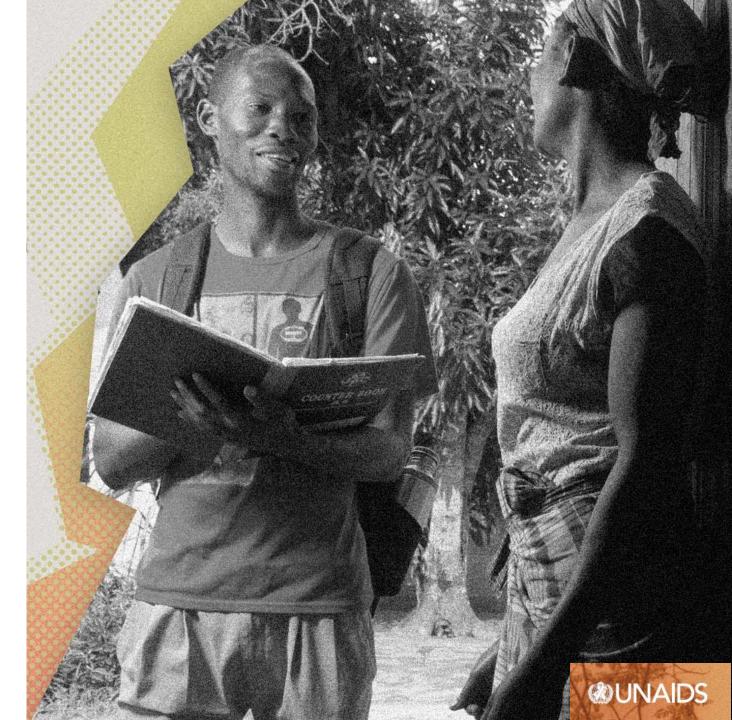
Panel 1: Leveraging Data to fill gaps in HIV service coverage

Leveraging data, technologies, & innovation to meet 2025 and 2030 goals

PCB THEMATIC SEGMENT Consolidated presentations from Panel 1

Friday, 10 December 2021





# What are the data telling us about inequalities among sub-populations in New South Wales, Australia?

#### **Andrew Grulich**

Theme Director, Populations and Prevention, and Head, HIV Epidemiology and Prevention Program, Kirby Institute, UNSW Sydney

UNAIDS PCB meeting | December 2021

## Trends in HIV diagnoses in NSW: context and data sources

Context

- HIV concentrated in gay men (70%+ of all diagnoses)
- HIV diagnoses were stable 2000-16, despite reaching UNAIDS 90/90/90 goals in 2016
- Data sources for today's analyses
  - HIV diagnoses based on routine HIV surveillance
    - Data on age, postcode and country of birth
      - Postcodes categorized by proportion of males who are gay (>20%; 5-19%; <5%)
      - Based on census information on cohabiting male couples
  - HIV testing, HIV treatment and PrEP data based on two sources
    - A clinical sentinel surveillance system of MSM attending high-caseload clinics based on electronic data capture (the ACCESS system, since 2013)
    - Annual gay community behavioural surveys (since 1996, annual)

## Declining HIV, but emerging disparities in HIV diagnoses

Figure 1. All new HIV diagnoses in MSM for Australian-born and overseas-born men

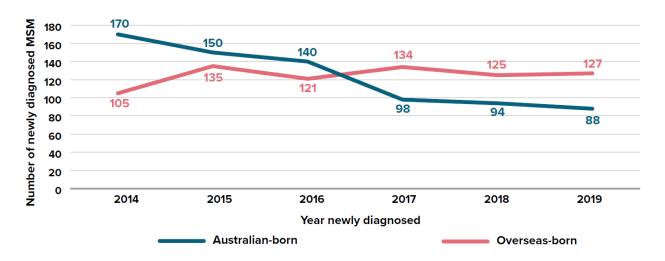
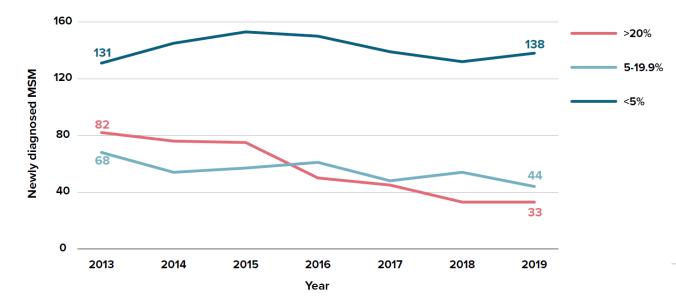


Figure 16. HIV diagnoses in MSM by proportion of adult males in the postcode who are gay



