21386
http://www.jiasociety.org/index.php/jias/article/view/21386 | http://dx.doi.org/10.7448/IAS.20.1.21386



WHO/UNAIDS: RECOMMENDED POPULATION SIZE ESTIMATES OF MEN WHO HAVE SEX WITH MEN
https://apps.who.int/iris/rest/bitstreams/1321427/retrieve

Guidance for setting size estimates of men who have sex with men

- Global AIDS Monitoring system collects size estimates reported by countries for men who have sex with men
- UNAIDS, WHO and Global Fund review estimates to determine their best use.
  - Most estimates are best for local use where the underlying data are collected
  - Some estimates use robust methods for extrapolation to a “national estimate.”
  - Only “national estimates” are displayed in global reports.
- “National estimates” were divided by the adult male population, aged 15-49, to give a population prevalence of men who have sex with men

Categorizations

- **Nationally adequate estimates are:**

➢ empirically-derived using one of the following methods:

1. multiplier;
2. capture-recapture;
3. mapping/enumeration;
4. network scale up method (NSUM);
5. RDS-SS.

➢ Estimates had to be national or a combination of multiple sites with a clear approach to extrapolating to a national estimate;

Correct population proportions to use?

- Nationally adequate sizes yields much higher population proportions

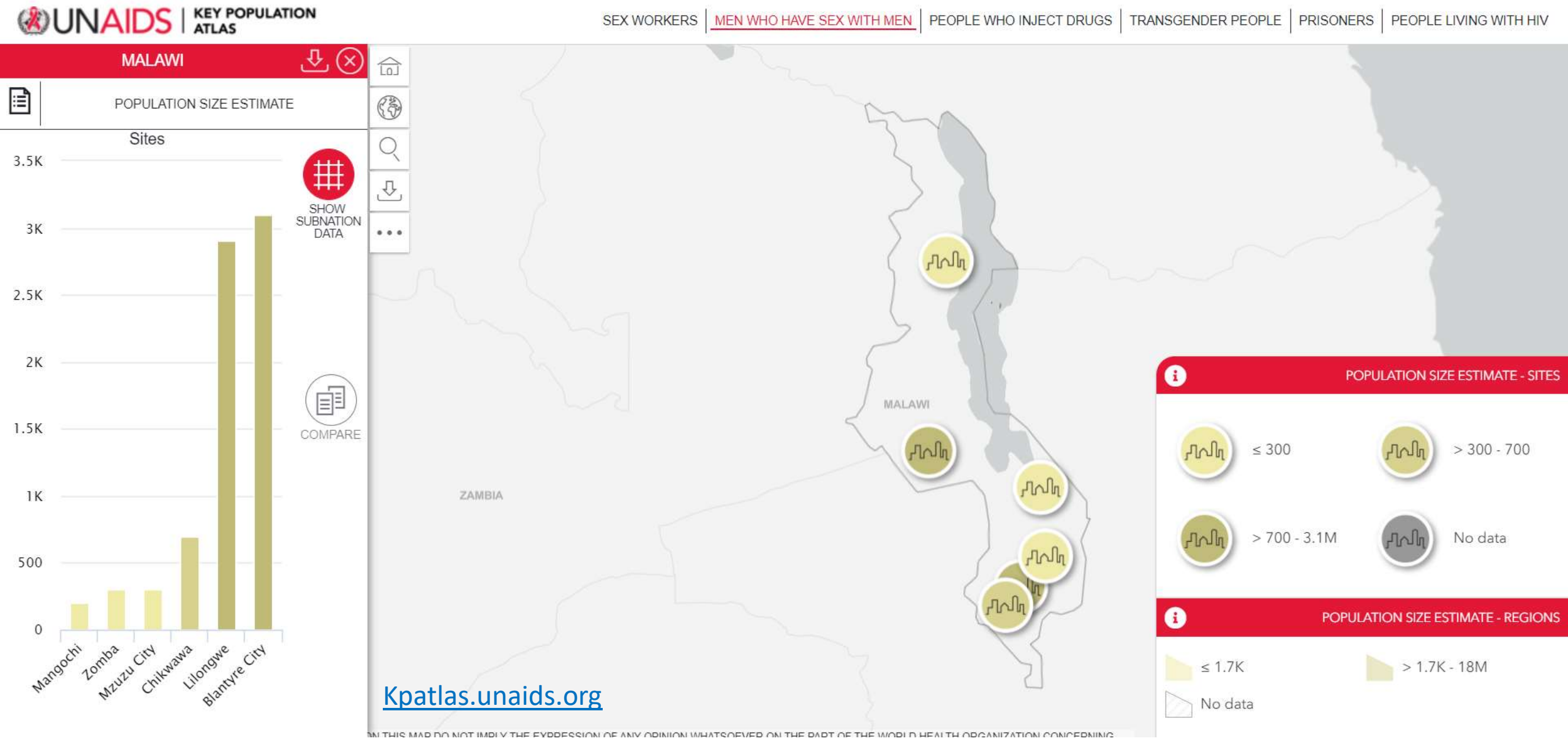
Table 1. Regional estimates for low- and middle-income countries of the proportion of the population of adult (15–49 years old) men who have sex with men using only nationally adequate estimates

Region	Number of countries	Median %	Interquartile range: 25% and 75% of the submitted estimates
Asia and the Pacific	12	1.63	0.26–3.10
Caribbean	4	5.7	0.29–0.10
Eastern and Southern Africa	2	1.45	1.9–1.9
Eastern Europe and Central Asia	6	2.11	0.9–2.68
Latin America	3	3.22	1.5–12
Middle East and North Africa	3	1.02	0.005–1.03
Western and Central Africa	8	1.44	1.0–6.27

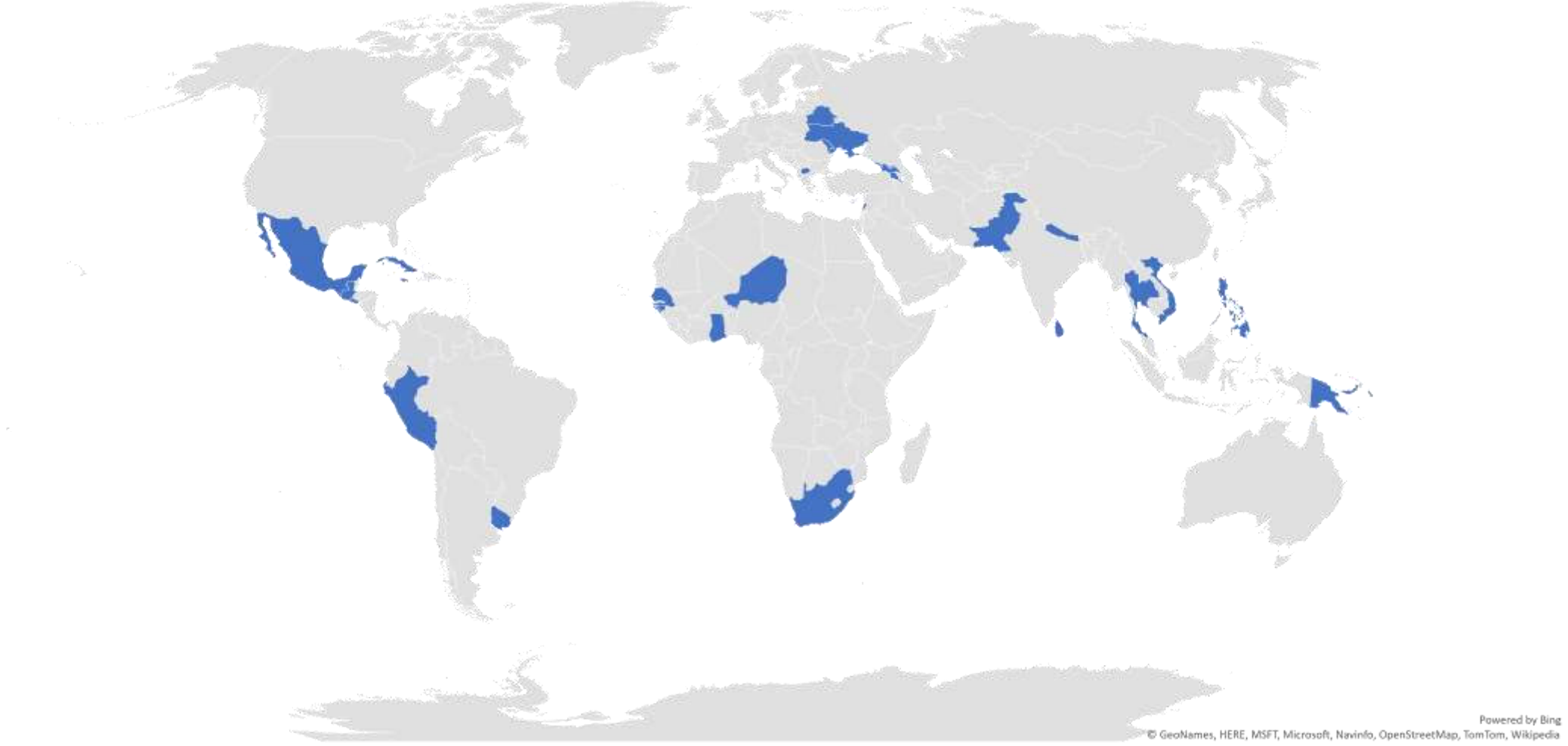
Source: AIDSInfo.unaids.org; Underlying data available in aidsinfo.unaids.org and WPP 2019.

Updated annually in the Quick Start guide: HIV Estimates Training Material – UNAIDS HIV Tools (hivtools.unaids.org)

Subnational estimates are useful locally



Nationally adequate size estimates for men who have sex with men are needed for estimates and national planning



Extrapolations to national population size estimates: methods 2010–2014

Approaches for extrapolations	FSW	MSM	PWID	Transgender women
Proportion of adult population	21	30	10	4
Based-on one selected estimate	4	2	4	
Summed up from site-specific results	8	7	4	1
Regression or models	9	13	6	4
Delphi/consensus	6	5	5	1
Total number of countries with extrapolations	58	57	29	10

doi:10.1371/journal.pone.0155150.t005

Sabin K, Zhao J, Garcia Calleja JM, Sheng Y, Arias Garcia S, et al. (2016) Availability and Quality of Size Estimations of Female Sex Workers, Men Who Have Sex with Men, People Who Inject Drugs and Transgender Women in Low- and Middle-Income Countries. PLOS ONE 11(5): e0155150. doi:10.1371/journal.pone.0155150
http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0155150

Geographic coverage of estimates with known estimation methods, 2010–2014

Geographic coverage	FSW	MSM	PWID	Transgender women
National or national representative sample	41	43	31	8
More than 50% of first subnational administrative divisions	10	6	3	1
Less than 50% of first subnational administrative divisions	10	7	3	3
Major cities	9	17	7	2
Capital city	6	8		1
Not reported	2	1	3	
Total number of countries	78	82	47	15

doi:10.1371/journal.pone.0155150.t004

Sabin K, Zhao J, Garcia Calleja JM, Sheng Y, Arias Garcia S, et al. (2016) Availability and Quality of Size Estimations of Female Sex Workers, Men Who Have Sex with Men, People Who Inject Drugs and Transgender Women in Low- and Middle-Income Countries. PLOS ONE 11(5): e0155150. doi:10.1371/journal.pone.0155150
http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0155150

Methods in estimating population size estimates, 2010–2014.

