Trends in late-diagnosis of HIV among gay, bisexual and other men who have sex with men in Melbourne

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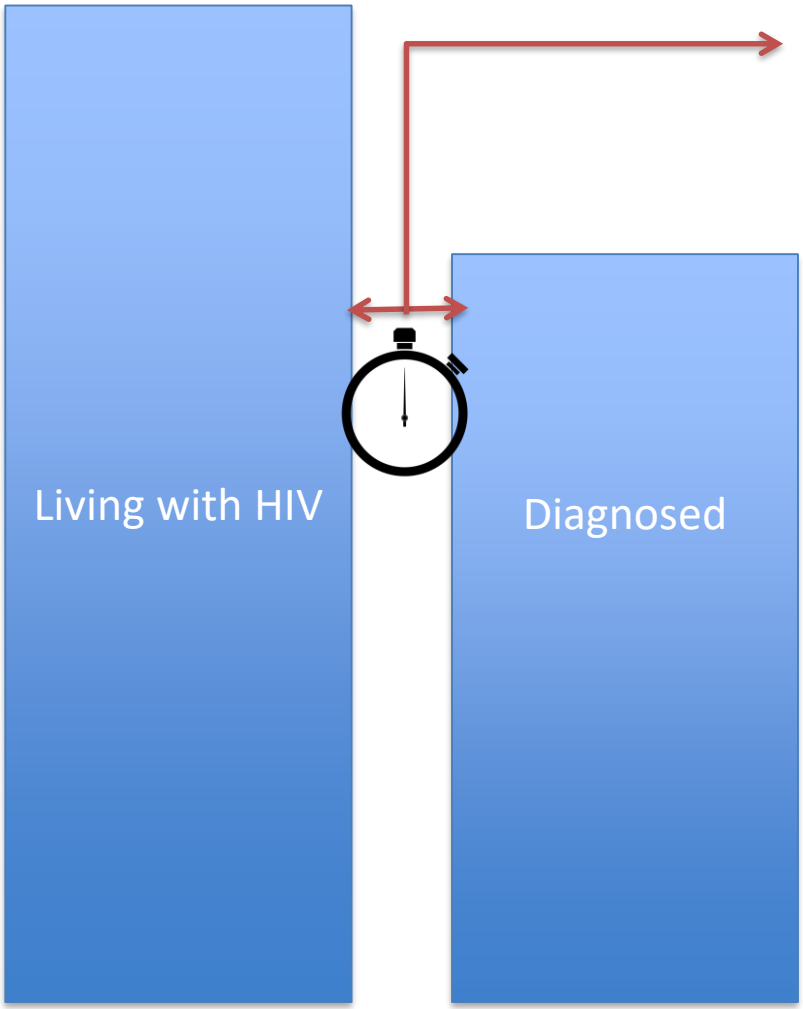
Background



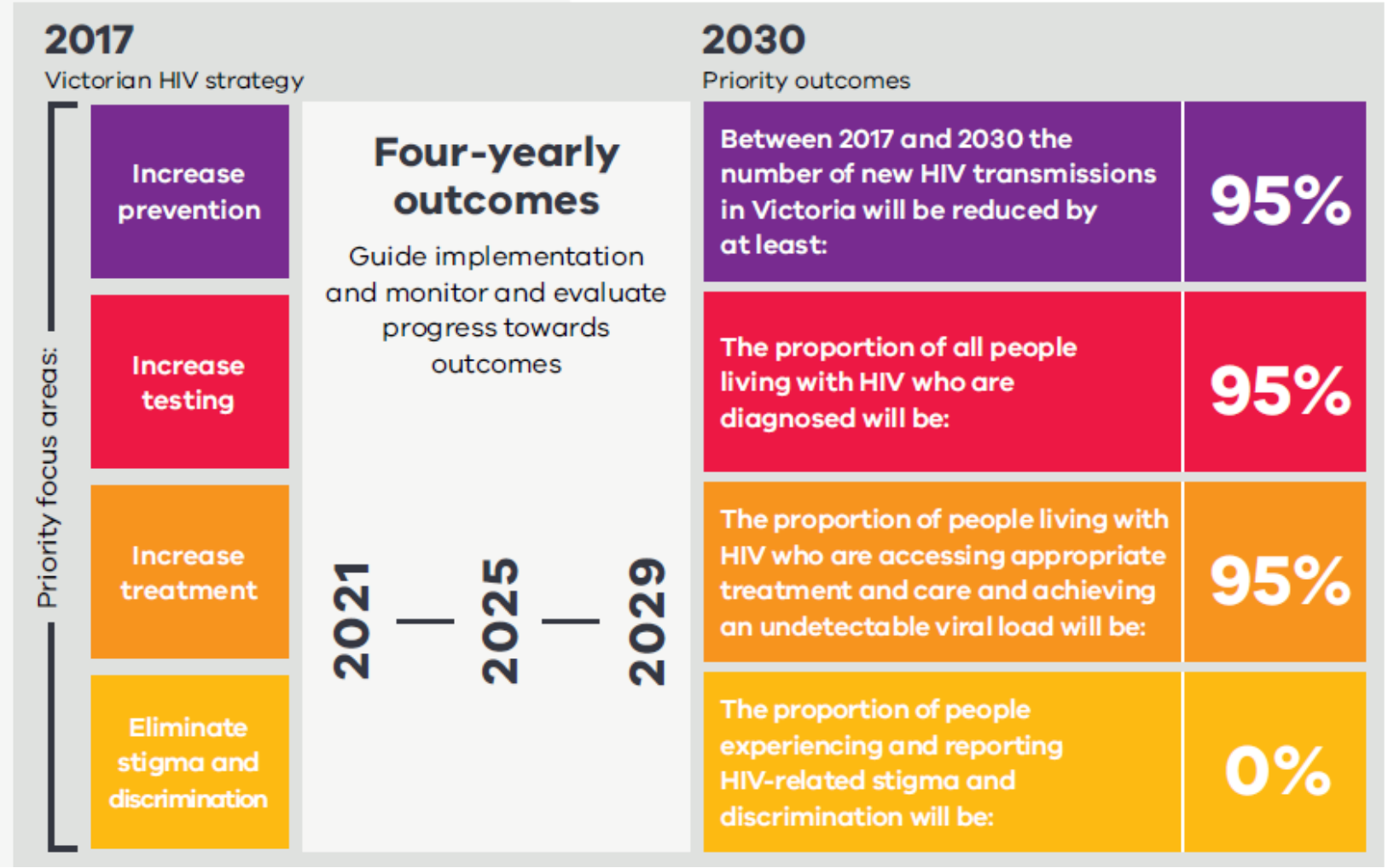
Undiagnosed HIV is associated with:

- Increased transmission risk
- Late diagnosis of HIV delays access to linkage to care and treatment and can increase morbidity.

Treated & Virally Suppressed

Background

- Victorian HIV Strategy

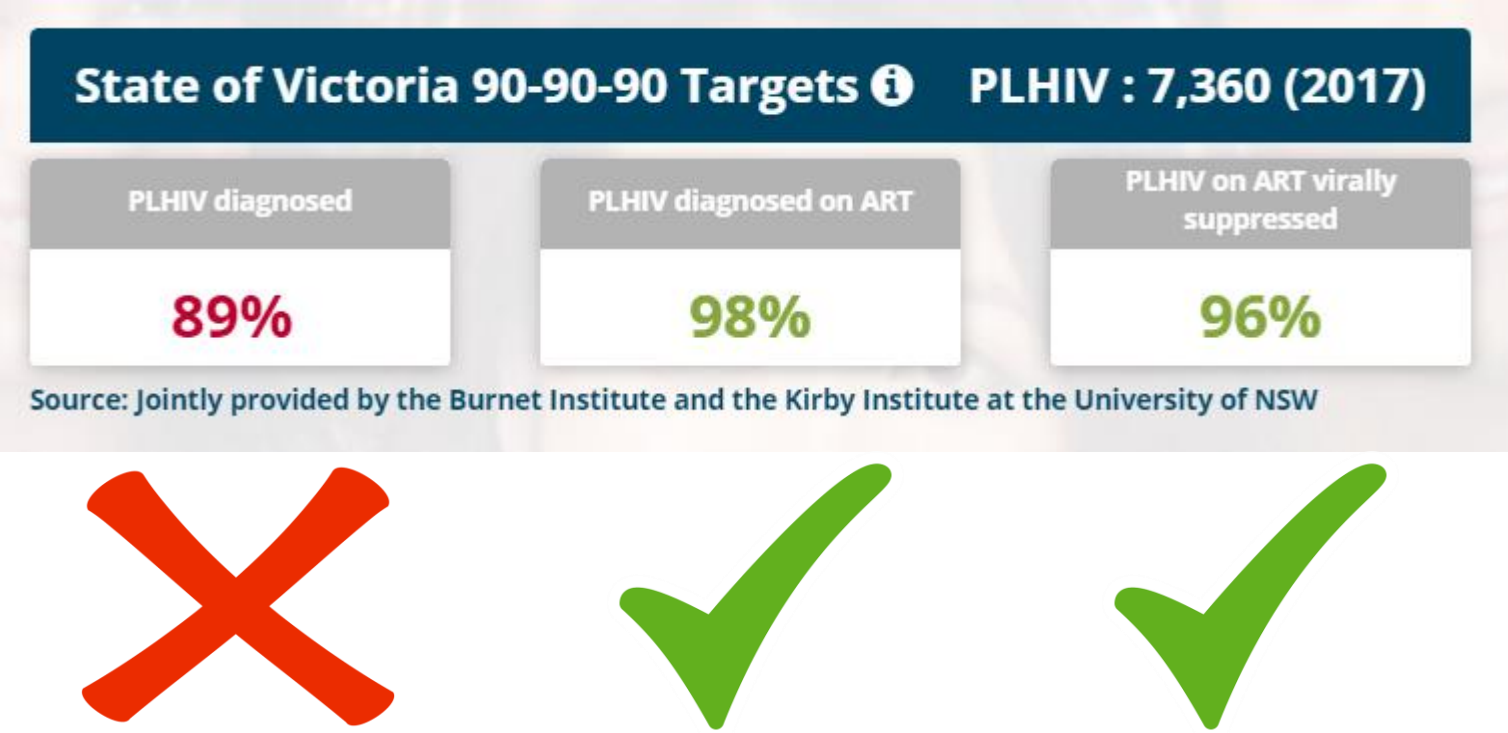


Background

- Programmatic response in recent years has brought in many novel strategies to engage priority populations in routine and more frequent screening:

- Rapid testing services (PRONTO!)
- Simplified results provision (SMS)
- Community social marketing
- HIV self-testing
- PrEP roll-out

Background – Progress on targets



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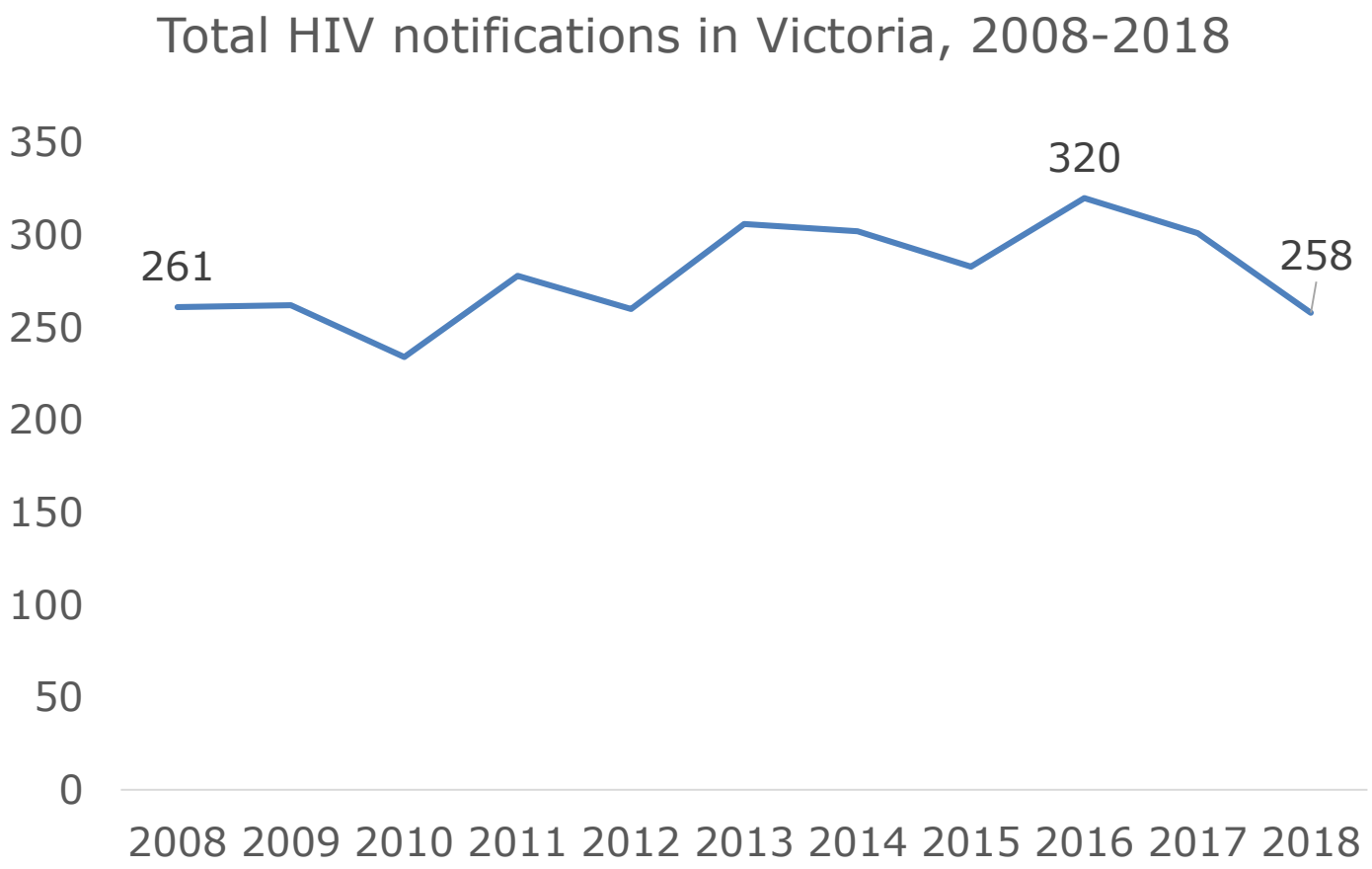
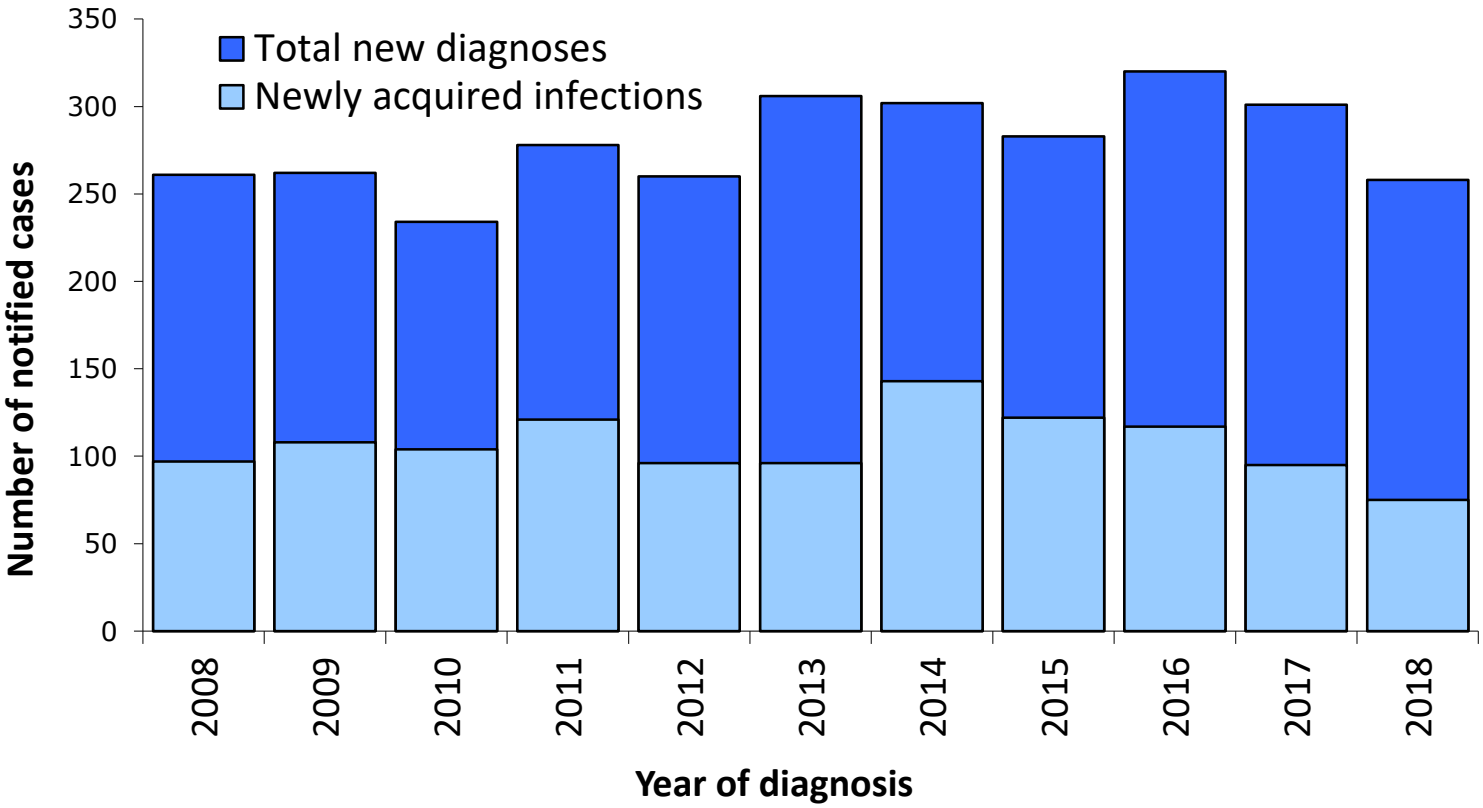