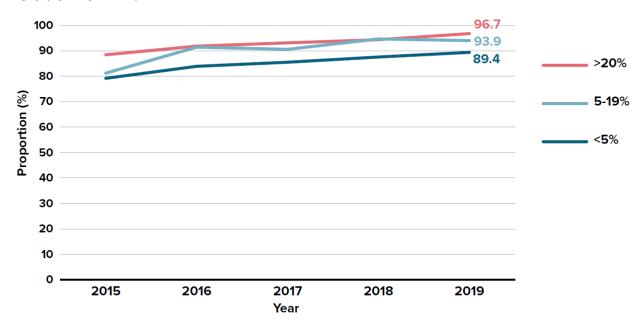
#### Trends, 2015-2019

- 25% decline in HIV diagnoses overall
- 41% decline in HIV diagnoses in Australian-born men; 6% decline in overseas-born
  - Increases in HIV in those recently arrived (<4 years)</li>
- 56% decline in highest-concentration gay postcodes, compared to 10% in lowest-concentration postcodes
- declines in all age-groups but least in those aged <25 years (20%)</li>

https://kirby.unsw.edu.au/report/trends-in-hiv-in-nsw-2015-2019

## **Disparities in HIV testing trends**

Figure 21. Proportion of men who reported an HIV test in the last 12 months among men who reported some condomless anal intercourse with casual partners in the last 6 months by proportion of adult males in the postcode who are gay (Sydney GCPS)



#### Trends, 2015-2019

- very high rates of HIV testing overall, slightly increasing
- no difference by country of birth
- lower HIV testing rates in suburbs with lowest concentration of gay men
- slightly lower testing rates in MSM aged less than 25 and > 55 years

## **Disparities in HIV treatment trends**

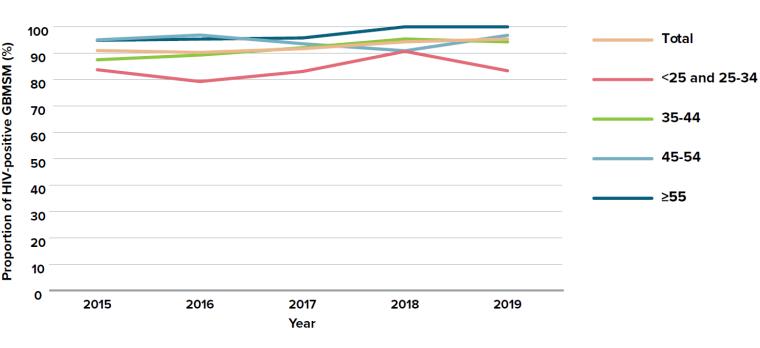
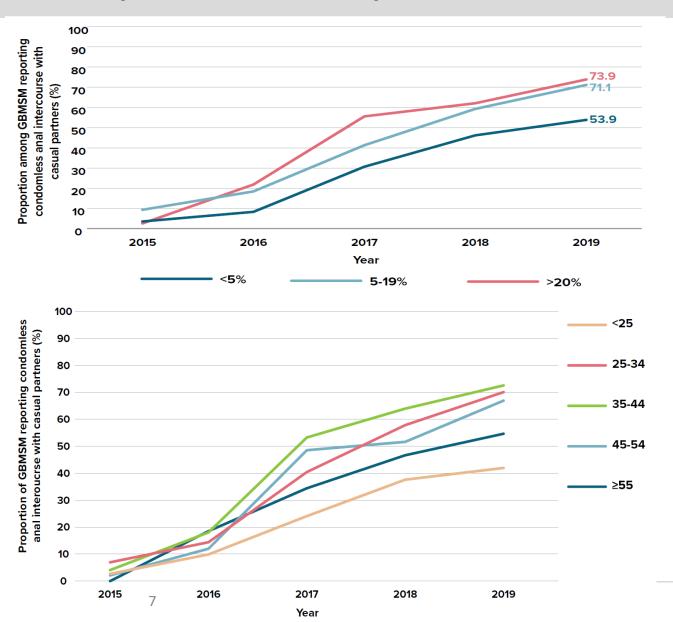


Figure 38. HIV-positive men on treatment, by age (Sydney GCPS)

### Trends, 2015-2019

- very high treatment levels overall (>90%)
- no difference by country of birth
- no difference by proportion of postcode gay
- slightly lower treatment rates in MSM aged less than 35

## **Disparities in PrEP uptake trends**



### Trends, 2015-2019

- enormous increases in PrEP use between 2015 and 2019
- no difference by country of birth
- markedly lower PrEP use in the lowest-concentration gay postcodes
- lower PrEP use in MSM aged less than 25

