Filling the Gap:

How can a non-government organisation track its progress towards [ENDING HIV] in the absence of behavioural surveillance?

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New Zealand AIDS Foundation
Te Tūāpapa Mate Āraikore o Aotearoa

IUSTI

Conflicts of Interest

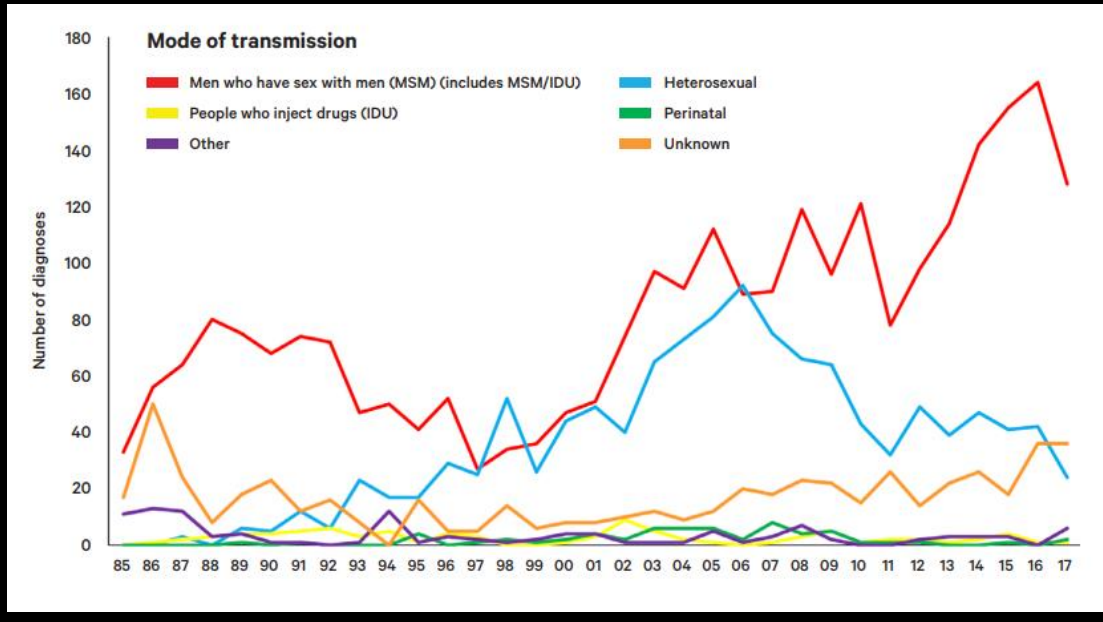
No conflicts to declare

Background

Aotearoa, NZ has a low-level, concentrated HIV epidemic among gay, bisexual and other men who have sex with men (GBM).

Since 2002, there have been repeat, bi/tri-annual HIV behavioural surveys targeted to GBM (GAPSS & GOSS). In 2014, funding for these surveys were not renewed.

Rising numbers of annual HIV diagnoses among gay, bisexual and other men who have sex with men between 2011 and 2016. With no behavioural data to aid interpretation



AIDS Epidemiology Group, Newsletter. 2018. University of Otago, NZ

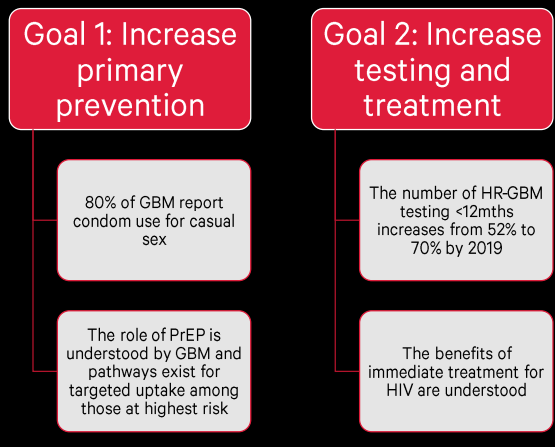
Background (cont.)

NZAF have relied on these surveys to inform and evaluate its progress on its Strategic Plans.

New and emerging biomedical HIV prevention tools were becoming available. NZAF were entering into combination HIV prevention approach with no data on GBM community knowledge/acceptability of these tools.

NZAF, and the wider sexual health sector of Aotearoa, needed to know what was going on out there.

NZAF Strategic Goals 2016-2019



[ENDING HIV] brand utilised to communicate and frame a combination HIV approach.

