



## **Comprehensive Sexual Health Screening Among Gay and Bisexual Men in Aotearoa/New Zealand**

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THE UNIVERSITY OF  
**AUCKLAND**  
Te Whare Wānanga o Tāmaki Makaurau  
NEW ZEALAND

**MEDICAL AND  
HEALTH SCIENCES**

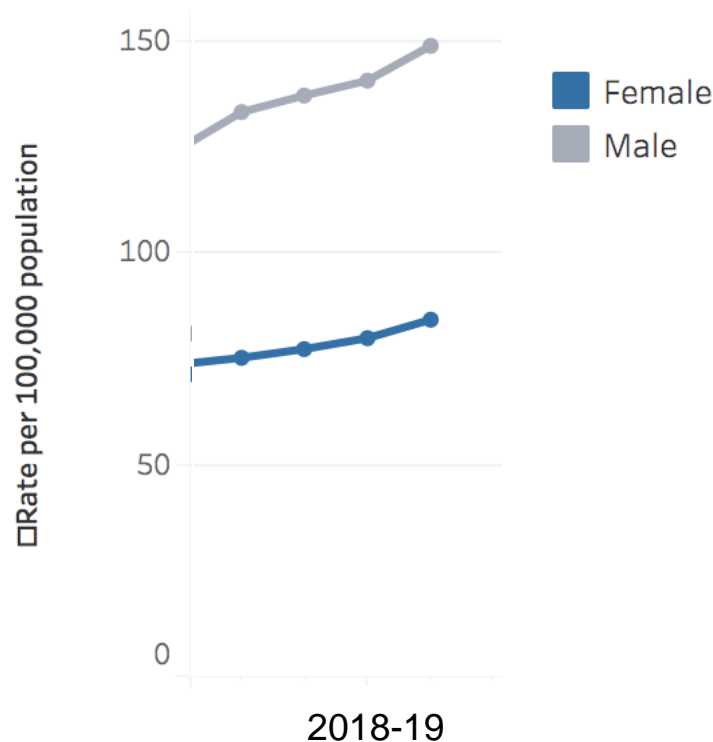


New Zealand AIDS Foundation  
Te Tuāpapa Mate Āraikore o Aotearoa

# Motivation

- With the introduction of PrEP, some have concerns there is a link to increasing trends in STIs among GBM.