## Data analysis for policy action

• Declining HIV diagnoses as PrEP was introduced on a background of high levels of treatment as prevention

- Disparities in HIV diagnosis trends explained by different access to HIV testing and PrEP
- New NSW HIV strategy 2021 specifically targets increased HIV prevention action focussed on
  - Recently arrived overseas-born MSM
  - MSM living outside of central Sydney
  - Young MSM aged < 25 years

## **NSW HIV Prevention Partnership Project**

Investigators and Steering Committee Professor Andrew Grulich Dr Christine Selvev Professor Rebecca Guy A/Professor Garrett Prestage Professor Martin Holt Ms Carolyn Murray Professor Anthony Kelleher Ms Jane Costello Ms Karen Price **Dr Prital Patel** Dr Angie Pinto Dr Ben Bavinton Dr Steven Nigro Mr Phillip Keen Professor John de Wit Professor John Kaldor Mr Bill Whittaker A/Professor Irvna Zablotska Professor David Wilson

PrEP Working Group Dr Ben Bavinton Ms Carolyn Murray Professor Martin Holt Professor Andrew Grulich Mr Scott McGill Ms Zinda Nanver Ms Karen Price Mr Matthew Vaughan Mr David Crawford Mr Phillip Keen

#### **HIV Treatment Working**

#### Group

Dr Angie Pinto Ms Carolyn Murray Professor Tony Kelleher Dr Prital Patel A/Professor Limin Mao Professor Andrew Grulich Ms Jane Costello Professor Rebecca Guy Mr Neil McKellar-Stewart Mr Neil Fraser Ms Kate Bath Mr Phillip Keen

#### **Group** Professor Rebecca Guy Ms Cherie Power Dr Prital Patel

**HIV Testing Working** 

Professor Andrew Grulich Mr Karl Johnson A/Professor Limin Mao Ms Vickie Knight Ms Ruthy McIver Mr Philip Cunningham Mr Neil Fraser MS Vickie Bowden Mr Phillip Keen

#### Behaviour Working Group

A/Professor Garrett Prestage Ms Cherie Power Professor Martin Holt Professor Andrew Grulich Dr Ben Bavinton Ms Karen Price Mr Neil Fraser Mohamed Hammoud Ms Elisabeth Morgan Mr Phillip Keen

#### Molecular Epidemiology Working Group

Dr Angie Pinto Mr Steven Nigro Ms Carolyn Murray Professor Anthony Kelleher Dr Francesca Di Giallonardo Professor Andrew Grulich Dr Christine Selvey Ms Jane Costello Ms Karen Price Mr Neil Fraser Mr Phillip Keen





