

NSW HIV Strategy 2016 – 2020

Quarter 3 2018

Data Report



The NSW HIV Strategy 2016-2020

The *NSW HIV Strategy 2016-2020* continues the NSW Government's commitment to achieving the virtual elimination of HIV transmission in NSW by 2020, and sustaining the virtual elimination of HIV transmission in people who inject drugs, sex workers and from mother to child. The Strategy refines our efforts across prevention, testing and treatment, building on the actions that have proven successful in implementing the *NSW HIV Strategy 2012-2015* and prioritising the additional activities needed to end HIV transmission in NSW, including expanding access to PrEP for people at a high risk of HIV and the rapid initiation of HIV treatment.

To achieve this goal the Strategy focuses on:

- Sustaining the central role of condoms in preventing the transmission of HIV
- Reducing sharing of injecting equipment among people who inject drugs by 25%
- Assessing all people attending public sexual health services and high caseload general practices for PrEP eligibility
- Facilitating testing of all recent sexual and injecting partners of people newly diagnosed with HIV
- Increasing the frequency of HIV testing in priority populations in accordance with risk
- Strengthening service integration and models of care to deliver HIV testing in our priority settings
- Strengthening systems and service integration for HIV prevention, diagnosis and management for Aboriginal people at risk
- Increasing the proportion of people with diagnosed HIV on ART to 95%
- Ensuring 90% of people newly diagnosed with HIV are on ART within 6 weeks of diagnosis in 2016 and to further reduce this timeframe over the life of the Strategy
- Further strengthening systems for timely collection and reporting of data to monitor progress, report outcomes and determine additional focus

The Strategy identifies the range of key settings needed for action including publicly funded sexual health services, general practice and primary care, Aboriginal Community Controlled Health Services, NSW needles and syringe program outlets, antenatal care services, drug and alcohol services, mental health services and emergency departments.

The activities NSW Health is engaged in to meet the Strategy goals and targets is summarised in the [NSW HIV Snapshot](#). To monitor progress against the Strategy goals and targets, a range of data sources are monitored and reported against via this quarterly data report. Detailed information on NSW residents newly diagnosed with HIV up to 2013 is available in the [NSW HIV 2013 Epidemiological Report](#).

Key messages

NSW continues to make progress towards the virtual elimination of HIV transmission

Between January and September 2018, 191 NSW residents were newly diagnosed with HIV. This number is 23% fewer than the average for the same period of the previous five years.

Thirty-eight per cent of the new HIV notifications were diagnosed in early stage of infection (within 12 months of diagnosis), which is 32% fewer than the average for the same period of the previous five years.

This decline in HIV notifications in the context of high HIV testing and treatment rates, and high uptake of HIV pre-exposure prophylaxis (PrEP) suggests that HIV transmission in NSW is decreasing.

New diagnoses in overseas-born men who have sex with men (MSM) are higher than in Australian-born MSM

The majority of newly diagnosed MSM in January to September, 2018 were born overseas (58%; n=88), highlighting the need to continue to target this population group. However, the number of new diagnoses in overseas-born MSM was 7% fewer than the previous five year average, which is a promising sign.

By contrast, the number of new diagnoses in Australian-born MSM fell by 40% in the same period.

Diagnoses in late and advanced stages of infection reflect the divergent NSW HIV epidemic

Delayed diagnosis prevents timely treatment uptake, which can lead to avoidable HIV-related illness and transmission. Thirty-six per cent (n=32) of overseas-born MSM diagnosed with HIV in January to September, 2018 had late or advanced stage infection. This number is 19% more than the average number for the same period of the previous five years (n=27).

Twenty-eight per cent (n=18) of Australian-born MSM diagnoses between January and September, 2018 were made in late or advanced stage of infection, 18% fewer than the previous five year average for this period (n=22).

Although the number of HIV tests provided in NSW continues to increase, testing rates must improve in all groups at risk of HIV. Between January and September 2018, over two thirds of newly diagnosed MSM had not had a HIV test in the 12 months prior to being diagnosed.

The number of diagnoses in people with heterosexual risk exposure is stable

Thirty four people with heterosexual risk exposure were newly diagnosed with HIV in January to September, 2018. This number makes up 17% of all new diagnoses.