Methods	FSW	MSM	PWID	Transgender women
Multiplier	29	31	23	2
Capture re-capture	19	17	11	2
Census & enumeration	19	10	3	1
Programmatic mapping	27	23	12	9
Network scale up method or population-based survey	4	11	9	
RDS-SS successive sampling	2	3	2	
Administrative registry/programmatic results	2	1	1	1
Regional benchmark	3	7	2	1
Population-based survey	1	5	4	
Expert opinion (wisdom of crowds/literature/ Delphi/key informants)	13	10	7	2
Wisdom of crowds	6	10	3	
Not Reported	9	6	6	2
Total number of countries	87	88	53	17

doi:10.1371/journal.pone.0155150.t002

Sabin K, Zhao J, Garcia Calleja JM, Sheng Y, Arias Garcia S, et al. (2016) Availability and Quality of Size Estimations of Female Sex Workers, Men Who Have Sex with Men, People Who Inject Drugs and Transgender Women in Low- and Middle-Income Countries. PLOS ONE 11(5): e0155150. doi:10.1371/journal.pone.0155150
http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0155150

Use of social media-based size estimates?

- Only relevant to men who have sex with men
- Recent study in Kenya suggested that previous estimates undercounted by 25%
- How to incorporate with other methods/estimates?
- How to use data from multiple sources without surveys? (Avoid double counting)

Shiny Applications for Epidemiology

https://www.epiapps.com/

Consensus Estimation

- This tool assists in synthesizing multiple independent estimates of a quantity (e.g. population size or prevalence). Stakeholders may add additional information regarding the methodological quality of the studies and prior knowledge of the metric.

Launch Application

Consensus Estimate Calculator

Enter Estimates | Define Prior Beliefs | Synthesis

	Estimate	Standard Error	Design Confidence
1	10444	4396	100
2	5699	946	50
3	10315	7153	100
4	7182	5679	100
5	8900	7974	100
6			100
7			100
8			100
9			100
10			100

Estimate : An estimate from a study

Standard Error : The standard error of the estimate. Standard error can be calculated from a 95% confidence interval as (upper - lower) / (2 * 1.96).

Design Confidence : Expert confidence in the design / implementation of the study. This scales the standard error such that a value of 50 will double the standard error.

Data reference: Johnston LG, Saumtally A, Corceal S, et al. High HIV and hepatitis C prevalence amongst injecting drug users in Mauritius: Findings from a population size estimation and respondent driven sampling survey. International Journal of Drug Policy. 2011. 22(4):252-8

Multiple Source Capture Recapture

- Implements user interfaces for log-linear models, Bayesian model averaging and Bayesian Dirichlet process mixture models.

Launch Application

Video tutorial:

- https://www.youtube.com/watch?v=PgmyUnFlo5Y&feature=youtu.be

Manual:

- https://fellstat.github.io/shinyrecap/

GitHub:

- https://github.com/fellstat/shinyrecap

Capture results

Note: 77 refusals in capture 1 and 41 refusals in capture 2

Population size of FSW in Kampala

8,848

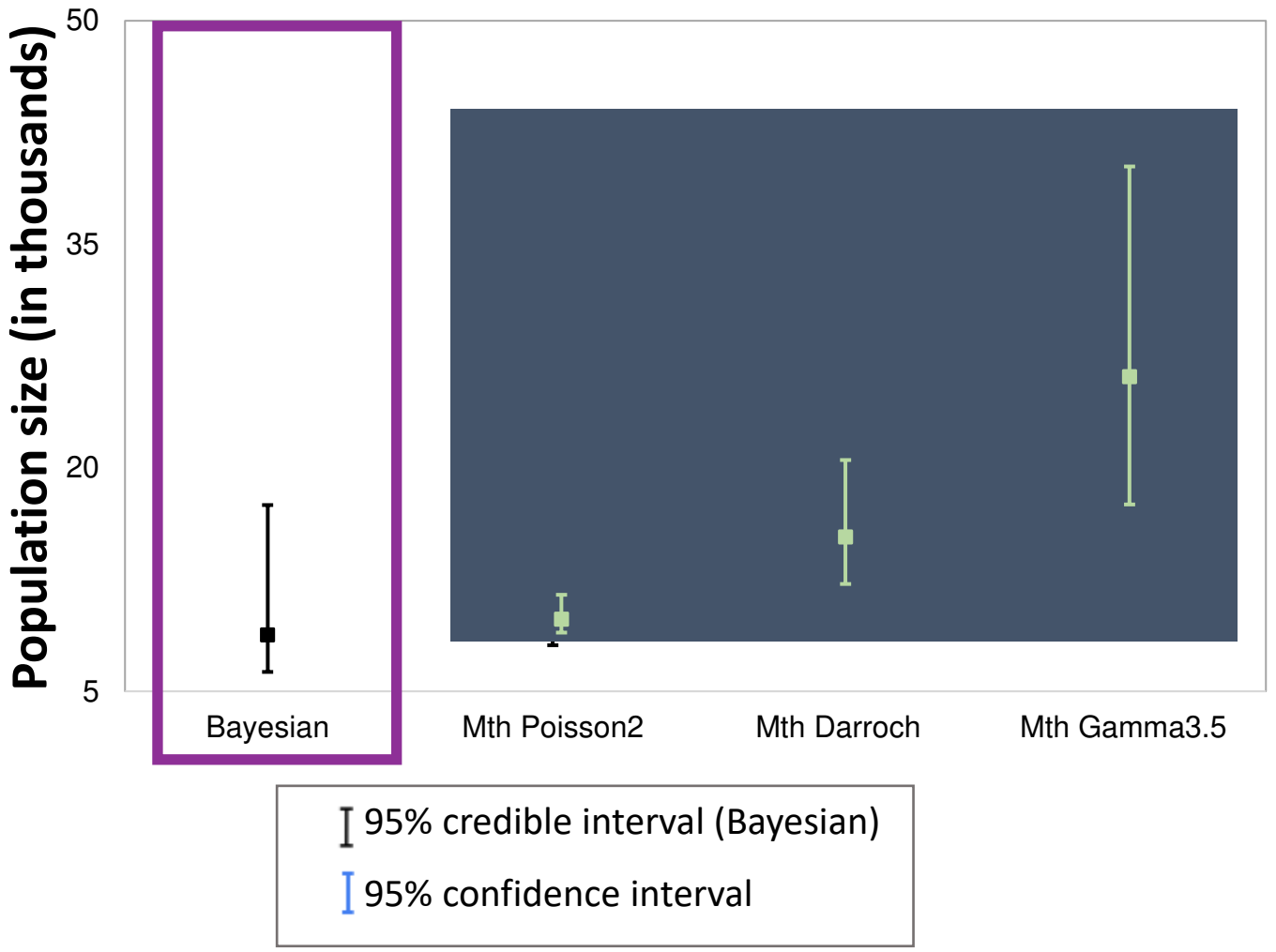
95% Credible Interval:

6,337-17,470

2.1%

of Kampala adult women

1.5-4.2%



Population Size Estimation Using Multiple Data Sources

- Implements a user interface for an algorithm for presenting a Bayesian hierarchical model for estimating the sizes of local and national populations. The model incorporates multiple commonly used data sources including mapping data, surveys, interventions, capture-recapture data, estimates or guesstimates from organizations, and expert opinion.

Launch Application

Reference: Bao, L., Raftery, A. E., & Reddy, A. (2015). Estimating the sizes of populations at risk of HIV infection from multiple data sources using a Bayesian hierarchical model. Statistics and its Interface, 8(2), 125-136.

Size Estimation Shiny App

Number of MCMC Iterations

100

Number Burn-In Iterations

1

Keep Every _th Sample

1

Upload Dataset

Browse... No file selected

Sample Posterior

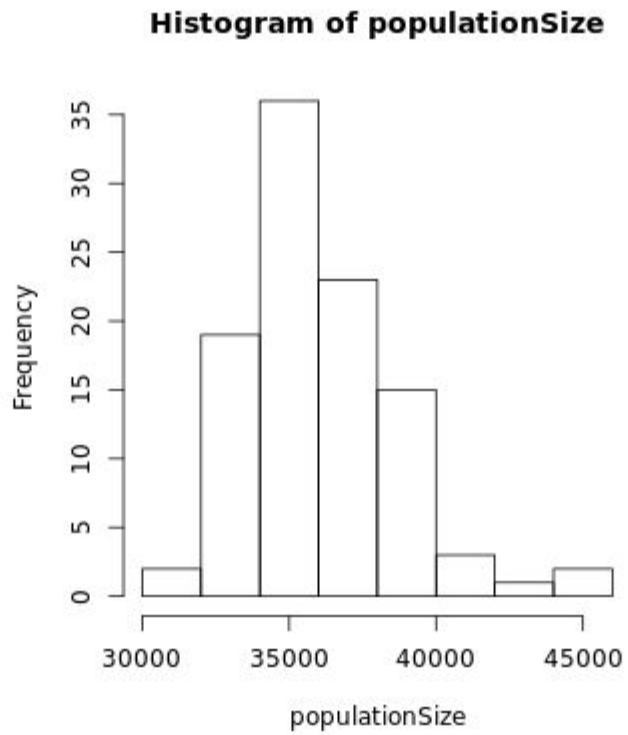
Download Data Template

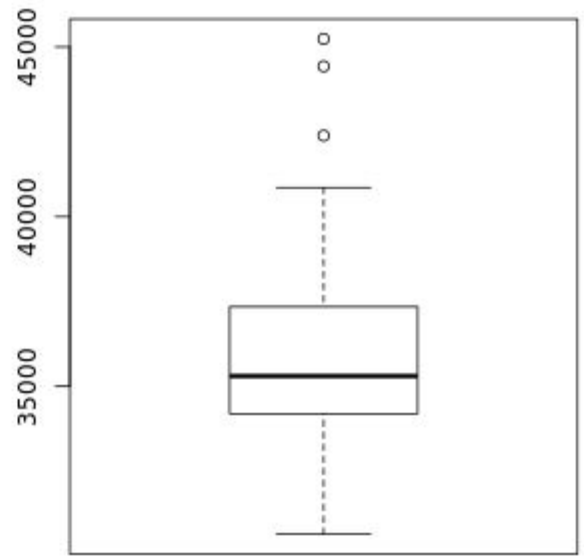
Download Posterior Sample

Plots | Tables | Help | References

Total Population Size

National estimate





Programmatic mapping?