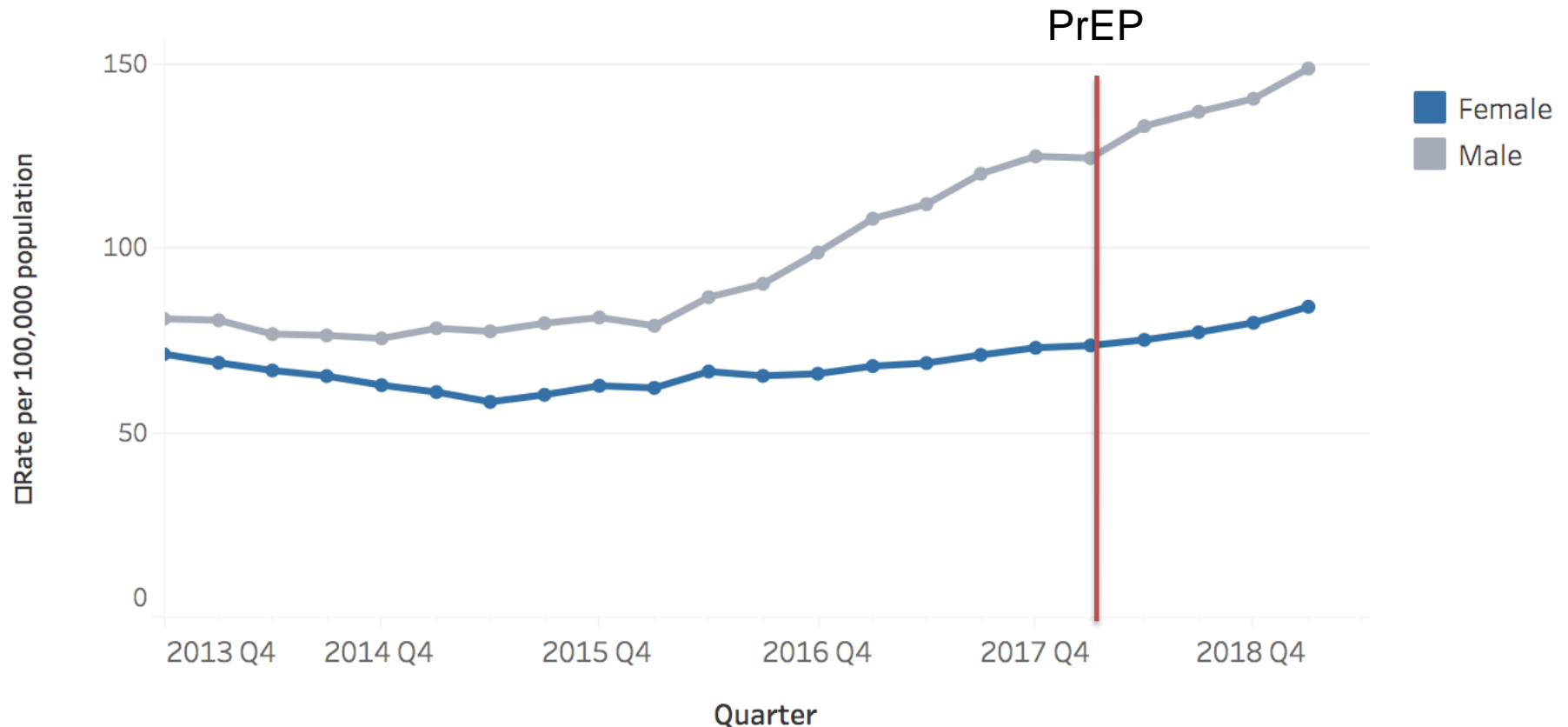
Rates of Gonorrhea in NZ since 2014



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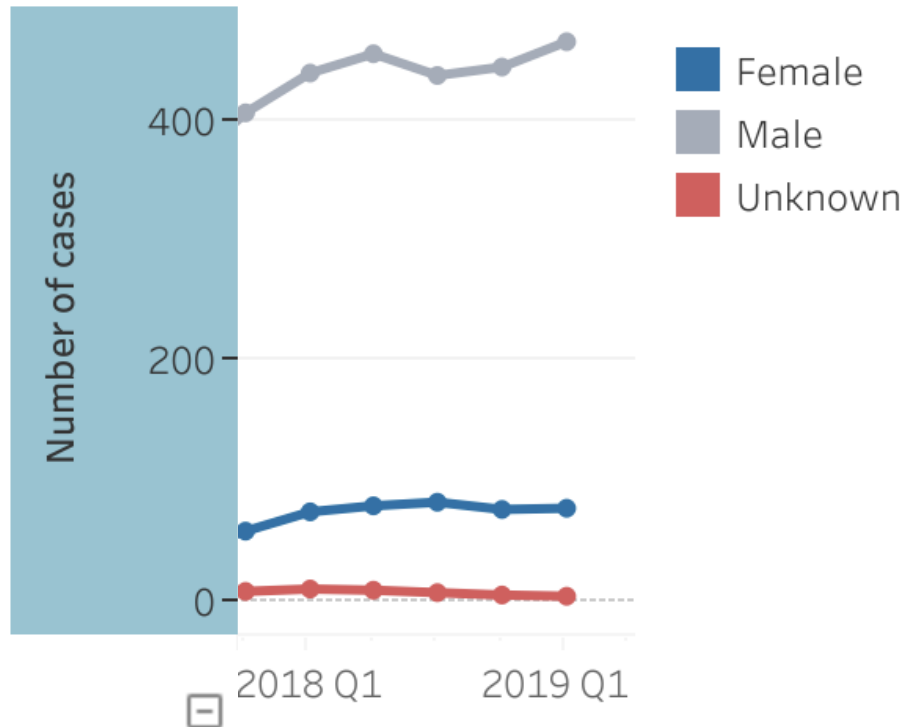
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# Motivation

- With the introduction of PrEP, there has been a concern with an increasing trend in STIs among GBM.