NSW will strengthen efforts to better target testing, and support equitable access to PrEP

The continued fall in the number of new diagnoses in Australian-born MSM, and the promising decreasing trend in overseas-born MSM diagnoses reflects the joint efforts of all NSW partners in the HIV response, and availability of combination prevention strategies.

Publicly funded sexual health centres are collecting further information on all newly diagnosed people to better inform strategies to prevent HIV infection, and increase testing of those at high-risk.

NSW Health is working with general practice to ensure people at risk of HIV have ongoing and equitable access to PrEP in NSW.

Coordinated state-wide efforts are also working to better target people who do not engage with conventional testing and prevention services, including overseas born MSM, MSM who do not identify as gay or bisexual, and men who have sex in countries with higher HIV prevalence.

Key data

HIV INFECTIONS	Target group	Jul-Sep 2018	Compared with Apr-Jun 2013-2017 average
Number of NSW residents newly diagnosed	All new diagnoses	60	27% less (av. n=82.4)
	MSM	45	34% less (av. n=67.8)
	Australian-born MSM	23	30% less (av. n=32.8)
	Overseas-born MSM	22	37% less (av. n=35.0)
	Heterosexuals	12	2% less (av. n=12.2)
Number of new diagnoses with evidence of early stage infection	All new diagnoses	20	44% less (av. n=35.4)
	MSM	15	54% less (av. n=32.8)
	Australian-born MSM	13	25% less (av. n=17.4)
	Overseas-born MSM	2	87% less (av. n=15.4)
Number all new diagnoses with evidence of late diagnosis	All new diagnoses	23	26% less (av. n=31.2)
PREVENT	Target group	Mar 2016 –Apr 2018	
Number of people receiving PrEP through EPIC-NSW	People in NSW at high risk of HIV infection	9,415	
TEST	Target group	Jul–Sep 2018	Compared with Jul–Sep 2017
Number of HIV serology tests performed in NSW	All	149,641	4% more (n=143,220)
Number of HIV tests performed in NSW public sexual health clinics, and priority LHD settings	All	15,635	3.5% more (n=15,111)
Number of DBS tests (Nov 2016 - Sep 2018)		947 (5 HIV positive)	
TREAT	Target group	Jul–Sep 2018	Target
Proportion of patients with diagnosed HIV infection in care, who were on treatment	Sexual Health and HIV Clinic attendees	97%	95%
	Select high and medium caseload general practices	98%	95%
Proportion of NSW residents newly diagnosed with HIV who initiated ART within four and six weeks of diagnosis	Newly diagnosed Jan-Mar 2018 (n=71)	61% < 4 weeks 85% < 6 weeks	>90%
Proportion of NSW residents newly diagnosed who were reported to be virally suppressed (VL < 200 copies/mL) at 6-month follow-up	NSW residents Jan-Mar 2018 (n=71)	91%	100%

1. Table of Contents

1	Reduce HIV transmission	7
1.1	How many cases are notified?	7
1.2	What is the stage of infection at diagnosis?	12
1.3	What are some of the characteristics of people newly diagnosed?	16
2	Expand HIV Prevention	19
2.1	Who is accessing PrEP through EPIC-NSW?	19
2.2	What is the prevalence of STIs among EPIC-NSW participants?	22
2.3	How many people in NSW are on PrEP?	24
2.4	How many men who have sex with men use condoms and other HIV risk reduction practices?	25
2.5	Community mobilisation “Ending HIV”	26
2.6	How accessible is the Needle and Syringe Program in NSW?	26
2.7	What proportion of people re-use other people’s needles and syringes (receptive syringe sharing) in NSW?	26
3	Increase HIV testing frequency	27
3.1	Is HIV testing increasing in NSW?	27
3.2	What are the HIV testing patterns in NSW?	31
3.3	How is testing being made more accessible?	36
4	Increase HIV Treatment	37
4.1	How many people in NSW are on antiretroviral therapy?	37
4.2	Is the proportion of people on antiretroviral treatment coverage increasing in NSW?	39
4.3	How quickly are people newly diagnosed with HIV commencing antiretroviral therapy and achieving undetectable viral load in NSW?	42
	Appendix A: Data Sources	45
	Appendix B: Characteristics of NSW residents notified with newly diagnosed HIV infection 1981 to 30 September 2018 (continues over page) Data extracted from NCIMS, Health Protection NSW, 2 November 2018.	48
	Appendix C: Demographic profile of participants who participated in EPIC study.	50
	Appendix D: Ending HIV Seven Statements Evaluation, ACON 2013-2018.	51