Total HIV notifications in Victoria, 2008-2018
350
300
250
200
150
100
50
0
261
320
258
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Background – Timeliness of diagnosis in Victoria



- Passive data relies heavily on having testing history
- Changes in reporting of Western Blot, makes interpretation post-2015 difficult
- Completeness of CD4 data at diagnosis within passive is patchy pre 2017

Objective

- Assess trends over time in the proportion of new diagnoses among GBM in Victoria that are late

- Examine whether individuals diagnosed late with HIV differ from those not late in the time required to achieve viral suppression.

Methods

The Australian Collaboration for Coordinated Enhanced Sentinel Surveillance of Blood Borne Viruses and Sexually Transmitted Infections (ACCESS):

- National sentinel surveillance system for HIV, hepatitis B, hepatitis C, and STIs (chlamydia, gonorrhoea, syphilis)
- Routinely collects de-identified health record data (e.g., testing, treatment) across clinical services and pathology laboratories
- Though de-identified, GRHANITE extraction software's hashing allows linkage across participating sites

Methods

- Linked HIV diagnostic, CD4 and viral load tests extracted from 13 clinical services in Victoria

Inclusion criteria:

- GBM diagnosed at three high caseload general practices and one peer-led community HIV testing service in Melbourne between January 2013 and December 2018
- Having a CD4 result from any clinical service in ACCESS within 90 days of diagnosis;
- Having a VL result following diagnosis

Late diagnosis:

- Defined as a CD4 result of < 350 cells/uL, without evidence of a negative HIV test in the previous 12 months