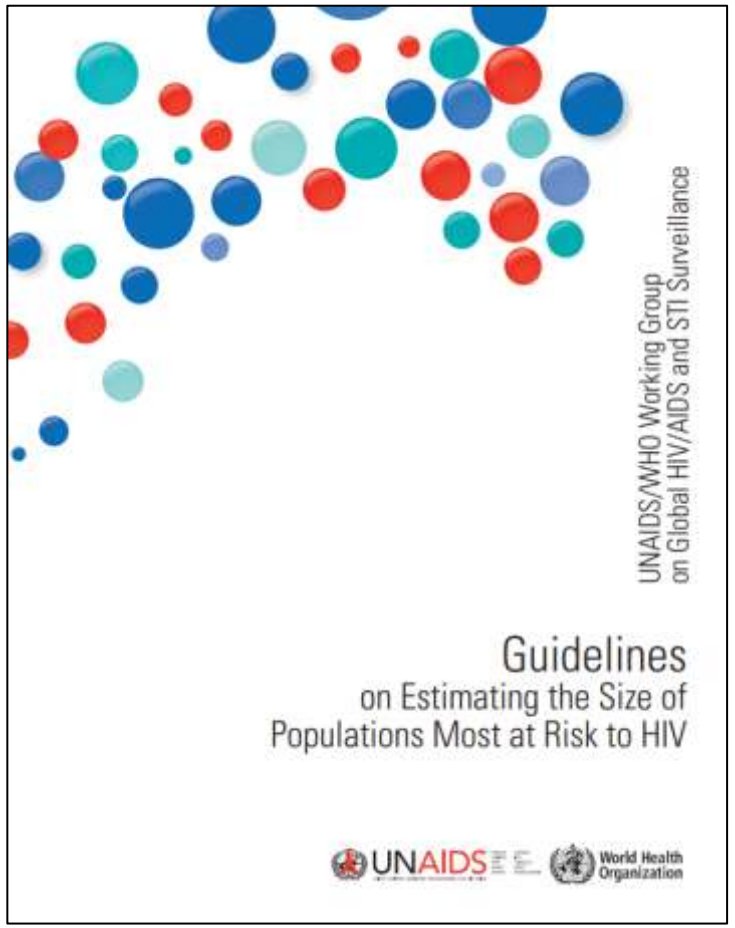
- Mapping results need to be adjusted for extrapolation

	Temeke	Mbeya	Njombe	Shinyanga	Iringa	Total
Females aged 15–49 years in 2016	528,797	761,840	181,614	382,217	241,090	2,095,558
FSW estimate adjusted for Double Counting (DC)						
Range in absolute numbers	3758; 7947	16,192; 20,463	5052; 5971	3849; 7386	8190; 8985	37,041; 50,752
% of FSWs aged 15–49 years	0.7%; 1.5%	2.1%; 2.7%	2.8%; 3.3%	1.0%; 1.9%	3.4%; 3.7%	1.8%; 2.4%
FSW estimate adjusted for DC and Frequency						
Range in absolute numbers	7598; 9512	34,965; 41,026	8270; 11,062	9832; 13678	11844; 15103	72,509; 90,381
% of FSWs aged 15–49 years	1.4%; 1.8%	4.6%; 5.4%	4.6%; 6.1%	2.6%; 3.6%	4.9%; 6.3%	3.5%; 4.3%
FSW estimate adjusted for DC, Frequency and invisibility						
Range in absolute numbers	10,124; 12,493	48,457; 54,995	12,142;17,333	20,766, 22,665	16780; 20359	108,269; 127,845
% of FSWs aged 15–49 years	1.9%; 2.4%	6.4%; 7.2%	6.7%; 9.5%	5.4%; 5.9%	7.0%; 8.4%	5.2%; 6.1%

https://doi.org/10.1371/journal.pone.0228618.t003

Guidelines are available at UNAIDS.org

- Guidelines on Estimating the Size of Populations Most at Risk to HIV (unaids.org)



CQUIN 5th Annual Meeting

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Differentiated services for MSM in Kenya
Community led research

Jeffrey Walimbwa Wambaya

ISHTAR, Kenya

16 November 2021

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HIV Learning Network
The CQUIN Project for Differentiated Service Delivery

Study Aim

To generate evidence on the HIV differentiated service delivery for MSM in Kenya.

Study Questions:

- How are HIV services on prevention, testing, treatment and care for MSM being delivered?
- What are the experiences with differentiated HIV service among MSM with men in Kenya?
- What are the facilitators and barriers to access and uptake of HIV differentiated services among MSM in Kenya?

Study Objectives

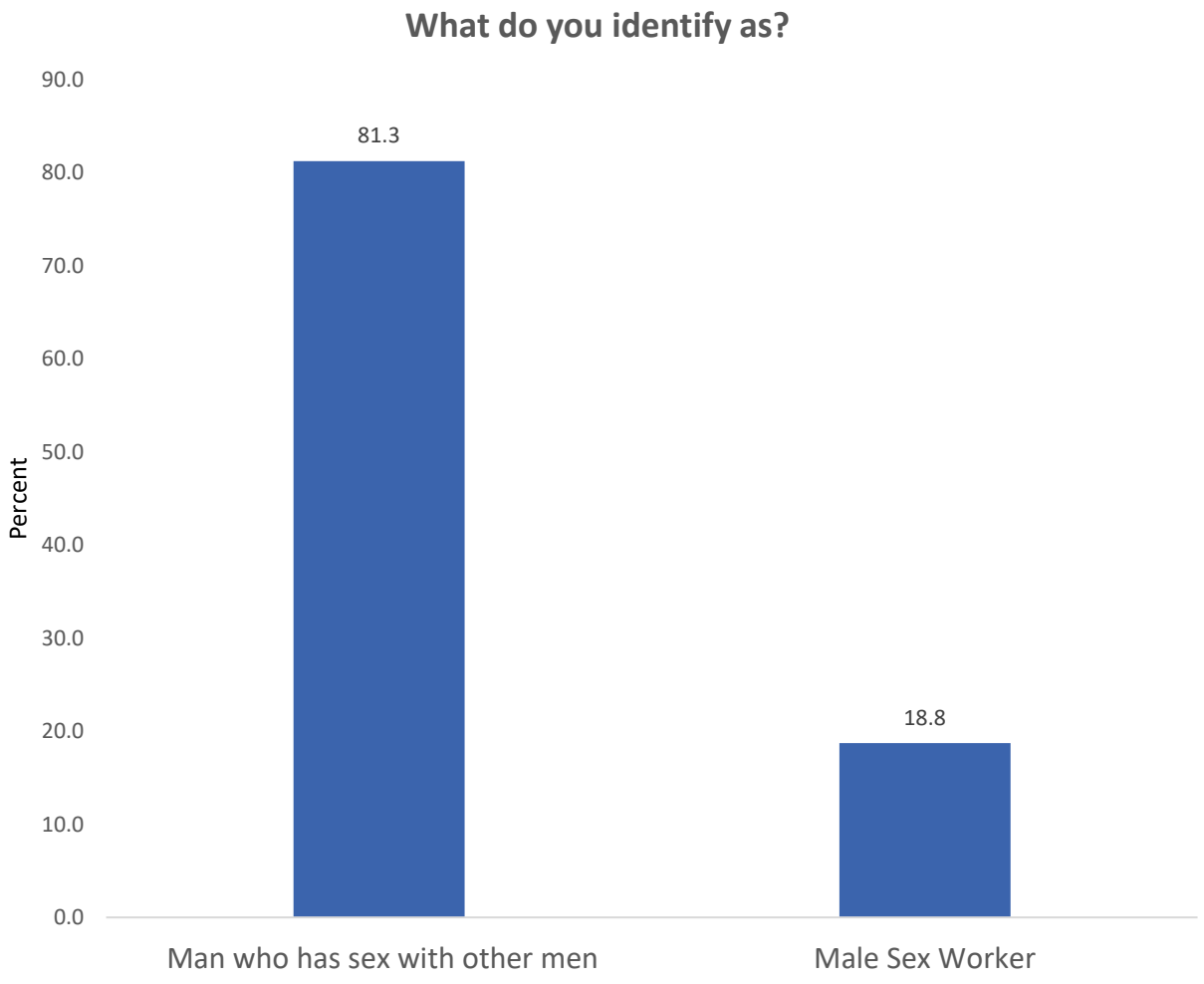
The study was guided by the following objectives;

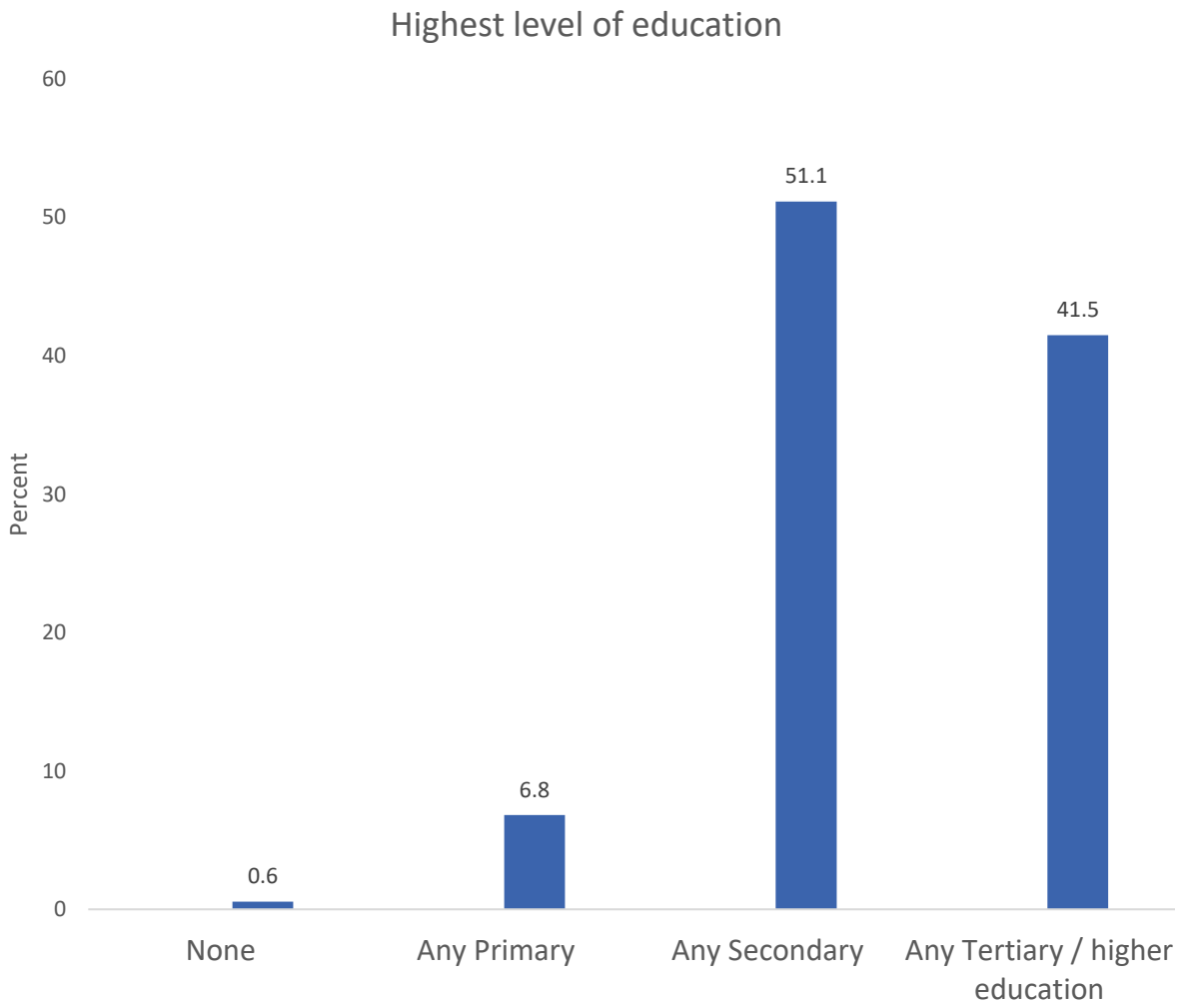
- To understand current HIV service delivery models for MSM in Kenya
- To explore MSM experiences with HIV services access and uptake within MSM and MSM facilities in Kenya.
- To explore opportunities and barriers for HIV differentiated services delivery among MSM in Kenya.