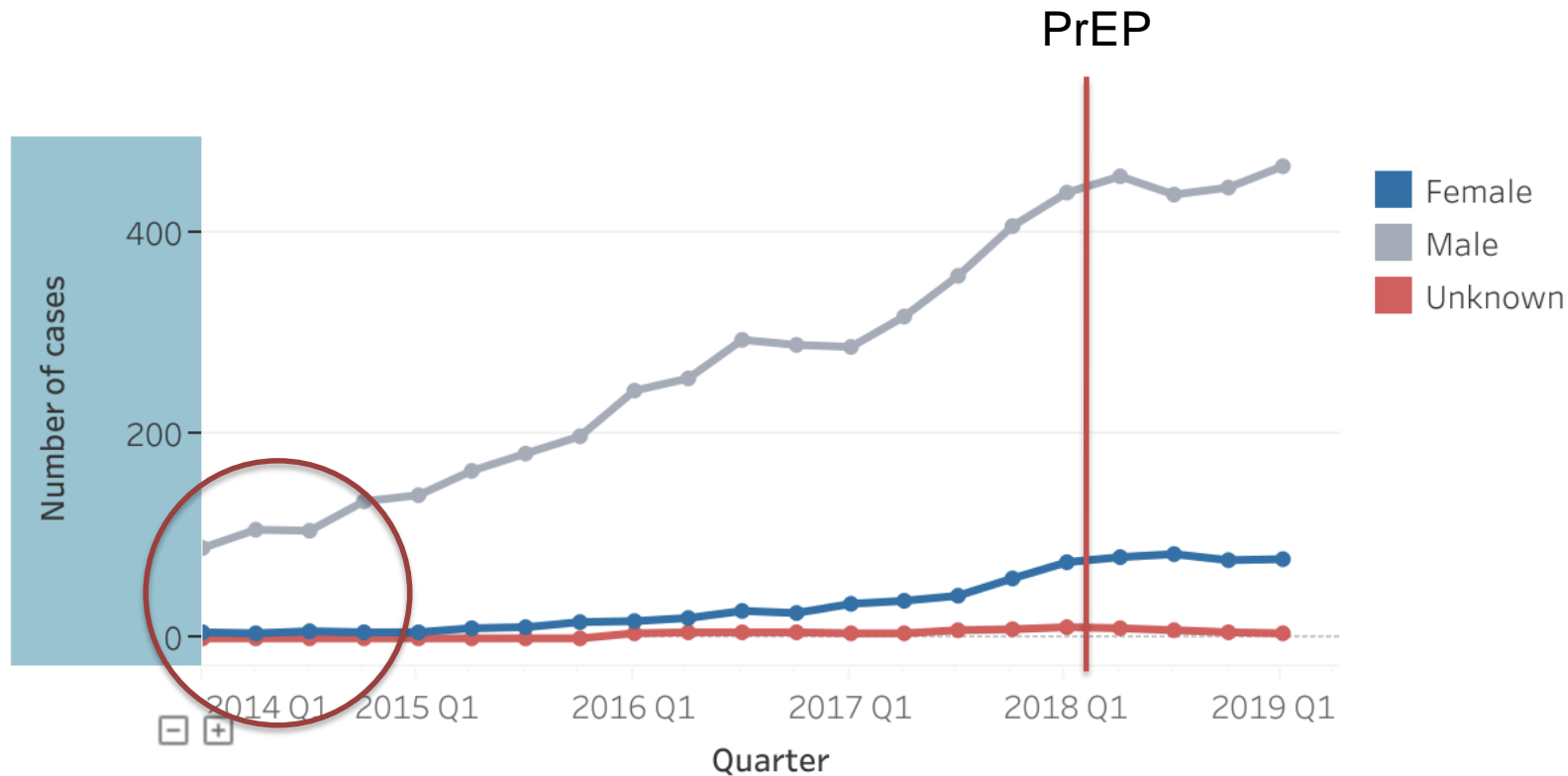
Incident Syphilis in NZ since PrEP



# Motivation

- With the introduction of PrEP, there has been a concern with an increasing trend in STIs among GBM.