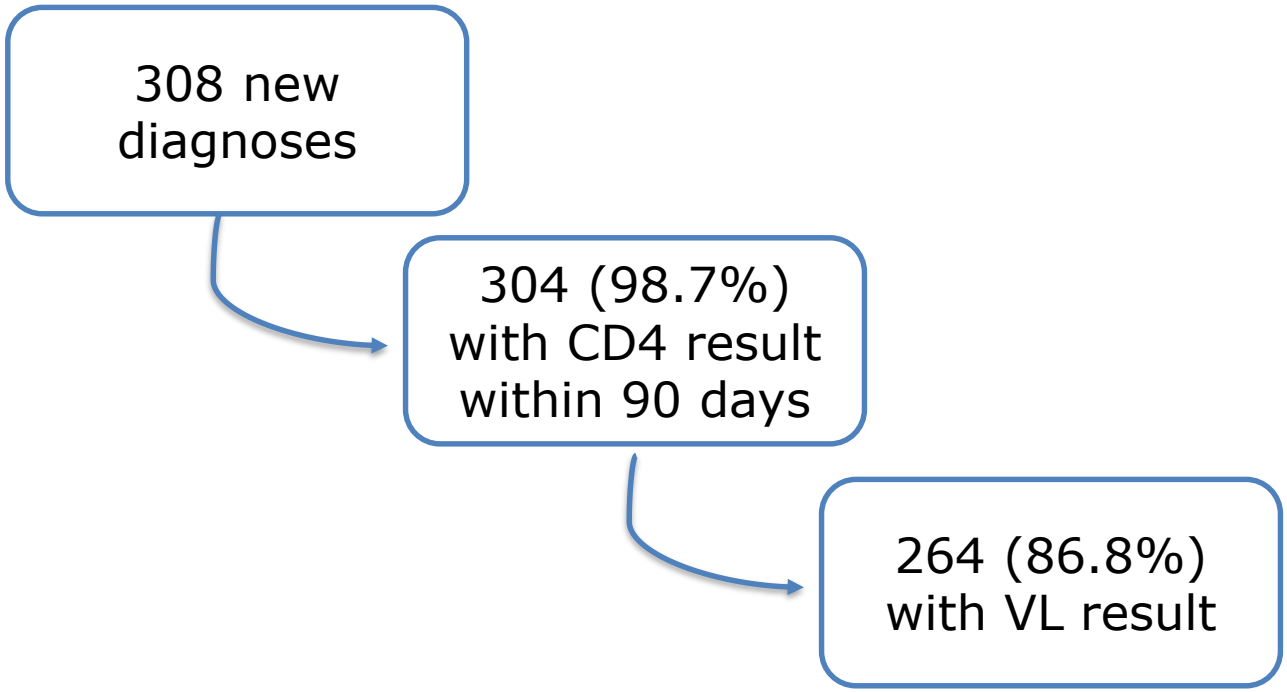
Methods

- We described annual proportion of new HIV diagnoses that are ‘late’ and the median CD4 at diagnosis over time

- We assessed trend in late diagnosis of HIV over time, using Poisson test for trend

- We calculated the median time (in days) from HIV diagnosis to first viral load result <200 copies/mL. We assessed difference between groups using Fisher’s exact tests.