Call to action to end new HIV transmission in Aotearoa, NZ by 2025

Commitment to a 10 year programme

Solution:

- NZAF to develop and implement programme and behavioural evaluation surveys within the communities we serve

Barriers:

- NZAF limited staffing capacity
- Limited budget (no funding increase in 9yrs)
- Could not commit to do surveys without major disruption/reorientation
- Inherent biases associated with "in-house" surveillance/evaluation
- Possibility of further damaging ability of previous behavioural surveillance to be refunded

Benefits:

- Have in-house capacity to design surveys, seek ethical review, and analyse data
- Already utilise a diverse range of online channels to target GBM
- In-house capacity to design and create adverts for recruitment
- Concern over committing to a Strategic Plan with no evidence

[ENDING HIV] Surveys

The aims of the [EH] Surveys are to:

1. Describe campaign reach, brand acceptability and message uptake,
2. Explore attitudes and knowledge related to key combination HIV prevention items,
3. Examine key HIV-related risk behaviours and use of combination HIV prevention tools,

...among GBM recruited online in Aotearoa, NZ.

Recruitment

Recruitment is repeatable and systematic.

Target sites/apps utilised by GBM to socialise and meet sexual partners.

Utilise a range of approaches: banner ads, pop-up messages, posts, and inbox messages.

Recruitment takes place across all channels over a 5wk period at 6mth intervals.

Independent ethical review was undertaken and granted by the New Zealand Ethics Committee for three years.

Analyses

Data cleaning and analyses completed for three rounds.

Analyses limited to those reporting:

- Male gender identity,
  and
- Gay/bisexual orientation,
  and/or
- Sex with male in previous 6mths

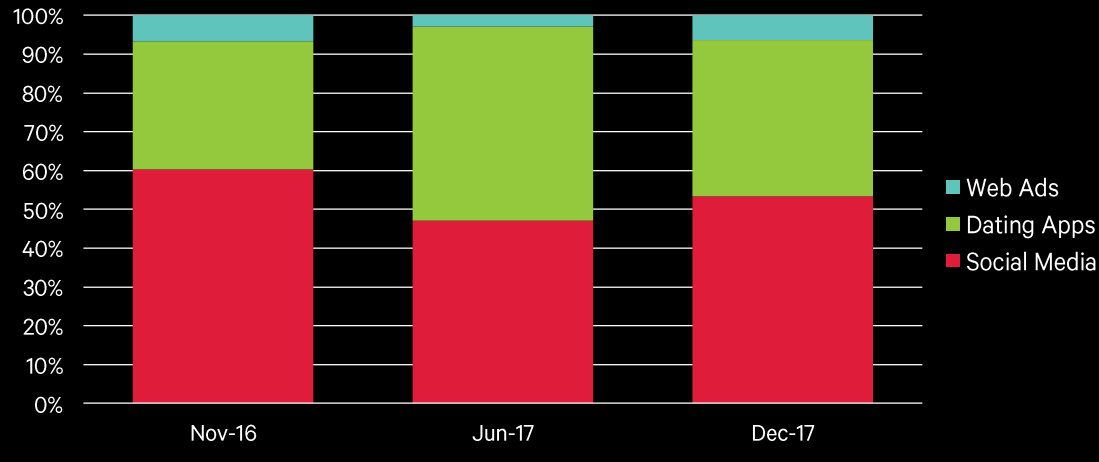
Logistic regression used to generate adjusted odds ratios.

	N	GBM	
		n	%
Total	**4111**	**3569**	**86.9**
Baseline – Nov 2016	1269	1148	90.5
Jun 2017	1447	1234	85.3
Dec 2017	1395	1187	85.1