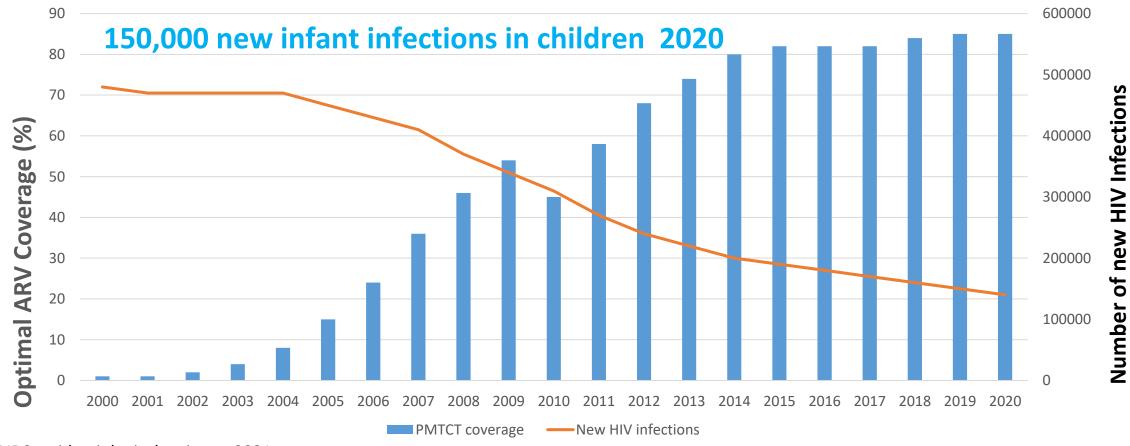






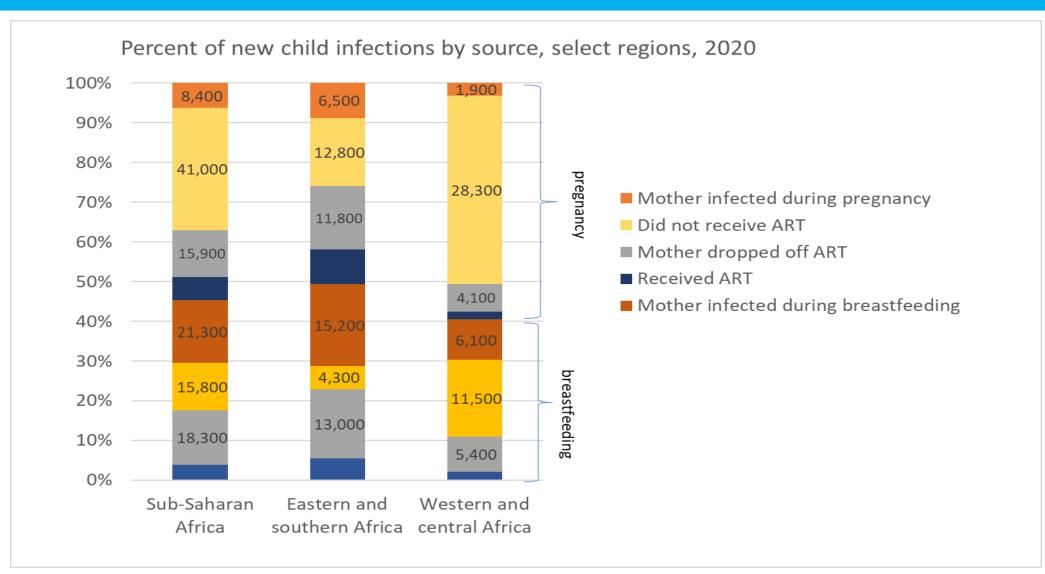


## PMTCT Optimal ARV Coverage and Reductions in New HIV infections in children - 2000-2020

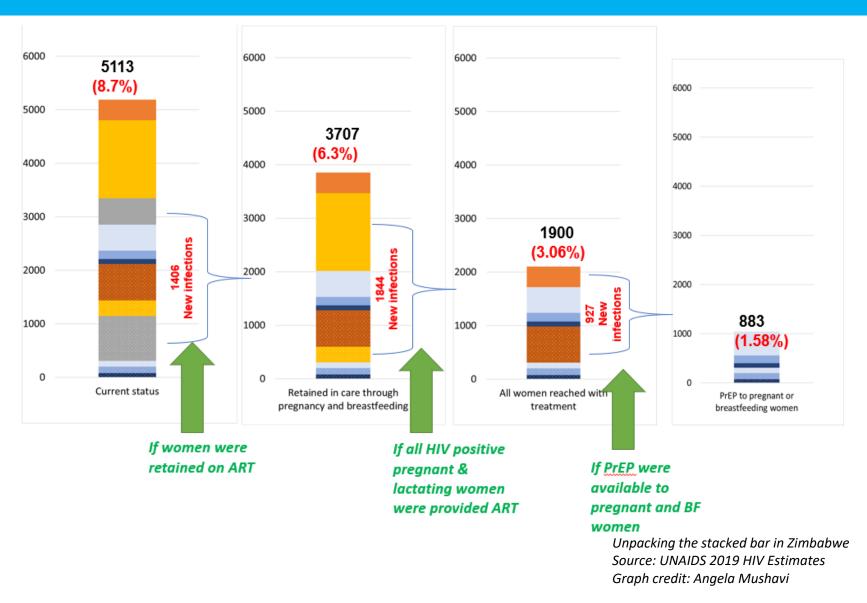


Source: UNAIDS epidemiological estimate 2021

## Stacked bar analysis to improve PMTCT programme precision: Sources of new HIV infection in children



# Data mining and use to improve PMTCT programme in Zimbabwe





GOING THE 'LAST MILE' TO EMTCT: A road map for ending the HIV epidemic in children