Methodology

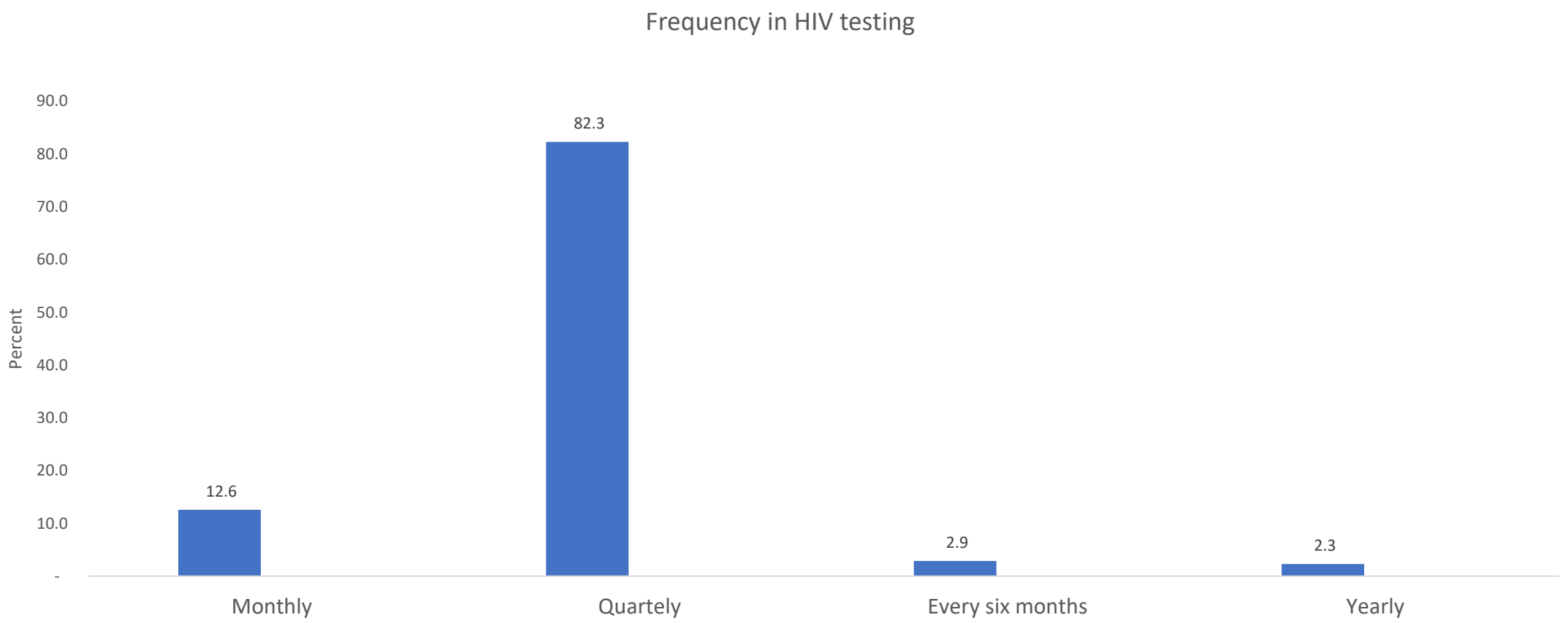
- Cross-sectional Mixed Methods study
- 3 Counties in Kenya- Kisumu Nairobi and Mombasa
- Sampled 332 MSM accessing DSD services
- 156 on ART and 173 on PrEP
- Cites and Clinics
- HAPA Kenya, ISHTAR, HOYMAS & MAYGO