Incident Syphilis in NZ since 2014



# Motivation



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- STI incidence among GBM is rising
  - STI incidence higher among HIV-positive GBM
  - High proportion of asymptomatic infection at anal and oropharyngeal sites for GBM
  - A person's risk of acquiring an STI can be minimised with consistent condom use and partner reduction
  - *The impact of STIs in a community can be further minimised with early detection and treatment*
- NZ guidelines recommend comprehensive STI screening (CSS) annually for all GBM
    - regardless of sexual behaviour

# Methods



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- We analysed data collected from the 2014 round of the Gay Auckland Periodic Sex Survey (GAPSS) and Gay Online Sex Survey (GOSS)
  - National cross-sectional community and internet study of GBM
  - venue-based in-person interviews and anonymous online surveys
  - Self-completed and voluntary
- We estimated recent (<12 months) comprehensive STI screening
  - defined as: anal (exam or swab), throat swab, penile (swab or urine), *and* syphilis test
- Identified clinical, behavioural, and socio-demographic predictors of CSS

# Results:Demographics



Demographics	
	n (%)
Age (SD)	21.5 (13.7)
Age Group	
Under 30	1348 (43.5)
30-44	914 (29.5)
45 or older	830 (26.8)
Region	
Auckland, Christchurch, Wellington, or Hamilton	2301 (74.3)
Anywhere Else	794 (25.6)
Site	
Bars	120 (3.9)
Big Gay Out	1050 (33.9)
Online	1782 (57.5)
Sauna/SOS	193 (6.2)
Ethnicity	
European	2211 (71.4)
Asian	350 (11.3)
Maori	305 (9.8)
Pacific	116 (3.7)
Other	125 (4.0)
Sexual Identity	
Bisexual or other	641 (20.7)
Gay or Homosexual	2493 (80.5)
Education	
Less than tertiary degree	1676 (54.1)
Tertiary degree or higher	1416 (45.7)
Work	
Not Employed	749 (24.2)
Employed	2361 (76.2)



# Results: Sexual Behaviour



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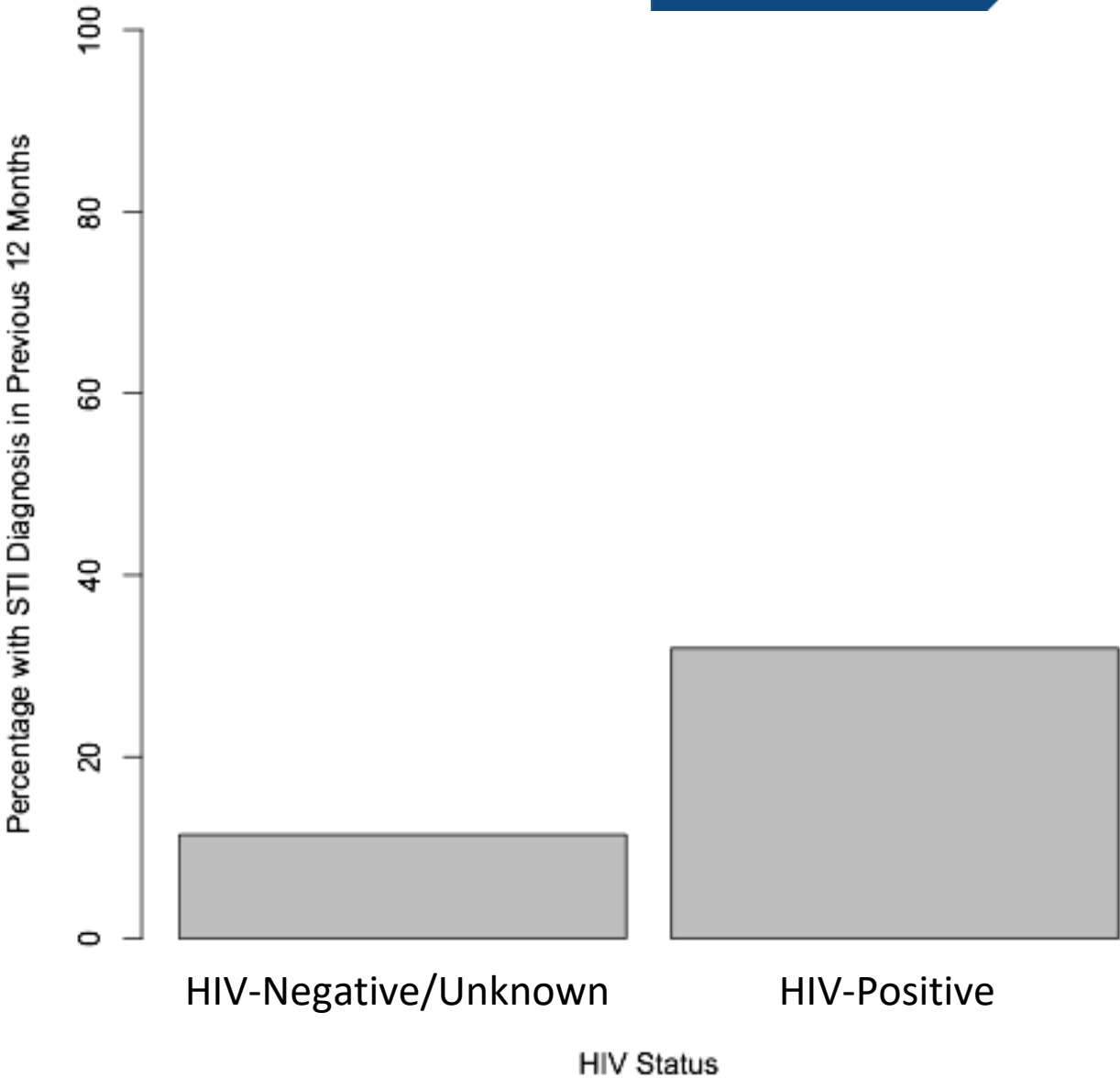
Sexual Behaviour	
	n (%)
Sex with Women	
No	2801 (90.4)
Yes	324 (10.5)
GP Know Sexual Identity	
No	1016 (32.8)
Not Sure	526 (17.0)
Yes	1580 (51.0)
Number of Male Partners	
None	211 (6.8)
1	679 (21.9)
2-5	1138 (36.7)
6-20	792 (25.6)
More than 20	264 (8.5)
Any Anal Sex	
No	726 (23.4)
Yes	2321 (74.9)
Safe Sex with Casual Partner	
Anal sex 100% Protected	947 (30.6)
Anal sex some unprotected	937 (30.3)
No anal sex with casual partner	394 (12.7)
No casual sex	778 (25.1)
Safe Sex with Regular Partner	
Anal sex 100% Protected	352 (11.4)
Anal sex some unprotected	826 (26.7)
No anal sex with regular partner	203 (6.6)
No current regular partner	1666 (53.8)