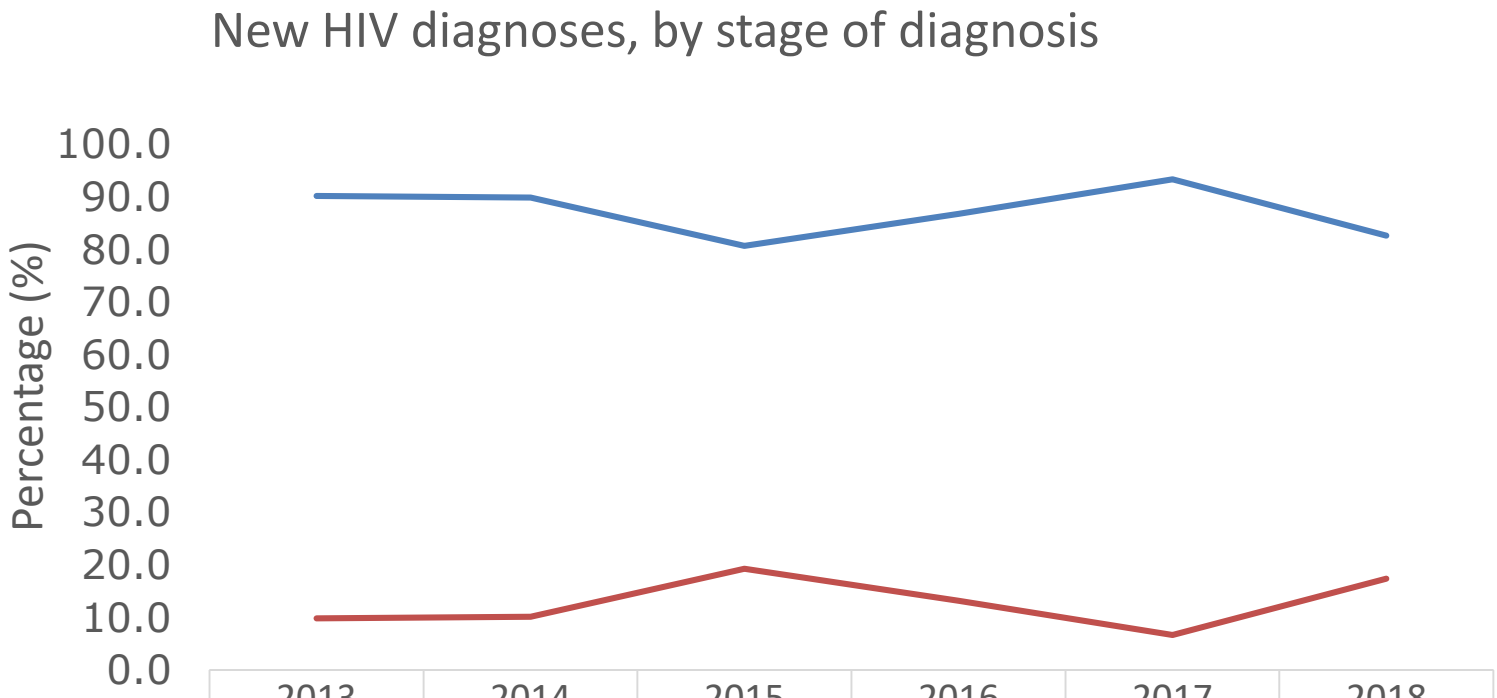
Results


308 new diagnoses
304 (98.7%) with CD4 result within 90 days
264 (86.8%) with VL result

Results

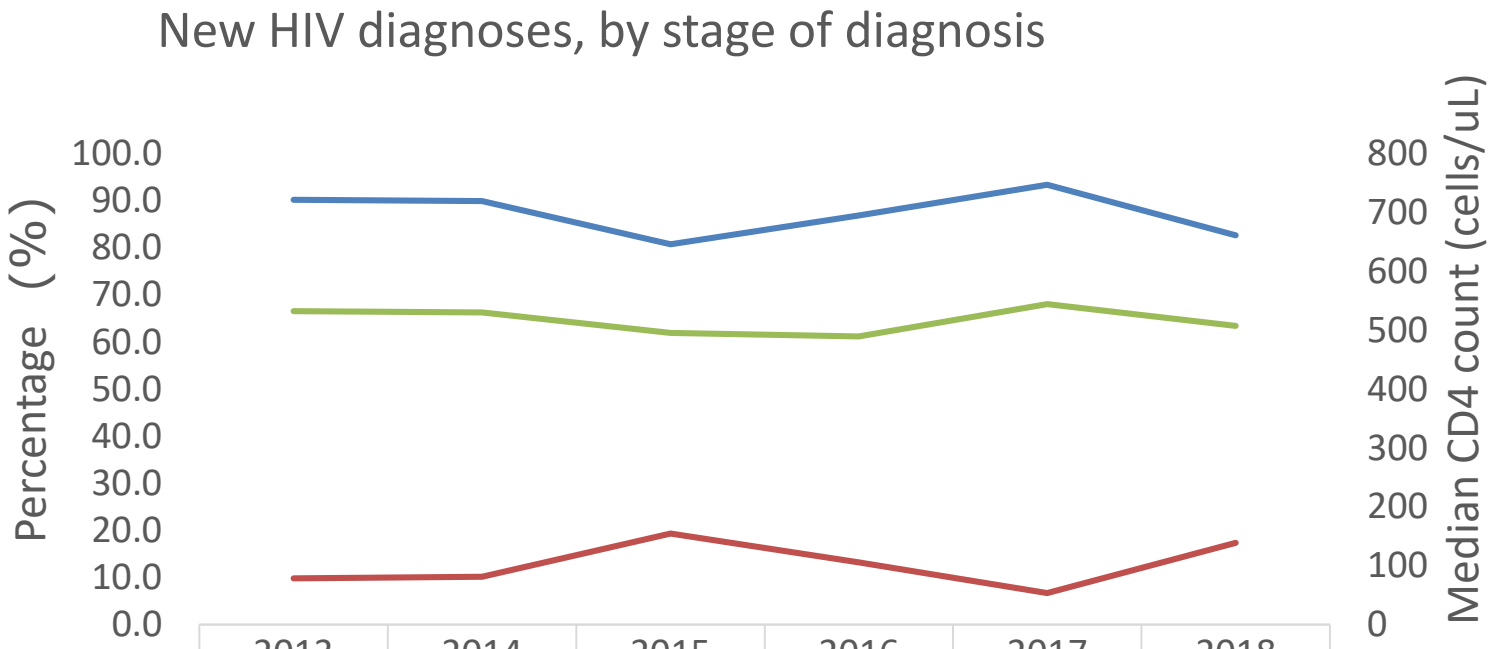
	Late Diagnoses n (%)	**Not Late Diagnoses** n (%)
Age (median, IQR)	34 (28-46)	34 (29-42)
Born in Australia		
Yes	12 (38.7)	157 (71.4)
No	19 (61.9)	63 (28.6)
Diagnosing clinic type		
General practice	26 (68.4)	236 (88.7)
Community service	12 (31.6)	30 (11.3)