Demographic characteristics

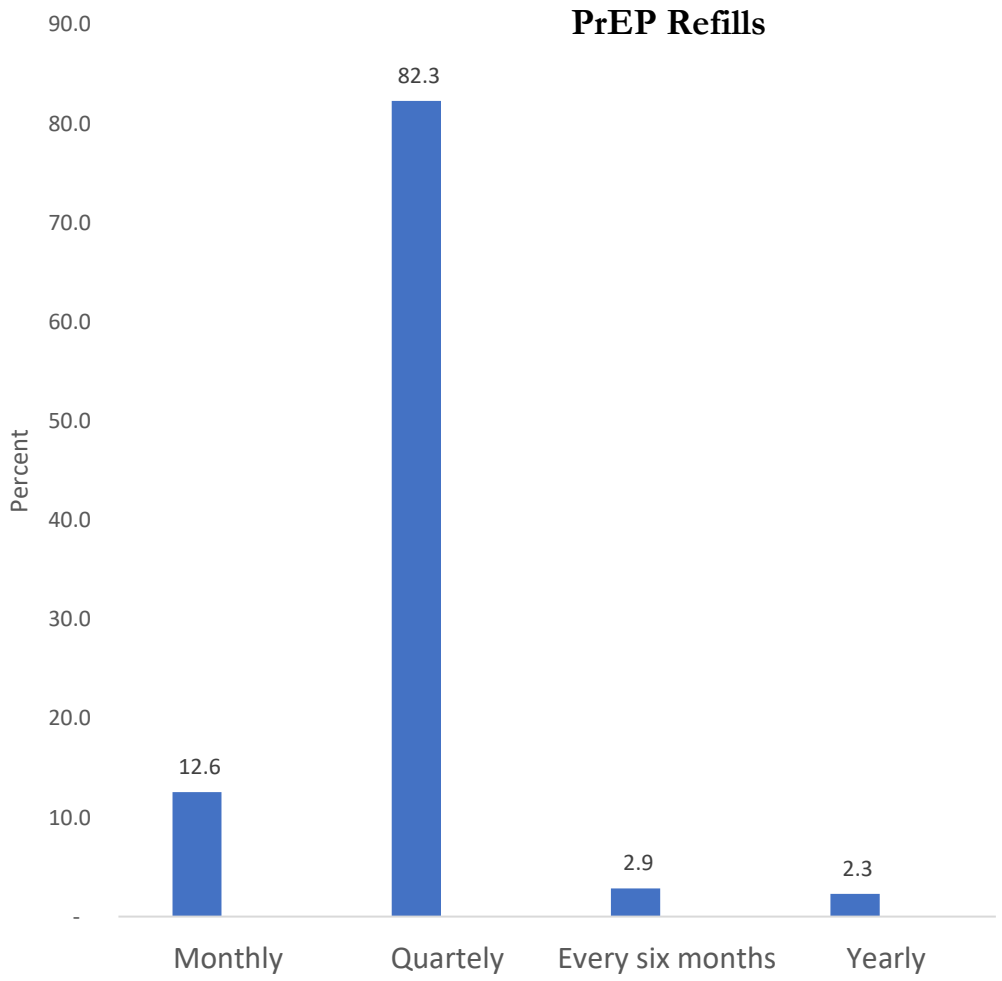


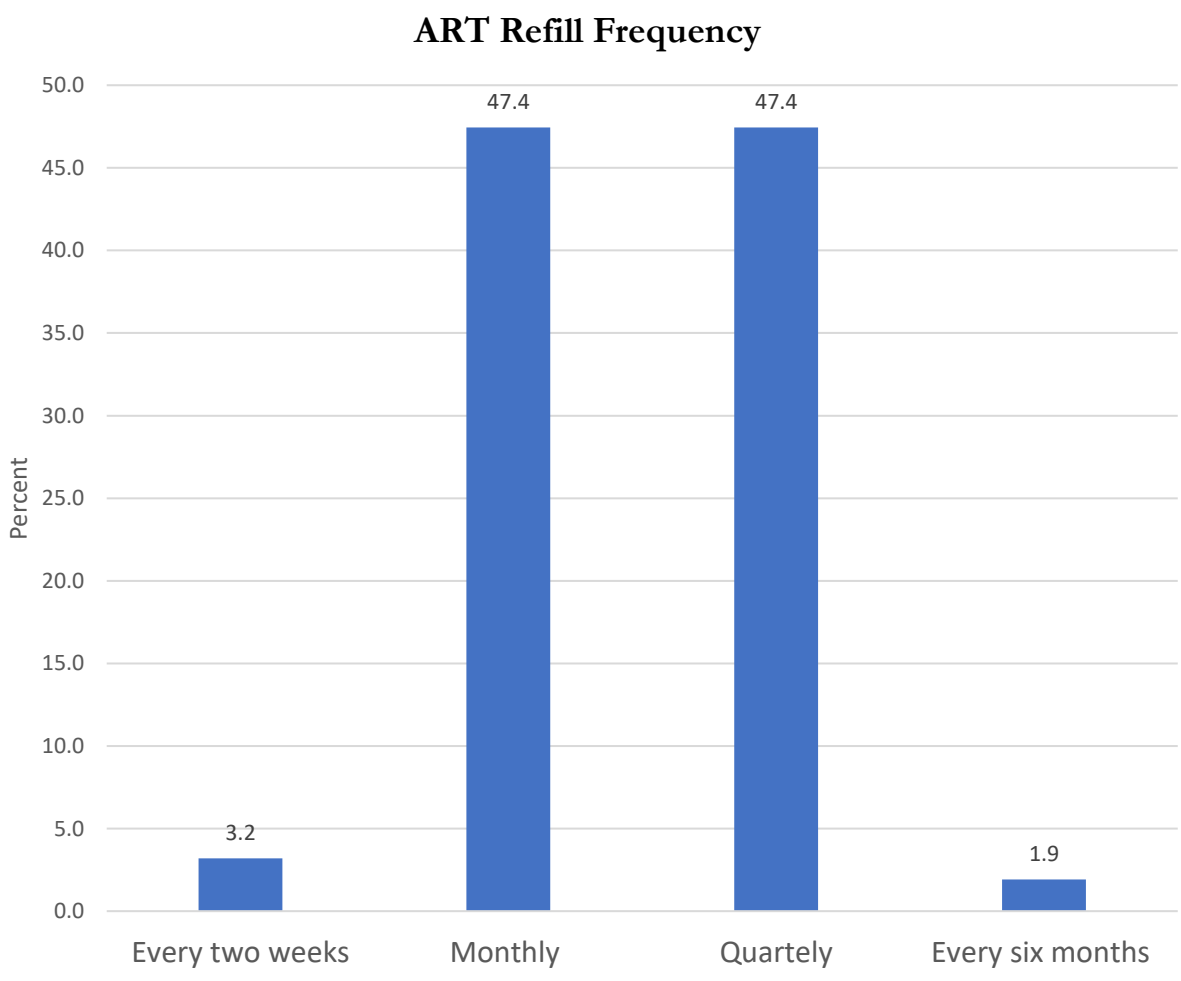


Frequency in HIV Testing

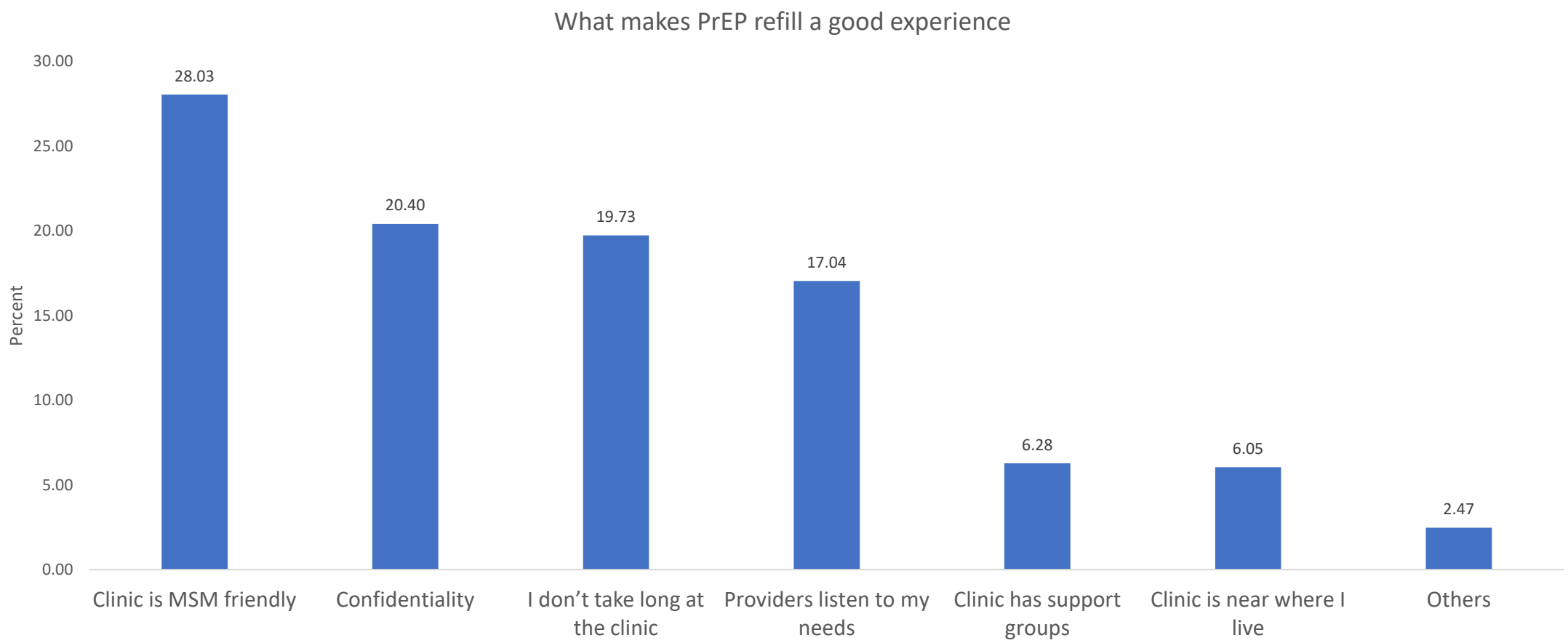


Refills for both ART and PrEP

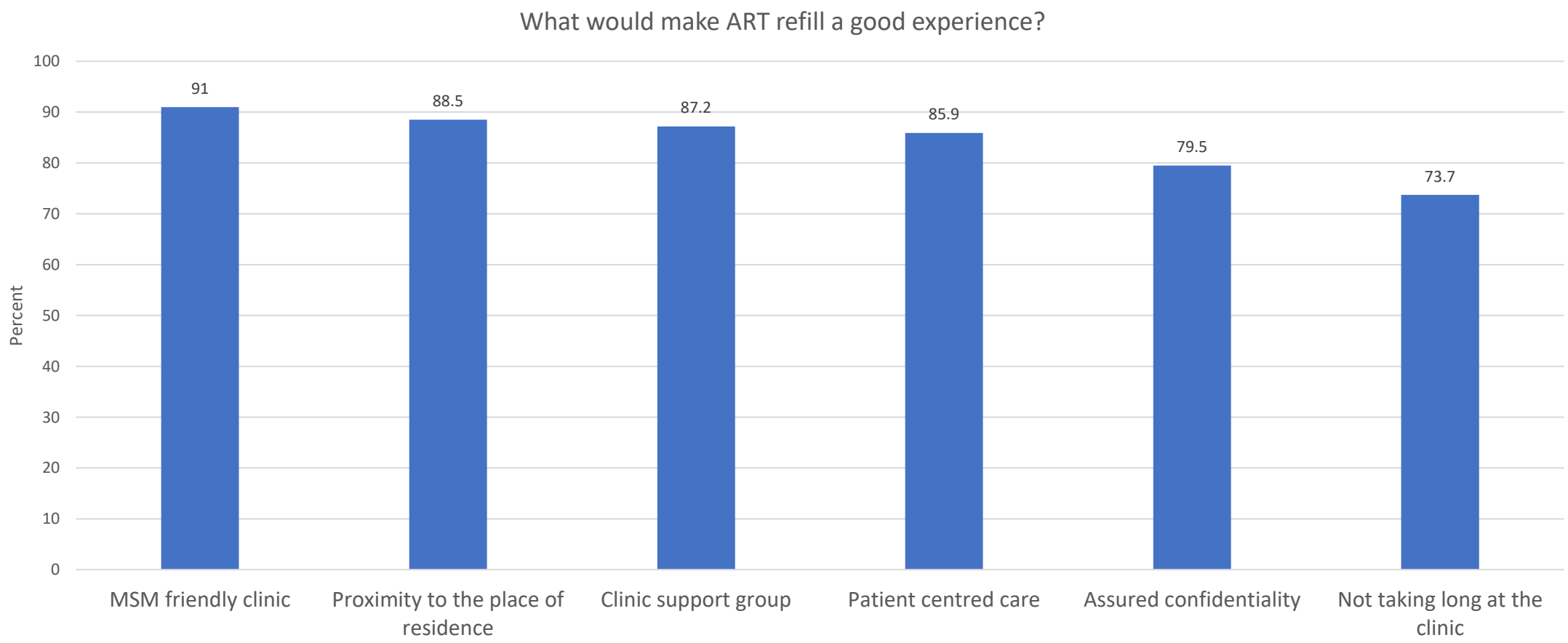




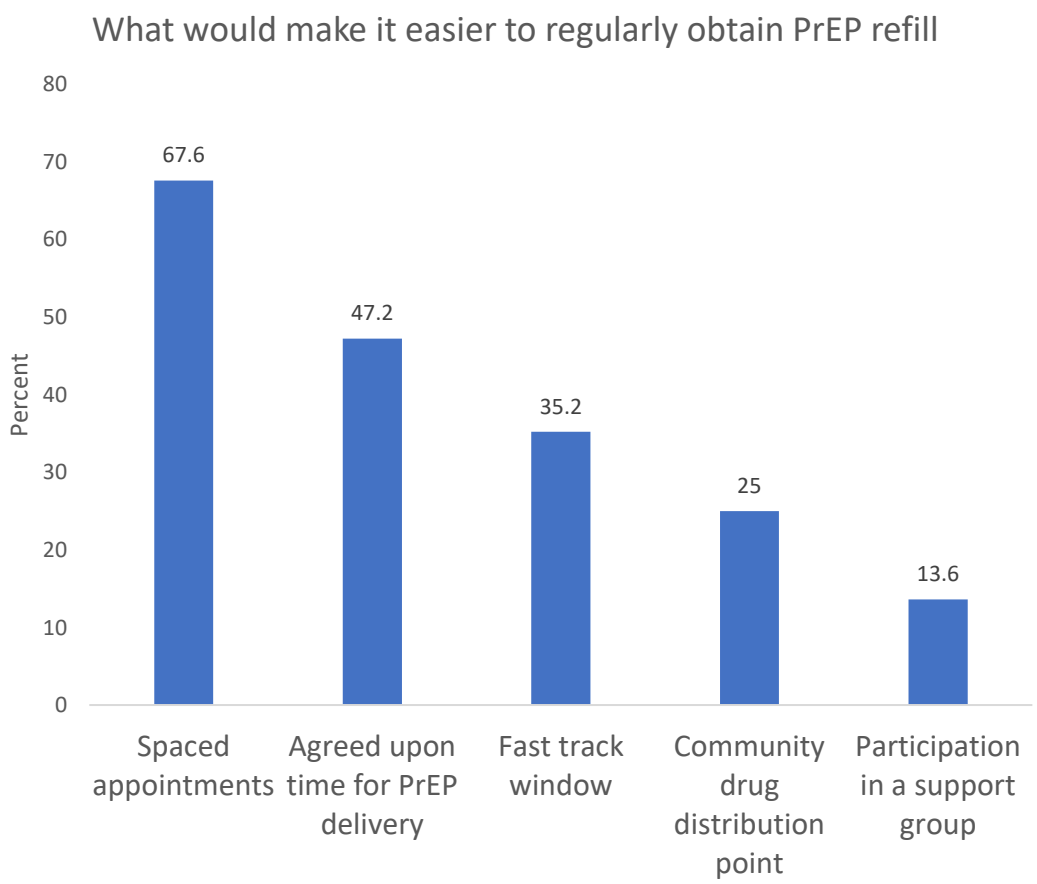
PrEP refill experience

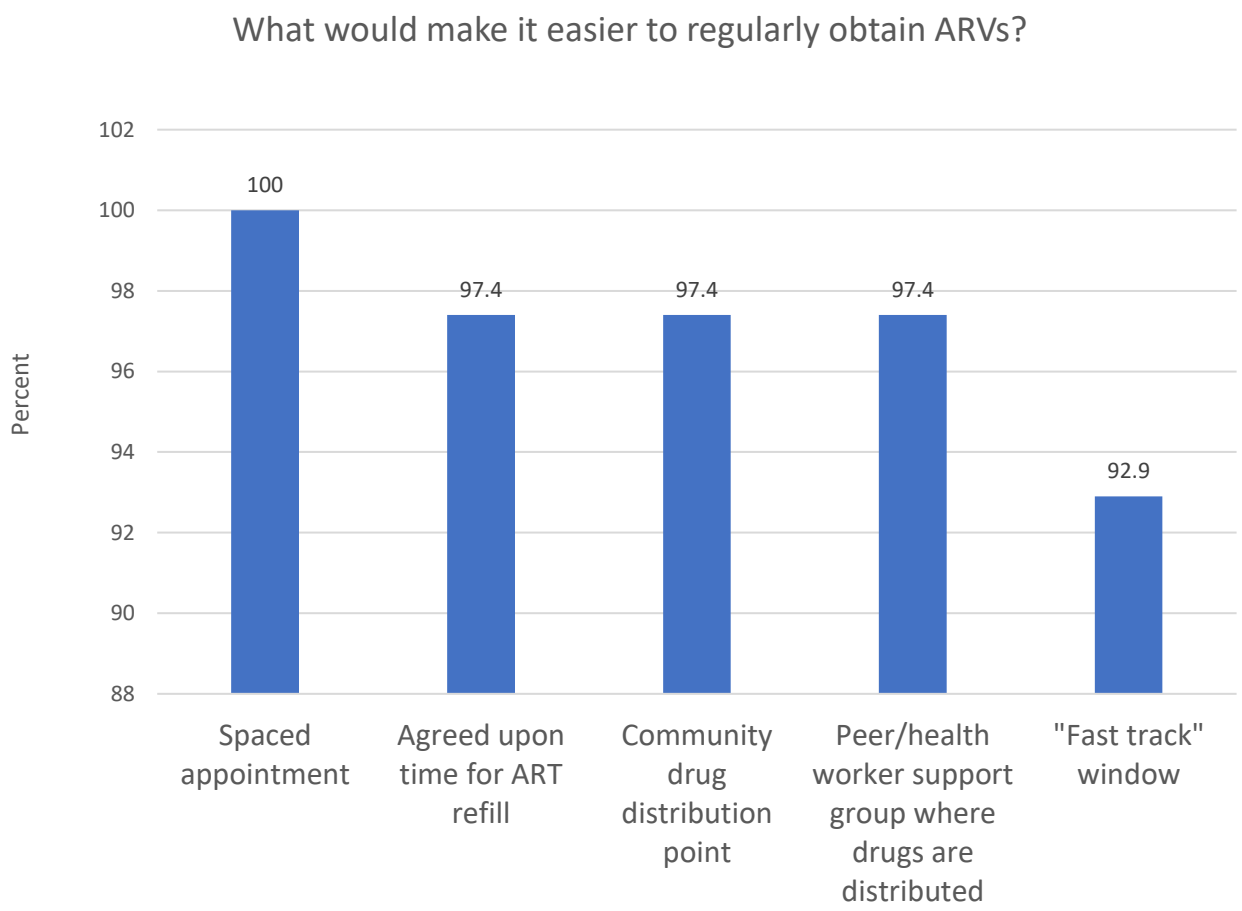


What would make ART refill a good experience



What would make it easier to regularly obtain PrEP & ART refill





Missed appointments

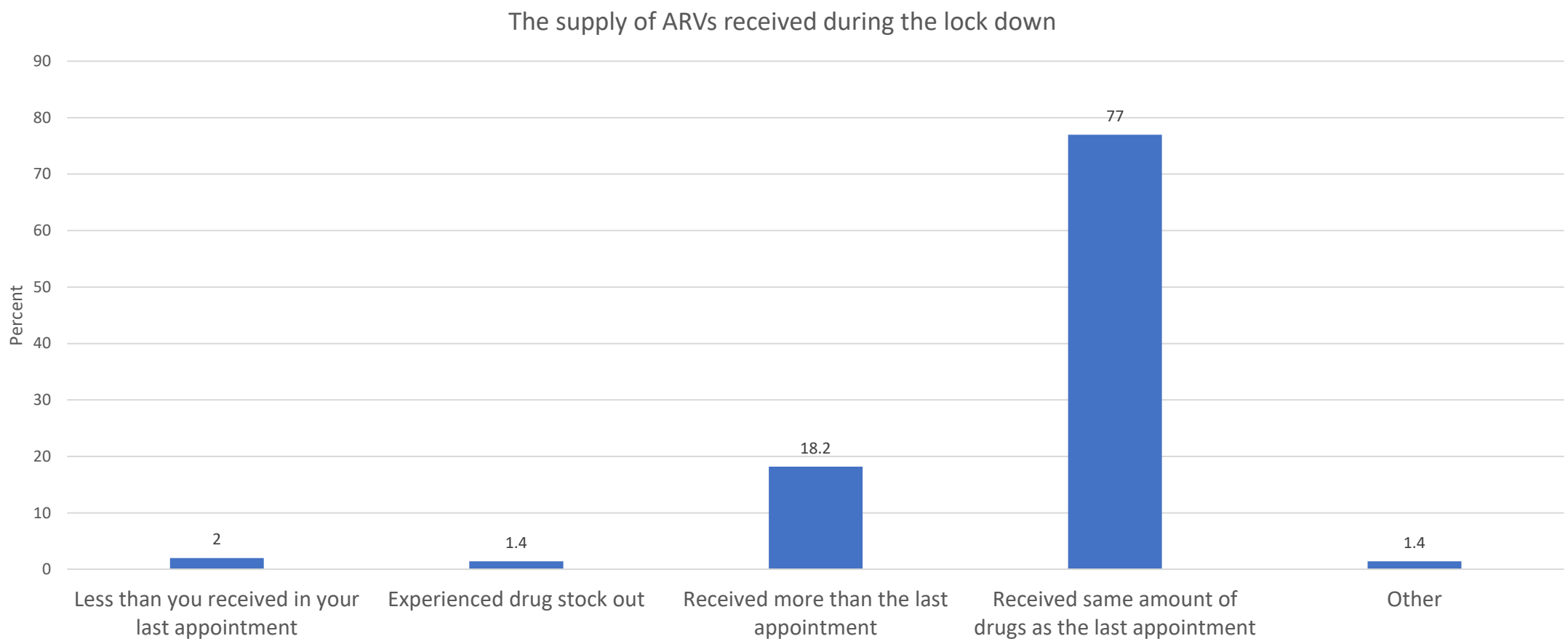
ART

Characteristics	Frequency	Percent
Missed appointment (n=154)		
Never	122	79.2
1-3 times	29	18.8
More than 3 times	3	1.9
Reasons for missed appointment		
Lack of transport	11	32.4
Unwell/family member unwell	6	17.6
Forgot	5	14.7
Didn't have time	5	14.7
Could not take day off work	3	8.8
Others	4	11.8
Total	34	100.0

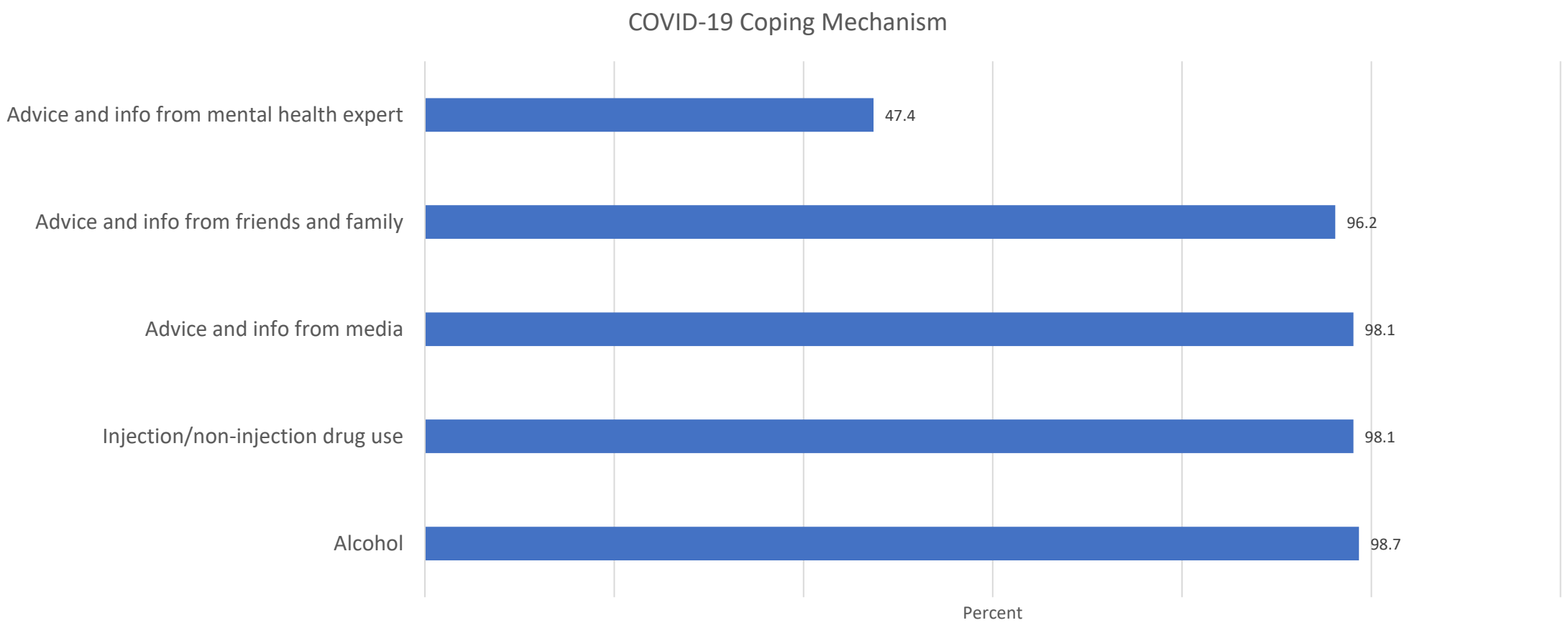
PrEP

Characteristics	Frequency	Percent
Missed appointment (n=171)		
Never	105	61.4
1-3 times	57	33.3
More than 3 times	9	5.3
Reasons for missed appointment (n=89)		
Lack of transport	29	32.58
Had travelled	16	17.98
Forgot	13	14.61
Didn't have time	11	12.36
Could not take day off work	9	10.11
Unwell/family member unwell	6	6.74
Others	5	5.62

Experiences during COVID-19



COVID-19 Coping Mechanism



Quotes

"*I have a…before I enrolled at the current clinic where I was accessing services at a certain public hospital. All I can say that the challenge I had most was waiting so much on the queue or when you book an appointment, you still find the clinician you booked is not around, he went away. So you have to reschedule your appointment or you will have to wait for someone else to come and serve you*. **DNHIM 004** (a recipient of care)

Quotes

They should be able to deliver the best services to the MSM. First, there needs to be a lot of sensitization of healthcare workers especially those in government facilities. I know most of the KP programs, where we have stand-alone or drop-in centers, there is a lot of work that has been done in terms of building their capacity. Some workers will also go on to build