World Health Organization for every child

## **Intervention domains**

## HIV prevention services for women and girls

Timely engagement in antenatal care

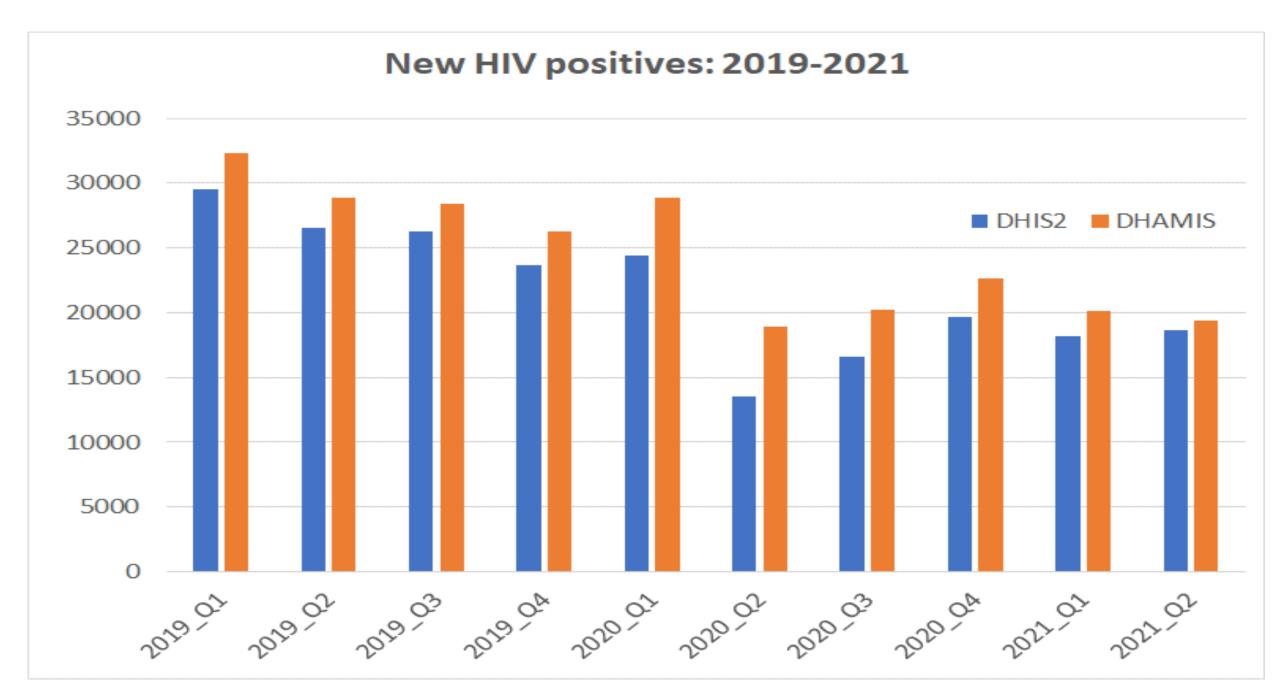
## Timely access to HIV testing

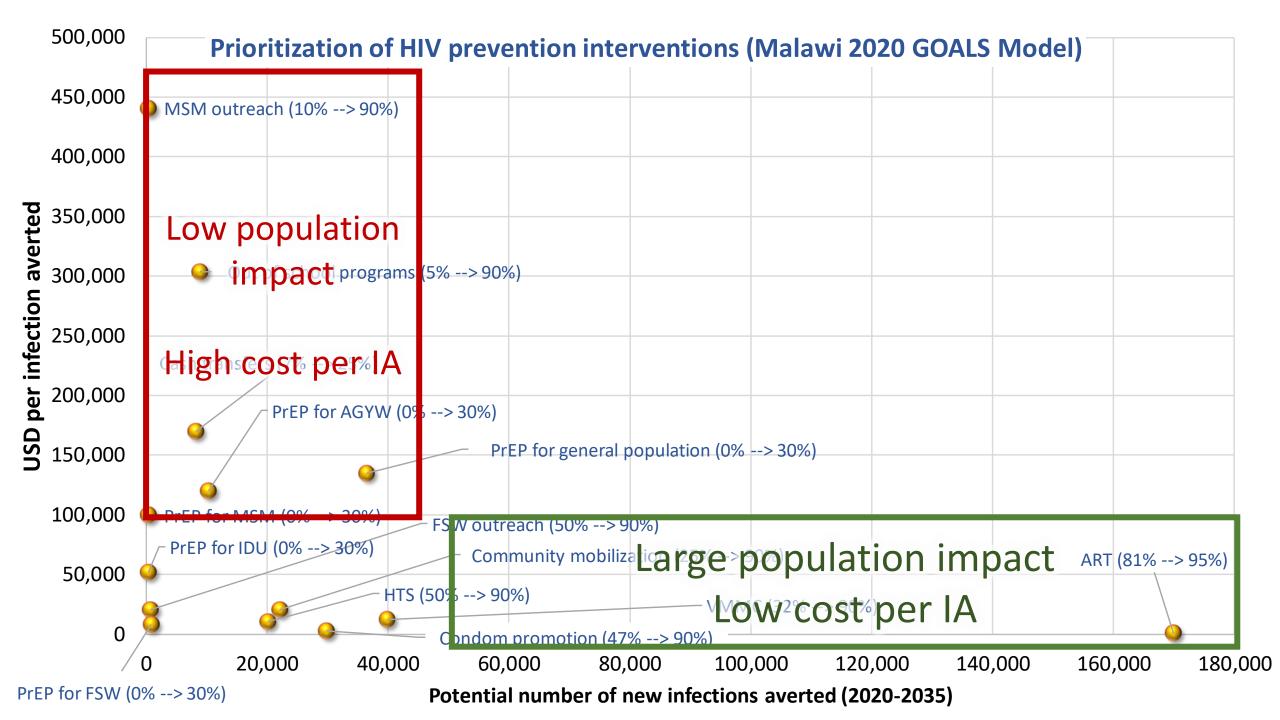
Timely ART initiation Programme retention and adherence support Services for infants at highest risk of HIV acquisition