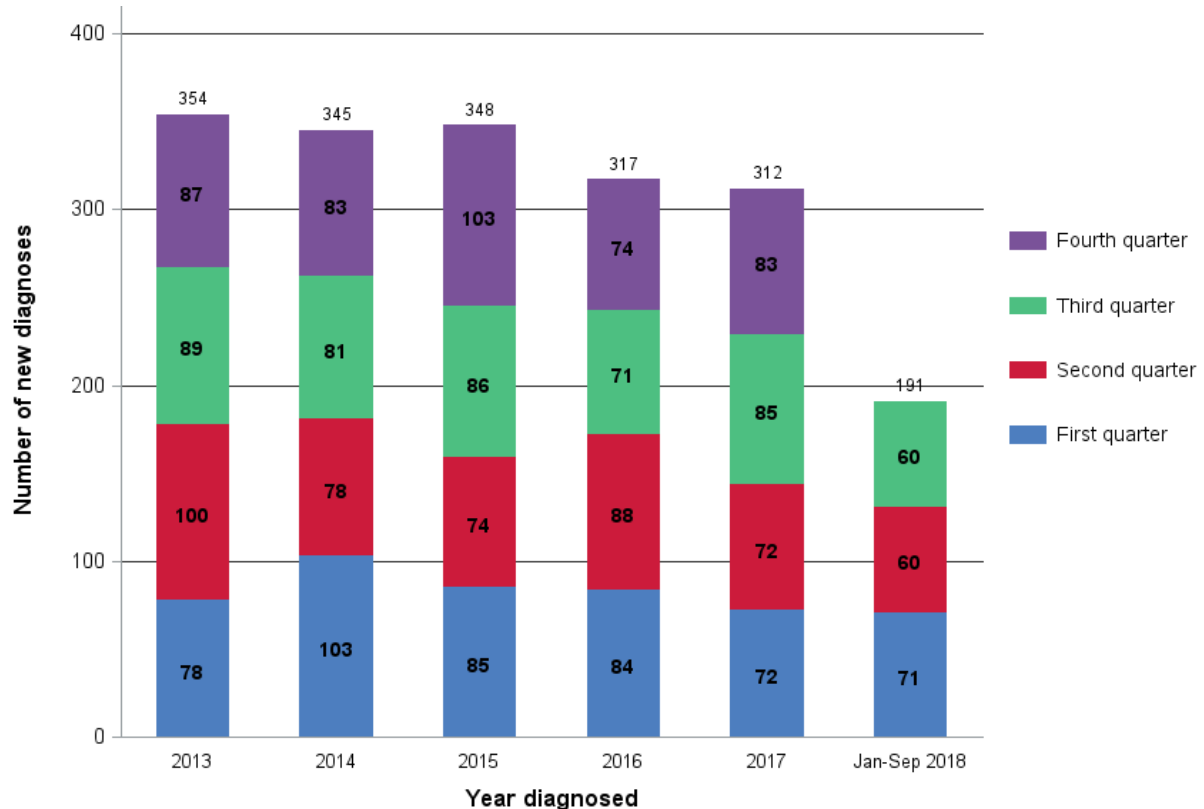
Glossary of Terms

ART	Antiretroviral therapy
CAIC	Condomless anal intercourse with casual partners
GBM	Gay and bisexual men
HIV	Human Immunodeficiency Virus
LHD	Local Health District
MSM	Men who have sex with men
NSP	Needle and syringe program
NSW	New South Wales
PBS	Pharmaceutical Benefits Scheme
PFSHC	Publicly Funded Sexual Health Clinic
PrEP	Pre-exposure prophylaxis
PWID	People who inject drugs
Quarter 1 / Q1	1 January – 30 March
Quarter 2 / Q2	1 April – 30 June
Quarter 3 / Q3	1 July – 30 September
Quarter 4 / Q4	1 October – 31 December
SGCPS	Sydney Gay Community Periodic Survey
SVHN	St Vincent's Health Network

1. Reduce HIV transmission

1.1 How many cases are notified?

Figure 1: Number of NSW residents with newly diagnosed HIV infection in January 2013 to September 2018



Source: Notifiable Conditions Information Management System Health Protection NSW, out 2 November 2018