# Results: Clinical History



Clinical Characteristics		
	n	(%)
HIV Status		
Positive	155	(5.0)
HIV Negative or Never Tested	2942	(95.0)
STI Diagnoses in Previous 12 Months		
Gonorrhoea	106	(3.4)
Chlamydia	190	(6.1)
NSU	43	(1.4)
Warts	62	(2.0)
Herpes	45	(1.5)
Syphilis	30	(1.0)
LGV	5	(0.2)
Any STI	373	(12.0)

# Results: Recent STI Dx



# Results: Testing History



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Characteristic	HIV positive (n=155)	HIV negative or unknown (n=2942)	Total (n=3097)
	n (%)	n (%)	n (%)
<b>LAST 12 MONTHS</b>			
Type of Screening			
Anal examination	65 (42.2)	697 (23.9)	762 (24.8)
Anal swab	77 (50.0)	722 (24.7)	799 (26.0)
Throat swab	79 (51.3)	871 (29.8)	950 (30.9)
Penile swab	59 (38.3)	696 (23.8)	755 (24.6)
Urine sample	93 (60.0)	1234 (41.9)	1327 (42.9)
Syphilis blood test	96 (62.3)	1132 (38.8)	1228 (40.0)
<b>Any STI screening</b>	<b>109 (70.8)</b>	<b>1504 (51.5)</b>	<b>1613 (52.5)</b>
<b>Comprehensive STI screening</b>	<b>69 (44.8)</b>	<b>612 (21.0)</b>	<b>681 (22.2)</b>
<b>EVER</b>			
Type of Screening			
Anal examination	113 (73.4)	1322 (45.3)	1435 (46.7)
Anal swab	115 (74.7)	1228 (42.1)	1343 (43.7)
Throat swab	129 (83.8)	1528 (52.3)	1657 (53.9)
Penile swab	107 (69.5)	1428 (48.9)	1535 (49.9)
Urine sample	137 (89.0)	2036 (69.7)	2173 (70.7)
Syphilis blood test	138 (89.6)	1849 (63.3)	1987 (64.6)
<b>Any STI screening</b>	<b>147 (95.5)</b>	<b>2329 (79.8)</b>	<b>2476 (80.6)</b>
<b>Comprehensive STI screening</b>	<b>118 (76.6)</b>	<b>1132 (38.8)</b>	<b>1250 (40.7)</b>