Results



	2013	2014	2015	2016	2017	2018
'Not late' diagnoses	90.2	89.9	80.7	86.8	93.3	82.6
Late diagnoses	9.8	10.1	19.3	13.2	6.7	17.4

Results



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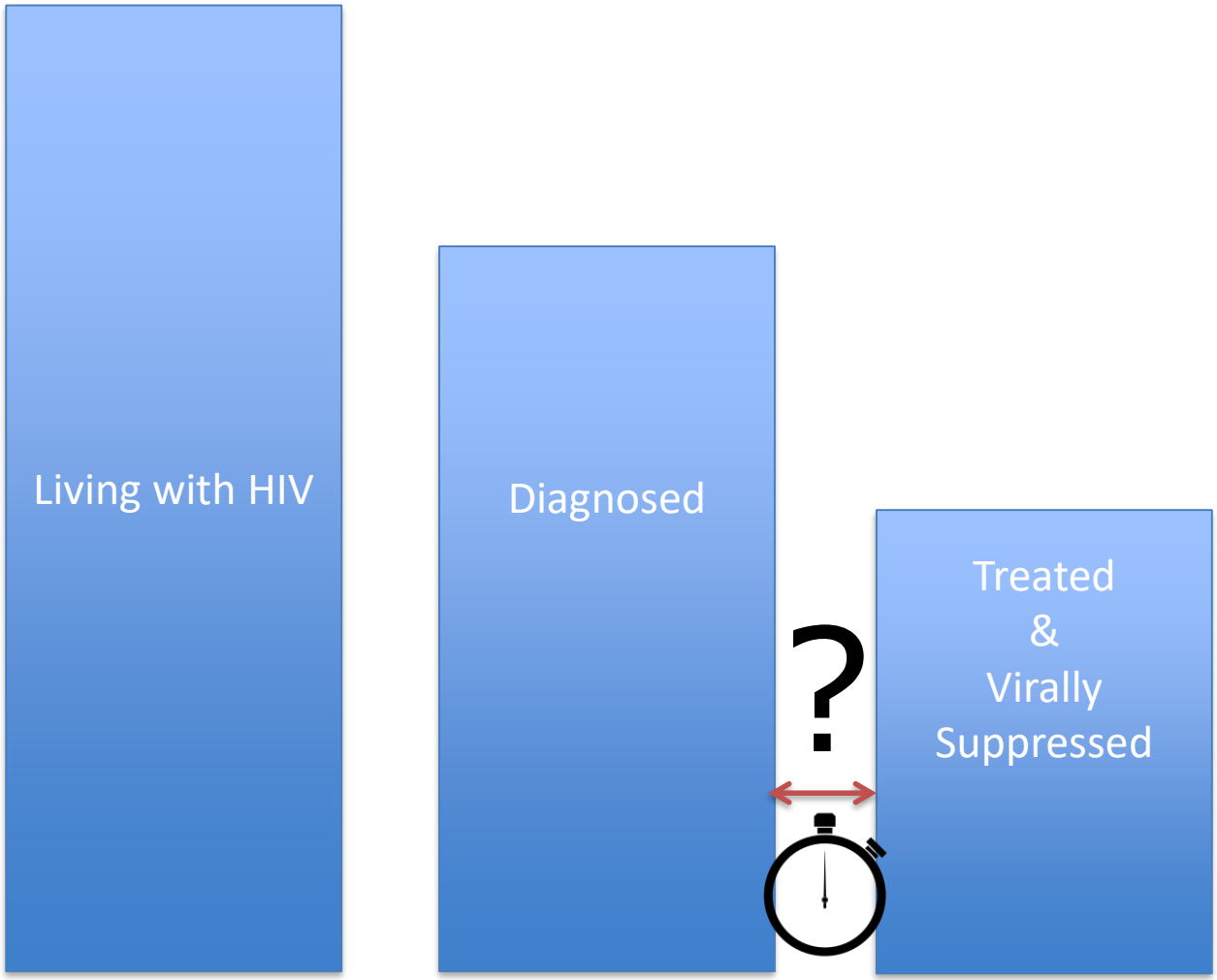
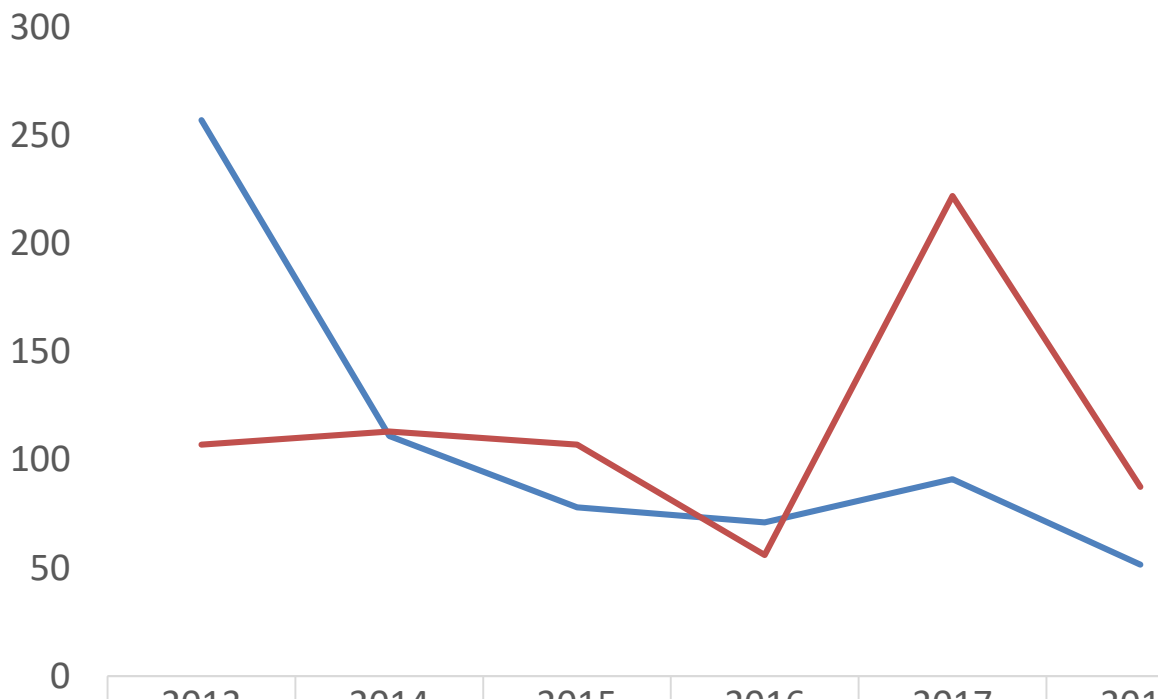
Median CD4 at diagnosis	532	530	495	489	544	507