the capacity of other healthcare workers but it needs to be strengthened to be able to provide services to the MSM. Also, looking into sustainability because right now, we are moving into being self-reliance. We also understand that donor funding is dwindling so we need to ensure that there is more of integration, in terms of other government facilities providing services to MSM so that when the MSM goes to a government facility, they are able to access condoms, lubricants and anal examination amongst others. **DKIC001** (Program)

Quotes

Because follow up especially for PrEP, for HIV, its easy. We do viral load. But for PrEP it's not easy. So when we do differentiated services for PrEP, it will be easier because at least someone from the community and the fellow peer who will support them who is initiated for PrEP. **DMIP 004** (Clinical team)

Conclusions and Recommendations

- Psychosocial support
- Peer engagement
- Integration of sexual and reproductive health services
- Health provider sensitization and training on delivering GBMSM-friendly services
- Transport and incentives to improve uptake of services

Conclusion

- Scaling up DSD will require engagement and coordination by the ministry of health, with strategic input from GBMSM communities, and strong partnerships with programme implementers also a coordinated effort from donors/ Funders
- Strengthen partnerships, linkages and referrals between health facilities and community structures such as community-based organizations (DICs) for continuity of care and programme sustainability
- Build the capacity of health providers, providing ongoing training and sensitization on DSD, GBMSM-friendly health services and psychosocial support
- We need to innovate and support incentives (transport) for people on ART and PrEP for retention and follow-up

Acknowledgement

- IAS- Support community Consultation in 2019
- ICAP- for the opportunity to learn and engage in DSD convenings
- NASCOP- For their support and leadership
- GBMSM HIV prevention Kenya- for partnerships and implementation of the research
- Ishtar- for hosting and leading the study