## **HIV AND AIDS DATA OUTCOMES**

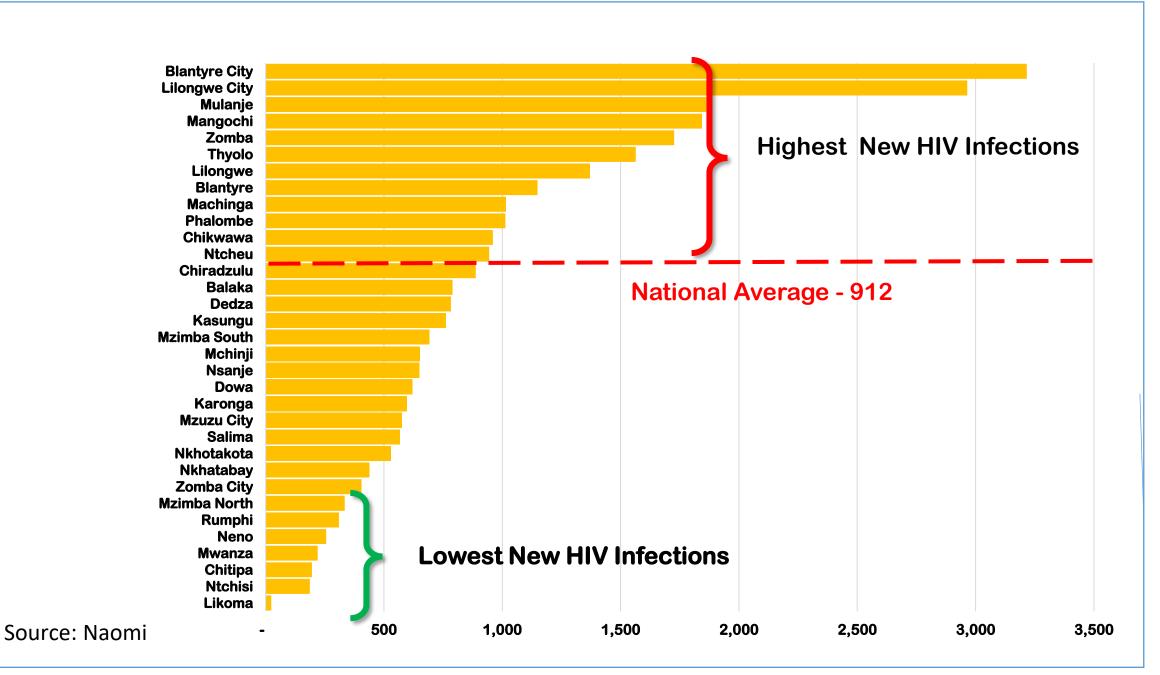
**December 2021** 

Emanuel Zenengeya Head of Planning, M&E Division National AIDS Commission Malawi





**Distribution of New HIV Infections - Adults 15+ Dec 2019** 







Of 10,302 patients: <u>only</u> **35%** said there was <u>always</u> enough staff to meet patients' needs.

Managers at facilities agreed: Of 397 Managers **77.3%** reported there was <u>not</u> enough clinical and/or non-clinical staff at the facility.







## Staff attitude & missed appointments

**63.7%** of patients thought the staff were always friendly & professional.

### But if you miss an ARV pick up visit:

- + **473 PLHIV** reported you are sent to the back of the queue next time
- + **305 PLHIV** reported you are reprimanded when you return
- + **816 PLHIV** reported being welcomed back
- + **431 PLHIV** reported staff provide counselling on adherence