	Survey Round									
	Baseline		Jun 2017		Dec 2017		Jun 2018*		Total	
	n	%	n	%	n	%	n	%	n	%
Age Group										
16-24	522	45.5	356	28.8	284	23.9	289	28.0	1451	31.5
25-39	399	34.8	473	38.3	493	41.5	403	39.1	1768	38.4
40+	227	19.8	405	32.8	410	34.5	339	32.9	1381	30.0
Total	1,148	100.0	1,234	100.0	1,187	100.0	1,031	100.0	4600	100.0
Ethnicity										
European	780	67.9	823	66.7	851	71.7	794	77.0	3248	70.8
Maori	158	13.8	146	11.8	112	9.4	103	10.0	519	11.3
Pacific	38	3.3	34	2.8	29	2.4	23	2.2	124	2.7
Asian	123	10.7	153	12.4	117	9.9	53	5.1	446	9.5
MELAA	20	1.7	22	1.8	22	1.9	17	1.7	81	1.8
Other	29	2.5	56	4.5	56	4.7	41	4.0	182	3.9
Total	1,148	100.0	1,234	100.0	1,187	100.0	1,031	100.0	4600	100.0
Sexual orientation										
Gay	816	71.1	935	75.8	878	74.0	794	77.0	3423	74.4
Bisexual	295	25.7	240	19.5	255	21.5	188	12.2	978	21.3
Takataapui	7	0.6	8	0.7	4	0.3	9	0.9	28	0.6
Heterosexual	5	0.4	6	0.5	20	1.7	9	0.9	40	0.9
Queer	11	1.0	14	1.1	9	0.8	18	1.8	52	1.1
Faáfafine	2	0.2	-	-	-	-	-	-	2	0.0
Other	-	-	16	1.3	13	1.1	9	0.9	38	0.8
Prefer not to say	12	1.1	15	1.2	8	0.7	4	0.4	39	0.8
Total	1,148	100.0	1,234	100.0	1,187	100.0	1,031	100.0	4600	100.0

** Preliminary data for Jun 2018 survey round*

Results – Recruitment sources



Results - Sociodemographics

	Baseline	Jun 2017		Dec 2017	
		OR	95% C.I.	OR	95% C.I.
Age:					
30yrs+ vs. <30yrs	*Ref.*	**1.96**	***1.67-2.31***	**2.57**	***2.17-3.04***
Ethnicity:					
Euro vs. other	*Ref.*	0.94	*0.80-1.12*	**1.19**	***1.00-1.43***
Identity:					
Gay vs. other	*Ref.*	**1.27**	***1.06-1.53***	1.16	*0.96-1.39*
Region of residence					
Auckland vs. other	*Ref.*	1.10	*0.93-1.29*	1.00	*0.85-1.18*

Results – Knowledge and attitudes

	Baseline	Jun 2017		Dec 2017	
		AOR	95% C.I.	AOR	95% C.I.
Condoms most effective tool to prevent HIV and STIs					
Knew this vs. didn't know/wasn't sure	Ref.	0.80	*0.46-1.39*	0.76	*0.43-1.33*
Daily PrEP significantly reduces risk of acquiring HIV					
Knew this vs. didn't know/wasn't sure	Ref.	**2.36**	***1.98-2.81***	**3.03**	***2.52-3.65***
UVL means cannot transmit HIV to sexual partners					
Knew this vs. didn't know/wasn't sure	Ref.	**1.16**	***1.00-1.41***	**1.43**	***1.20-1.70***
Everything has changed, we can end HIV					
Strongly/agree vs. strongly/disagree	Ref.	**1.84**	***1.55-2.18***	**2.14**	***1.80-2.55***

Adjusted for age and ethnicity

Results – Sexual behaviours & testing

	Baseline	Jun 2017		Dec 2017	
		AOR	95% C.I.	AOR	95% C.I.
Condom use with casual partner(s)					
Always/almost vs. half/rarely/never	Ref.	0.89	*0.72-1.15*	-	-
PrEP use, current or last 6mths					
Yes vs. no	Ref.	**4.03**	***1.93-8.41***	**6.47**	***3.14-13.36***
Recent HIV testing					
Last 12mths vs. 12mths+/never	Ref.	**1.40**	***1.15-1.70***	**1.29**	***1.06-1.56***

Adjusted for age, number of male sexual partners in last 6mths, and recruitment source

Strengths & limitations

Strengths

Systematic and repeatable sampling of GBM online, allows measuring of trends over time.

Large and diverse sample of GBM collected in each round.

Capturing of key HIV-related data to inform progress toward NZAF's Strategic Goals.

Questionnaires are short, anonymous and voluntary – limiting reporting bias.

Limitations

One year follow-up resulting in inability to determine meaningful/sustained trends.

Cross-sectional. Lack of temporal causality.

Online-only recruitment biases sample and limits generalisability.

Sample bias towards European, gay-identified males. Without population-level data cannot say if this is representative.

Conclusions

The [EH] Surveys are providing estimates to fill a data gap in NZAF's response to the HIV epidemic in Aotearoa, NZ.

NZAF have seen significant increases in key combination HIV prevention-related knowledge, attitudes and behaviours among GBM over time.

Online sampling and surveillance has become increasingly popular to sample GBM. But alone is not appropriate for national surveillance programmes.

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Thank You

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