CQUIN 5th Annual Meeting

Virtual: November 16-19, 2021

Targeting MSM through virtual interventions in Zambia

Goma Nkula

Site Coordinator

USAID Open Doors project

16 November 2021

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HIV Learning Network

The CQUIN Project for Differentiated Service Delivery

Project Overview

- 5-year USAID/PEPFAR funded project
- May 17, 2016 – December 31, 2022
- Prime: FHI 360
- Implementing partners: 7 Community Resource Partners,
- Collaborating partners: Ministry of Health, National AIDS Council

Target audience

- Female Sex Workers (FSW)
- Men who have Sex with Men (MSM)
- Transgender persons (TG)

Geographic coverage

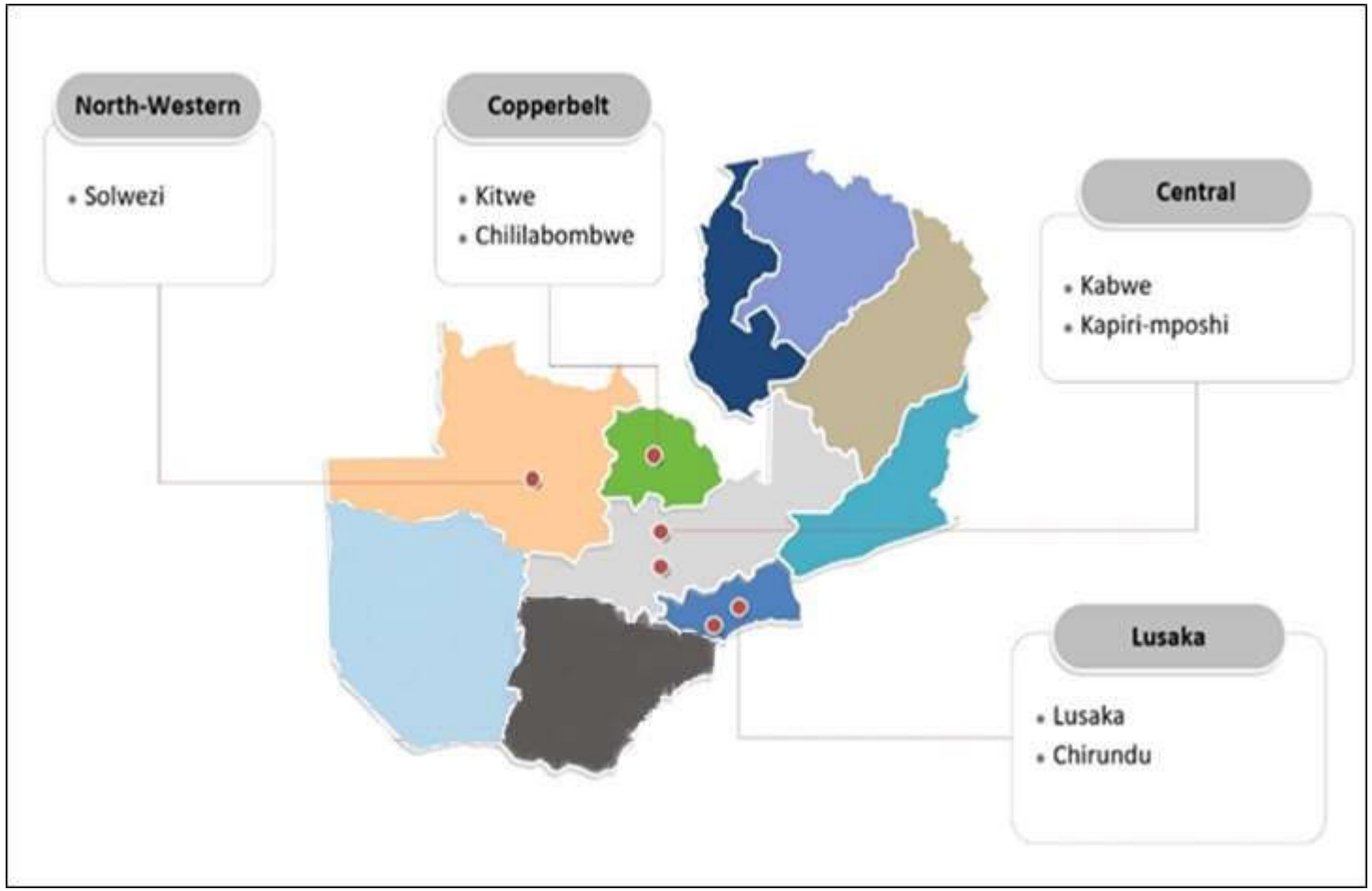
4 provinces and 7 districts

Lusaka: Lusaka and Chirundu

Central: Kabwe & Kapirimposhi

Copperbelt: Kitwe & Chililabombwe

Northwestern: Solwezi



Project Goal and Objectives

Goal

Increase access to and use of comprehensive HIV prevention, care, and treatment services by key populations (KPs)

Objectives

- Identify and address the key determinants of risky behavior among KPs in Zambia, particularly in the targeted areas.
- Increase the availability of high-impact HIV and other health services for KPs.
- Strengthen the capacity of local stakeholders to plan, monitor, evaluate and assure the quality of interventions for key populations.

Minimum Package of Services for KPs

- HIV testing and counseling services
- Peer education, SBCC & sensitization
- Condom & lubricant promotion and distribution
- STI screening & treatment
- Reproductive health, including family planning integration
- Screening for cervical cancer
- Voluntary medical male circumcision
- GBV/IPV screening & support
- Referral to other social services & skills education
- Pre- and post-exposure prophylaxis
- Emergency contraception
- Referral to continuum of care-ART, VL
- Alcohol abuse counselling and mental health services
- Economic strengthening & GSLA activities

Minimum package of interventions

- **Regular SNS meetings**

✓The Social Network Strategy (SNS) uses KP peer leaders to reach potential clients as seeds in their networks. The Seeds then invite peers within their networks to attend SNS meetings that are held either at the Project Wellness center or a community safe space. Meetings often cover: benefits of HIV testing, PrEP demand creation, STIs screening and treatment, and using Community Adherence Groups (CAG)

✓SNS meetings are led by peer promoters and lay counselors that provide behavior change communication and HIV testing services

✓SNS meetings have been instrumental in identifying hard-to-reach high risk MSMs that cannot be reached through traditional modalities, such as hotspot-based outreach

Minimum package of interventions

- **<u>Weekend MSM clinics</u>**

✓These clinics are specifically targeted towards MSMs that the project is unable to reach during the weekdays. These clinics are mobile and set in selected community safe spaces or project wellness centers.

✓Allows for comprehensive service delivery the clinics are comprised of peer promoters, counselors and healthcare providers (all of whom have been trained in KP sensitivity by the project).

✓ The safe spaces used are either client homes, peer promoter homes or safe spaces of the client's choice.

- **Use of MSM seeds and trusted key informants to identify and invite hard to reach/most at risk MSM.**

Minimum package of interventions

- **Creation of various MSM only champion groups for project services such as PrEP uptake and VL suppression.**

✓ These groups are spearheaded by project clients that have consistently been on PrEP or those that currently on ART and have their viral load suppressed

✓ The members of the groups are either selected by project staff or existing champions themselves can recommend peers that are high risk or hard to reach.

✓Whatsapp groups are created for groups with members that have smartphones.

✓ The groups generally meet through weekend clinics, SNS meetings and social interaction meetings held by Project at the wellness center. This encourages clients to come with 1-2 partners to access information and services.

- **These groups create a snowball effect where other MSM with similar behaviors and experiences are motivated to take up project services.**

Minimum package of interventions

- **Project services demand creation through social media platforms such as Whatsapp, GRINDR, and Facebook.**

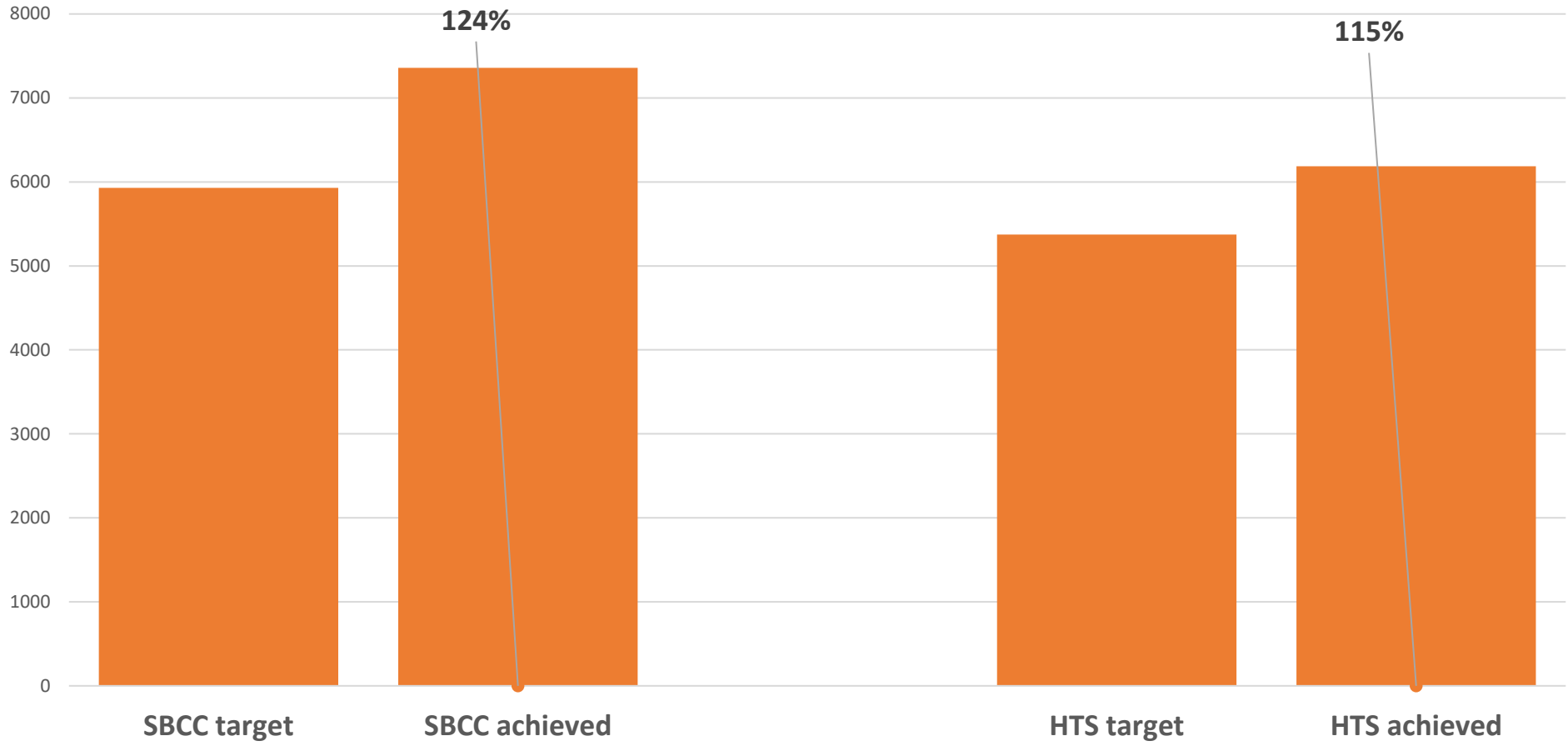
✓ Project peer promoters are selected from among the target key populations.