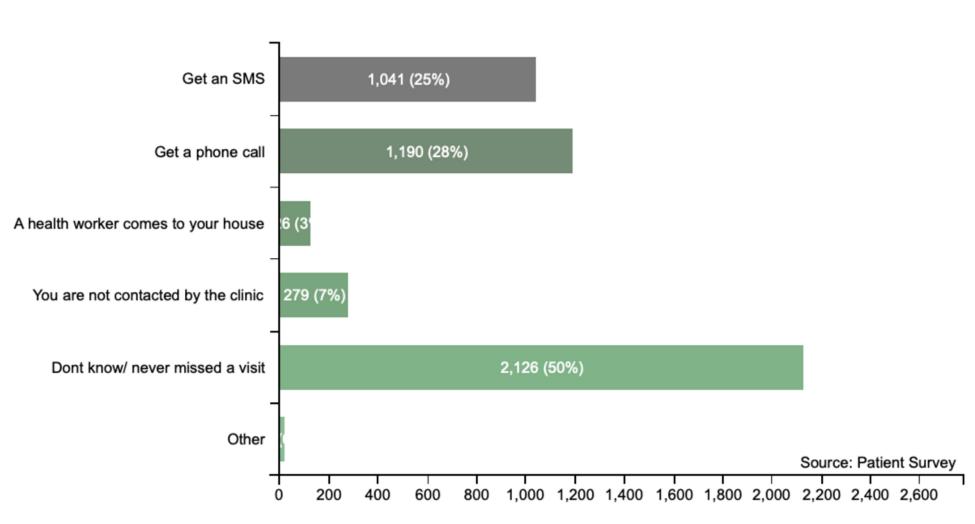
### Some clinics are showing it can be done better:

234 clinics had no reports of PLHIV being sent to back of queue.165 of those clinics also had no reports of PLHIV being reprimanded.



## **Protocol if someone misses an appointment**

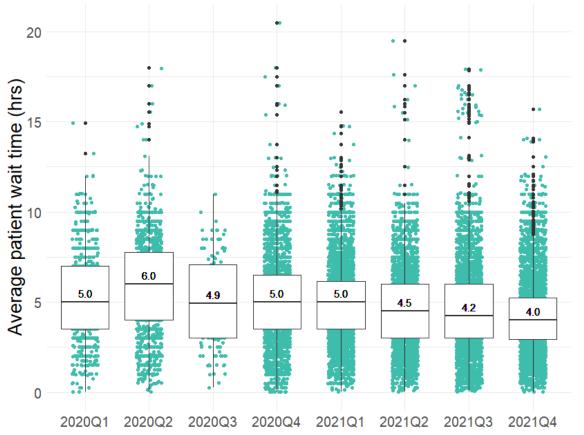
When Patients Miss a Visit to Collect ARVs:





Patients Surveyed: 4,247

## Improvement in waiting times



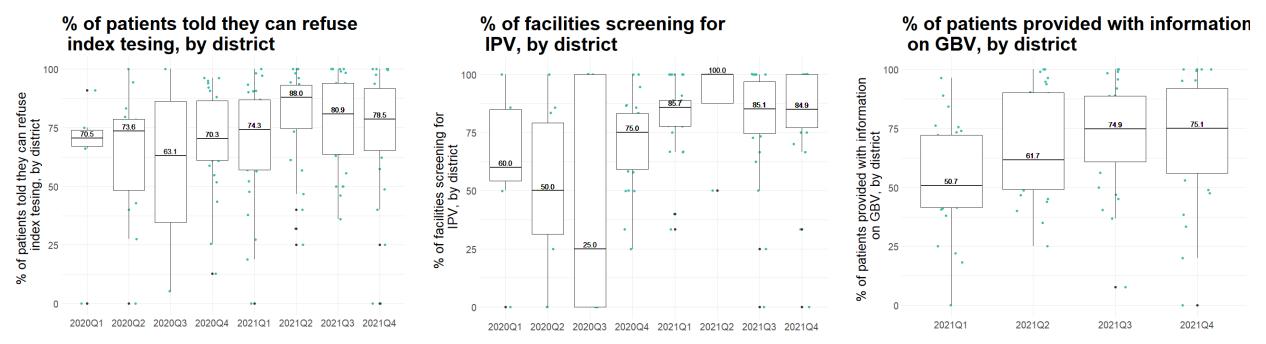
### Average patient wait time (hrs)

### Waiting times dropped by 33% from 2020 Q2 to 2021 Q4

(from six hours to four hours)



## Index testing and GBV



More PLHIV are told they can refuse index testing (71% to 79%), more clinics screen for IPV

(60% to 85%) and more PLHIV provided with information on GBV (51% to 75%)