Living with HIV
Diagnosed
?
Treated
&
Virally
Suppressed

Results



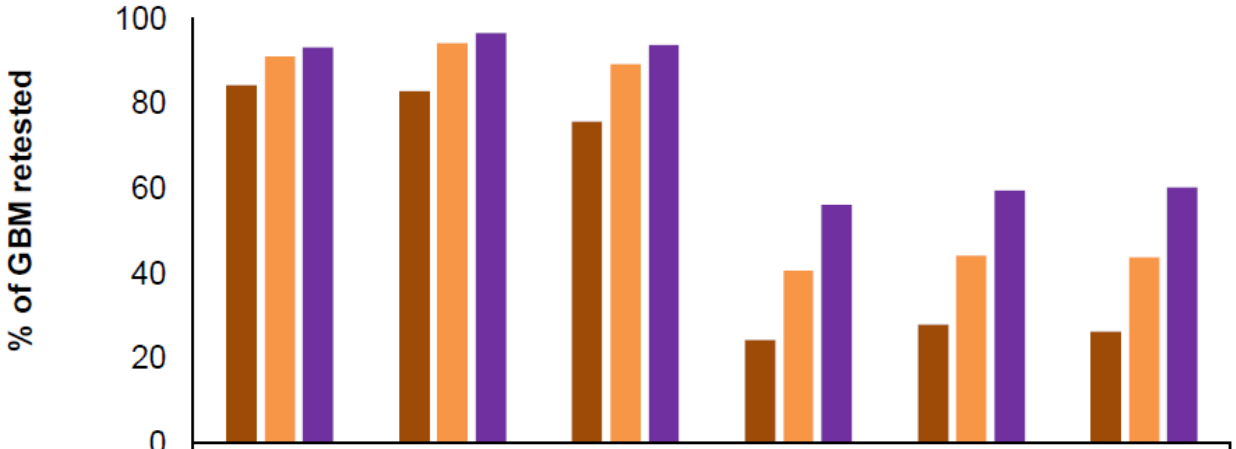
	2013	2014	2015	2016	2017	2018
'Not late' diagnoses	257	111	78	71	91	52
Late diagnoses	107	113	107	56	222	88
Number of 'not late' diagnoses	55	63	47	46	29	19
Number of late diagnoses	6	7	11	7	2	4

Discussion

- Late diagnosis was more common among GBM born overseas and in public/community-based services.
- Suggestive of structural or financial barriers to accessing routine and frequent testing among this group.
- Need innovative models of care and community health promotion to help remove barriers and increase knowledge and motivation for routine and frequent screening.
- Encouragingly, late diagnosis was not associated with poor outcomes related to time to viral suppression, suggesting much focus needs to be made on ensuring testing is accessible to all.

Discussion

- Persistent proportion of late diagnosis of HIV among GBM in clinics that service an engaged proportion of the community.



	GBM on PrEP			GBM not on PrEP		
Retested within 3 months (%)	84	83	76	24	28	26
Retested within 6 months (%)	91	94	89	41	44	44
Retested within 12 months (%)	93	97	94	56	60	60

Source: ACCESS

Discussion

- Late diagnosis likely far more common outside of this network, and increasingly more notifications in Victoria occurring outside of high caseload.

- Need to ensure testing strategies continue to focus on GBM not on PrEP and those who may experience additional barriers to testing (e.g. Medicare-ineligibility).

Acknowledgements

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