# Results: Testing History



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Characteristic	HIV positive (n=109)		HIV negative or unknown (n=1504)		Total (n=1613)	
	n	(%)	n	(%)	n	(%)
Place Last Screened						
My regular GP	22	(20.2)	582	(38.7)	604	(37.4)
Another GP	0	(0.0)	49	(3.3)	49	(3.0)
Sexual Health Clinic	37	(33.9)	578	(38.4)	615	(38.1)
NZAF Clinic	3	(2.8)	130	(8.6)	133	(8.2)
HIV Clinic	27	(24.8)	25	(1.7)	52	(3.2)
Somewhere Else	6	(5.5)	84	(5.6)	90	(5.6)
Missing/Unknown	14	(12.8)	56	(3.7)	70	(4.3)
Symptoms History						
Had symptoms	23	(21.1)	212	(14.1)	235	(14.6)
No symptoms	77	(70.6)	1208	(80.3)	1285	(79.7)
Don't remember	4	(3.7)	58	(3.9)	62	(3.8)
Missing	5	(4.6)	26	(1.7)	31	(1.9)



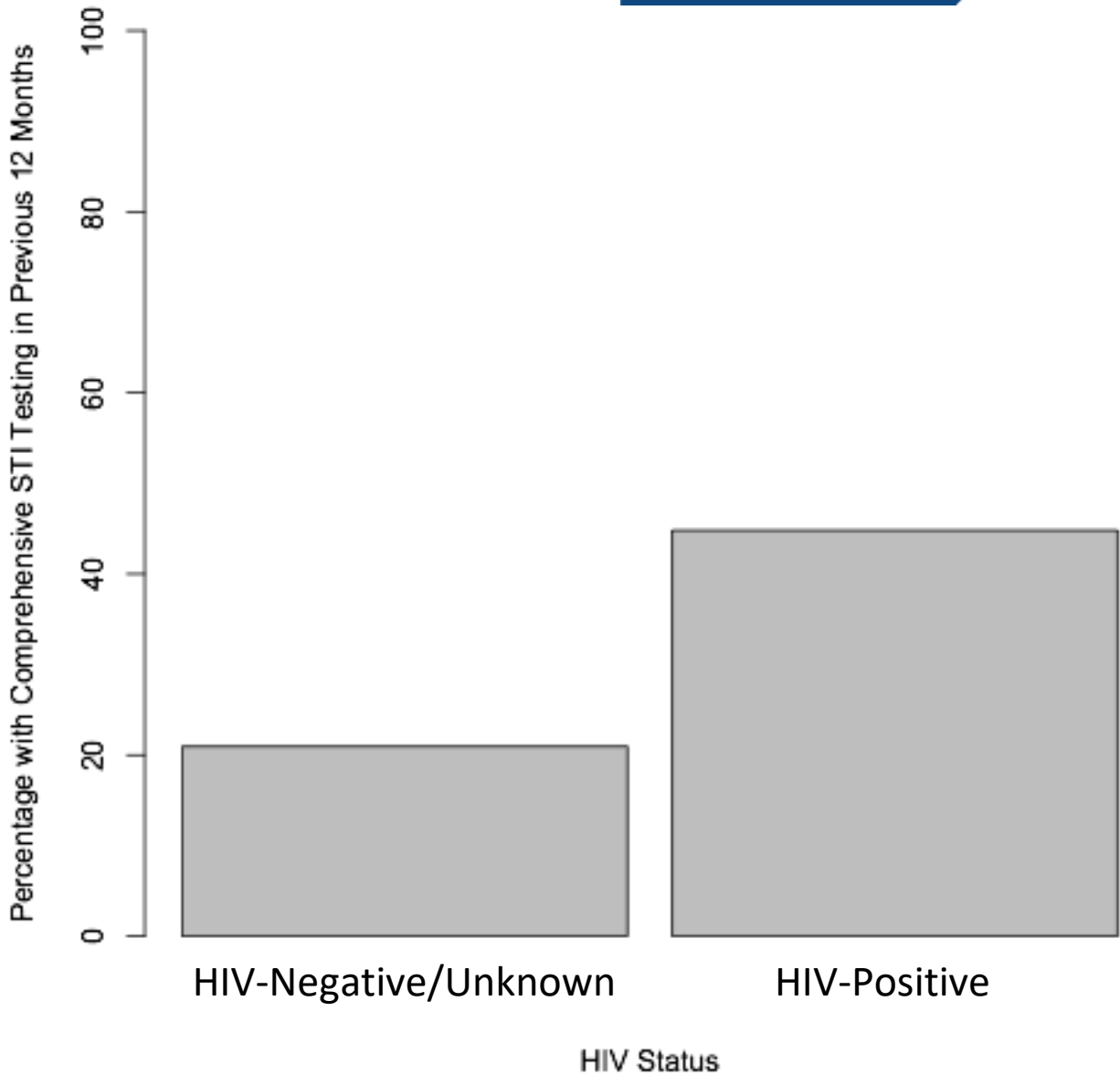
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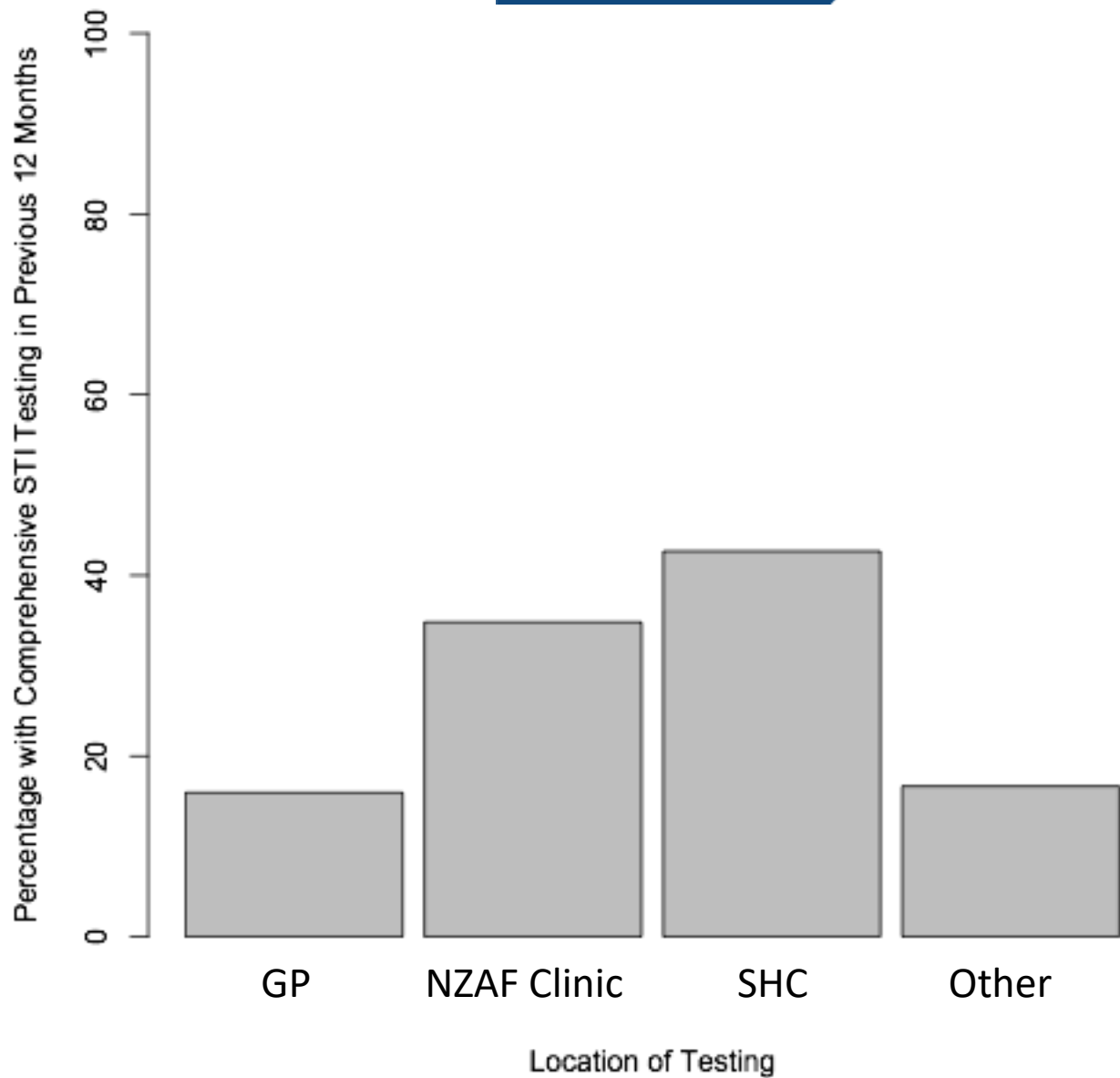
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# Results: Recent CSS