## More information + all reports available online

Facility, District + Provincial reports available at:

http://data.ritshidze.org.za/ZA/reports

https://ritshidze.org.za/category/resources/

PPP RITSHIDZE	Zo	one 17 Clin	ic Monitoring Report Gauteng - Sediberg: 2021 Q3	117 RITSHIDZE	Ugu District	Monitoring R KwaZutu-Nat	
Facility Hours and Waiting Times				Facility Hours and Walting Times			
Facility is Open 24 Hours	Time Patients Sp Facility Amount of time spent	2	Earliest Patient Arrival Time Patient	Often public healthcare users experience long welfs people, particularly working people and those in sch refits, increases the risk of that person disergaging	col. Having people living with HIV spend an ext	inic. This simply does not w nded time at a clinic, simply	ork well for m y to collect AP
Open Time M-F: 7:00 Open Time Sat: NA Average stop time: 15:57 NDoH May 2019 Circular:	This ranks: • 51 of 396 Facilities N • 5 of 118 Facilities in Quarter) • 2 of 8 Facilities in the	istionally (Top Quarter) the Province (Top a District (Top Quarter)	This ranks: • 103 of 396 Facilities Nationally (Top Half) • 15 of 118 Facilities in the Province (Top Quarter) • 3 of 8 Facilities in the District (Top Half)	Time Patients Spend at t		Facility Results (5 Be Pot Edward Ciric Keshtburde Ciric birgdweri Ciric	est/Worst) 201 213 23
cilities must be open from ) - 19.00, as well as 8.00 - 10 on Saturdays.*	+ 2 of 8 Facables in the	District (10p Quarter)		Amount of time spent:	4:57	Margane Clinic Golima Clinic	244
Incues at the Facility	Please specify the	-	How Safe is the Facility to Wait	Comparison Results National Average:	4.12	Southpart Clinic Port Shepstone Clinic	8-16 8-35
Long?	why the queues		Before it Opens?	Province Average: Best District Result: Word District Result:	2:46 1:52 7:32	Unainto Clinic Marburg Clinic	6:44
of patients report long queues	No Data for this Indice	ator	Under Dr. 205		Paletti Responses 178	Turton CHC Facility Results (5 Br	est/Worst)
				Earliest Patient Arriv	6:27	Margate Clinic Pot Edward Clinic Gollima Clinic Iblingdweni Clinic	8:52 8:10 8:00 8:00
There is not enough staff 1				Comparison Results		Gamalakhe CHC	758
			This ranks:	National Average: Province Average:	5.51	Southport Clinic	812
0 01 02 03 04 05 04 07 08 0	17		53 of 335 Facilities Nationally (Top Quarter)     12 of 108 Facilities in the Province (Top	Rest District Result:	7:07	Marburg Clinic Turtos CHC	501
	1		Quarter) <ul> <li>1 of 7 Facilities in the District (Top Quarter)</li> </ul>	Want District Result	4:17	Unzinto Clinic	248
y Staff	1			How Safe is the Facility to Wait	Before it Opens?	Facility Results Kealtburde Clinic	5.00
Are there Enough Staff at the Faci	lity? Patent	Are Staff F	riendly and Professional?	Stery Groute: 4%	District Score* 3.61	Port Shepstone Clinic Southoart Clinic	5.00
n 805		Yes: 82%		Sector Sec	Comparison Results	Marburg Clinic	4.50
n 20%		Europines 20%	20%	and the second s	National Average: 2.18	Port Edward Clinic Turton CHC	4.00
				They finds and the	Province Average: 2.18 Province Average: 2.14	Unrainto Clinic	2.41
				Sections 16	Best District Result: 4.77	Margate Clinic	2.33
					Worst District Result: 1.81		
				7% 17%	* Essens based on average of all survey responses with a maximum score of 8 and a minimum score of 1. HOHER scores are bellar.		
hia ranka:		This ranks:		Are the Queues at the Fa	cility Long?	Facility Results (5 Be	est/Worst)
46 of 396 Facilities Nationally (Top Quarter) 15 of 118 Facilities in the Province (Top Quarter) 5 of 8 Facilities in the District (Bottom Half)			s Nationally (Top Half) in the Province (Top Quarter) he District (Bottom Half)	Mas 8/15,	District Score* 62%	Kwahitbunde Clinic Margate Clinic	12%
				Decisions 25	Comparison Results	Port Edward Clinic	165
Facility Manager: Does the Facility hav	e Enough	Which C	adres are Understaffed?		National Average: 68%	Izingdweni Clinic	42%
Staff?	Terperan I	C Dealer	R Professional nume		Province Average: 64%	Marburg Clinic	100%
		English ourse assistant	C Promocial Inc. R Encoded Inc. B		Best District Result: 12%	Port Shepstone Clinic	100%
	No	Lab trabal	C) Lay counselors III Linkage officers	115	Worst District Result: 97%	Southpart Clinic	100%
		Afternice dub Solitato	C Data capturer     C Security guard     C Security guard     C Security automated		* Percent of survey responses responding Ves (excluding "Duril Know"), LONIER survey, are beller.	Turton CHC Unrainto Clinic	100%