✓ Since the project does not have official social media pages, MSM peer promoters use their personal accountants to interact and mobilize and promote QuickRes among their MSM peers on these platforms.

✓ They are able to set up appointments to meet in person where comprehensive behavior change messages are shared with clients, including referrals for HTS and other project services.

- **Escorted referrals to public facilities for clients to easily access services.**

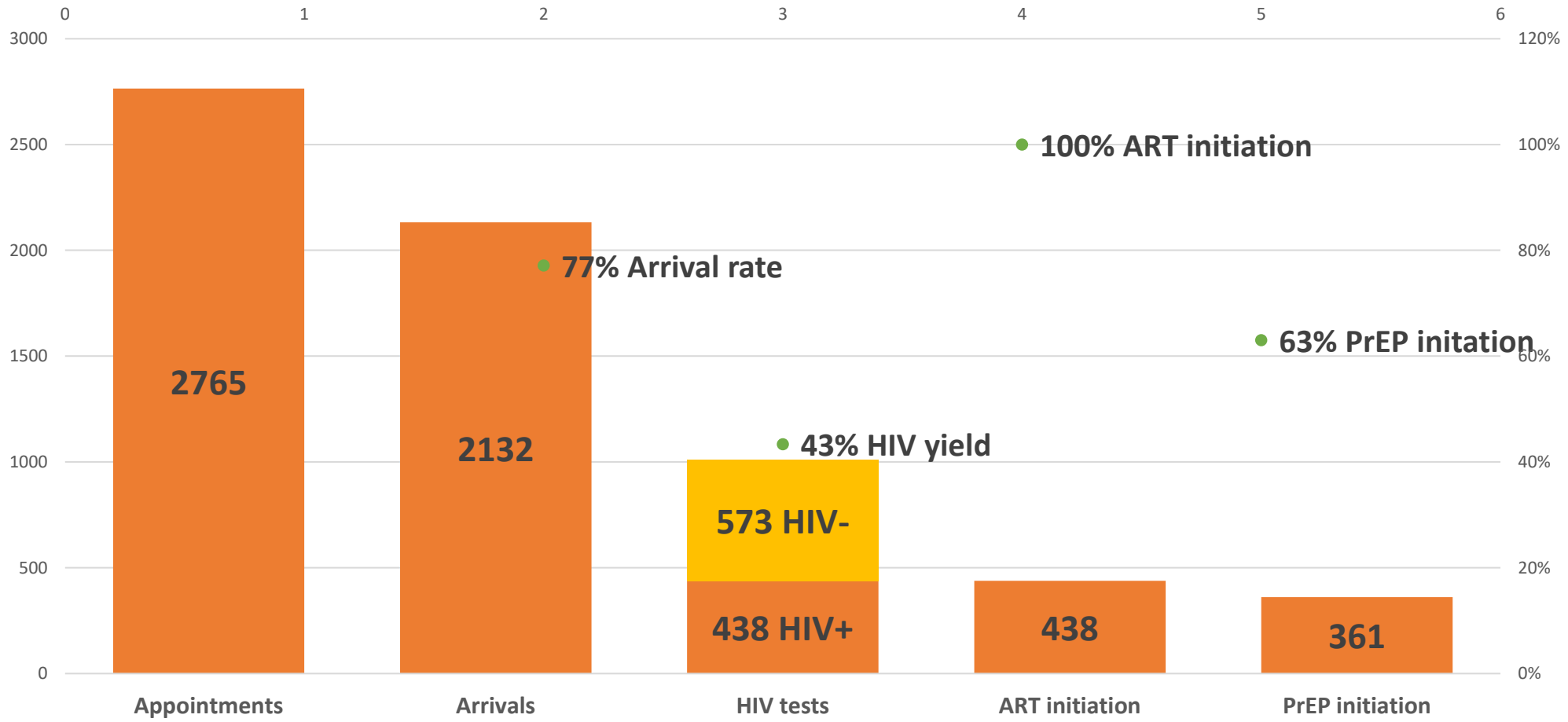
Project-wide MSM performance October 2020 – September 2021



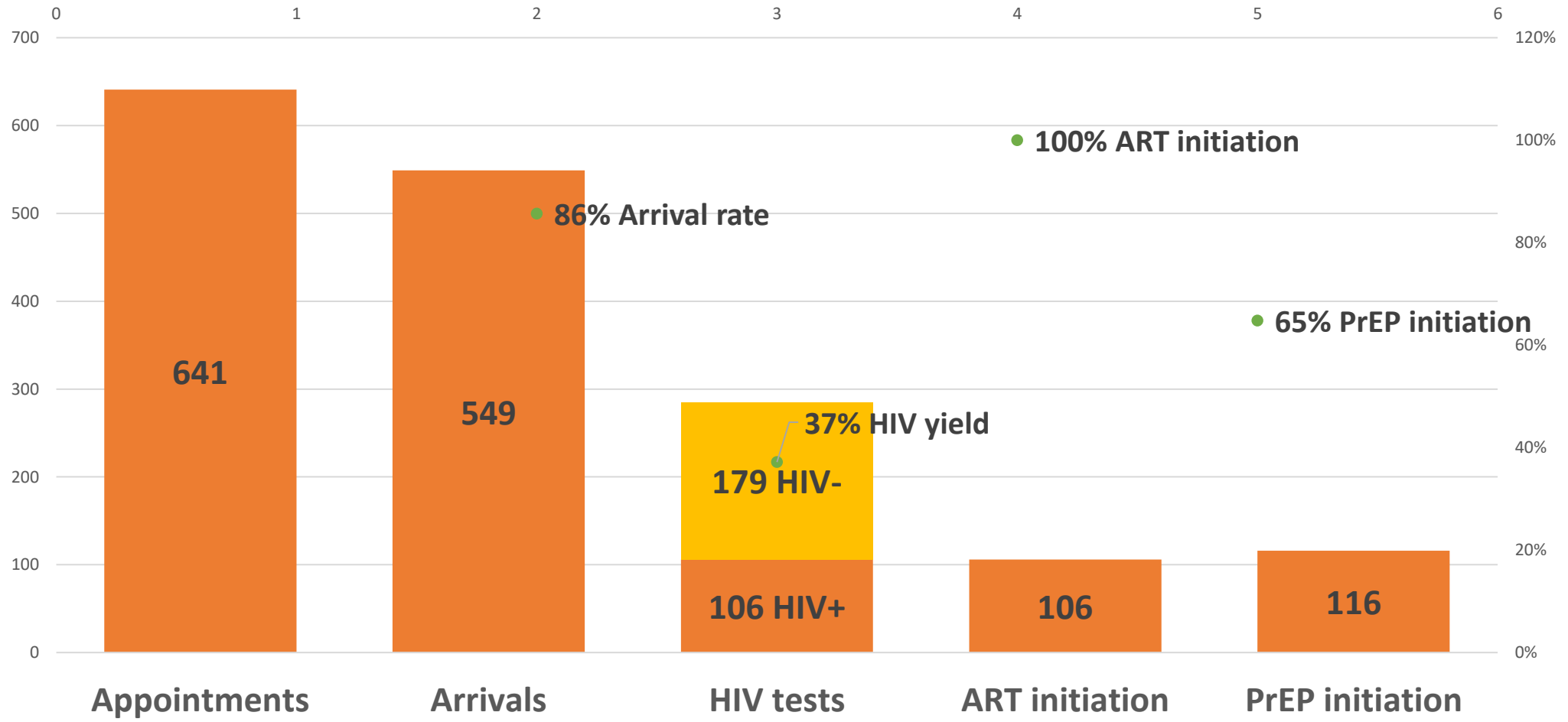
Reaching MSM through QuickRes

- QuickRes enables MSMs to discretely book for and access services at a facility and time that is most convenient to them
- MSM peer promoters promote online appointments in SNS meetings, weekend clinics, and social media

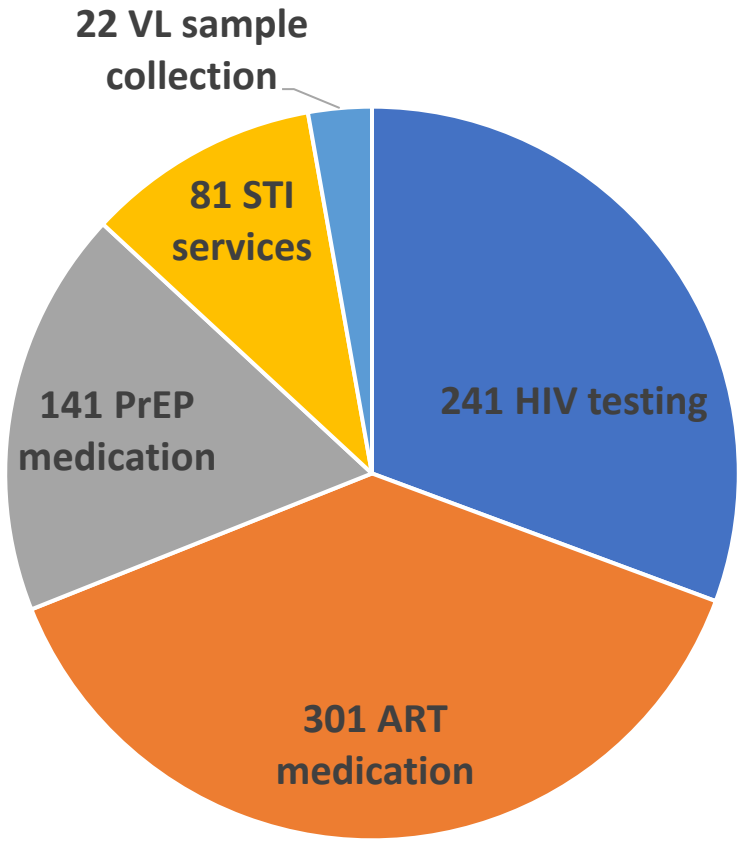
Jan – Sept 2021 QuickRes performance – All Sites



Jan – Sept 2021 QuickRes performance – MSM



Jan - Sept 2021 QuickRes performance – MSM appointments



A single appointment booking can be made for 1+ health service

Challenges

- Inconsistent network can disrupt QuickRes application use
- Some clients do not have contact numbers (phone) to be easily reached by ART facilities for service update
- Mobility of clients
- Closure of hotspots and hookup points due to COVID-19

Lessons Learned

- There is need to train all service delivery personnel in KP sensitivity to allow for MSMs to access services in a stigma free environment
- Using MSM as peer navigators and service providers is an effective way of reaching MSMs for behavior change messages and clinical service delivery
- The social network strategy is the most effective modality for reaching hard to reach MSMs with targeted services
- In order to increase reach to MSM population, programs can engage older MSMs as peer promoters and key informants
- Weekend clinics, online reservations (e.g. QuickRes) and mobile clinics are very instrumental in providing convenient and flexible services to MSMs who face barriers in accessing health services

Thank you

Panel Discussion

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CQUIN 5th Annual Meeting

Virtual: November 16-19, 2021

Session 4 starts tomorrow Wednesday 17 November at 7am EST/12N
West Africa/1pm Geneva/2pm Pretoria/3pm Nairobi

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