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**UPTIGHT  
MEDICAL  
CLINIC**

'WE TREAT  
THE WHOLE PERSON,  
EXCEPT  
SEXUAL STUFF'

UPTIGHT  
MEDICAL

*edgar*

# Results: Multivariate Model CSS Ever



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Characteristic	Comprehensive STI Check-Up ever
Age Group	
Under 30	0.96 (0.77-1.21)
30-44	Ref
More than 45	0.53 (0.41-0.69)
HIV Positive	2.10 (1.44-3.07)
Any Anal Sex	
No	Ref
Yes	1.83 (1.17-2.89)
Number of Male Partners	
None	0.66 (0.32-1.33)
1	0.65 (0.44-0.94)
2-10	Ref
11-20	1.53 (1.21-1.93)
More than 20	1.85 (1.33-2.57)
GP Know Sexual Identity	
Yes	Ref
No	0.36 (0.28-0.46)
Not Sure	0.51 (0.39-0.67)
Site	
Big Gay Out	Ref
Bars	1.37 (0.82-2.22)
Online	0.79 (0.64-0.98)
Sauna/SOS	0.70 (0.43-1.10)
Safe Sex with Casual Partner	
No anal sex with casual partner	Ref
Anal sex some unprotected	1.83 (1.12-3.05)
Anal sex 100% Protected	1.71 (1.06-2.84)
No casual sex	1.45 (0.87-2.44)
Ethnicity	
European	Ref
Asian	0.91 (0.65-1.25)
Maori	0.76 (0.54-1.05)
Pacific	0.52 (0.27-0.93)
Other	1.24 (0.77-1.95)

# Summary



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- **\*Older GBM are less likely** to report a CSS than GBM 30-44
- **\*GBM who reported anal sex are more likely** to reporting a CSS than GBM who reported no anal sex
- **\*As the number of male partners increase**, so too do the odds for CSS
- **\*HIV-positive GBM have more than twice the odds** of reporting CSS than HIV-negative/unttested GBM
- **\*Online participants are less likely** to report CSS than GBM recruited at venues
- **\*Pacific GBM are less likely** to report CSS than European GBM

\*multivariable model adjusted for: age, HIV status, reported anal sex, number of partners, GP knowledge, site recruitment, sex with casual partner, and ethnicity

# Summary



**MEDICAL AND  
HEALTH SCIENCES**

- **\*Nearly 80% of GBM are not meeting CSS guidelines. (Only half reported any STI test or treatment in previous 12 months and only 22% reported CSS)**
- **\*Many high-risk GBM report inadequate screening**
  - A reflection of access to/offer by health system?
- **\*Encourage more frequent STI screening among GBM**
- **\*Concern that CSS is not as common in primary care**
  - PrEP rollout continues to rely on primary care for adequate scale up

# Limitations



- **Self-reported** data, incomplete with regards to frequency of sexual contact
- Participating GBM **may not be representative** of larger GBM population
- **True prevalence of STIs** among GBM will likely be higher as asymptomatic GBM may not report receiving a CSS
  - HIV positive GBM report receiving CSS and are more likely to engage in high risk behaviours than HIV negative GBM
- **Data from 2014—prior to PrEP/U=U in NZ**
- **Unknown response rate**

# THANKS!

## MoH Funding



## Fellowship and Staff



New Zealand AIDS Foundation  
Te Tūāwhiri Māori Arahore o Aotearoa

**GAPSS/GOSS Participants &  
Venue Operators**

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