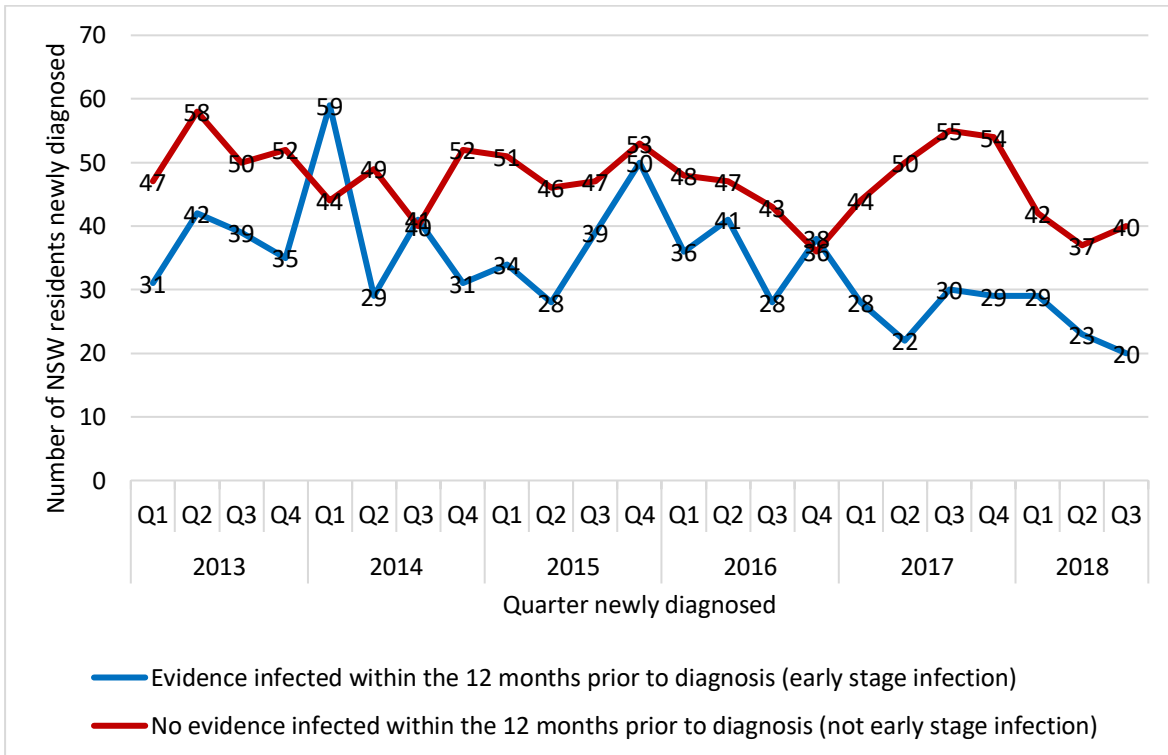
In July to September (Q3) 2018:

- Sixty NSW residents were notified to NSW Health with newly diagnosed HIV infection, 27 per cent (%) fewer than the Q3 2013-2017 average of 82.4 (Figure 1).
- Of 60, 20 (33%) had evidence their infection was acquired within one year of diagnosis (early stage infection), 44% less than the Q3 2013-2017 average of 43.5 (Figure 2).
- Forty-five (75%) were men who have sex with men (MSM) and twelve (20%) acquired HIV via hetero-sex (Figure 3). This is 34% fewer MSM, but a similar number of heterosexuals compared with the new diagnoses averages of Q3 2013-2017 (av. n MSM = 67.8; av. n heterosexuals = 12.2).

In January to September 2018:

- One hundred and ninety-one NSW residents were notified to NSW Health with newly diagnosed HIV infection, 23% fewer than the January to September 2013-2017 average of 249.2 (Figure 1).
- Of 191, 72 (38%) had evidence of early stage infection, 32% less than the January to September 2013-2017 average of 105.4 (Figure 2).
- Of 191, 152 (80%) were MSM, 34 (18%) acquired HIV via hetero-sex, three (<2%) via injecting drugs and two (<1%) via another exposure. This is 24% fewer MSM and 15% fewer heterosexuals compared with the new diagnoses averages of January to September 2013-2017 (av. n MSM = 201.0; av. n heterosexuals = 40.2) (Figure 3).

Figure 2: New diagnoses January 2013 to September 2018 by evidence infected within 12 months of diagnosis



Early stage infection: a sero-conversion like illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or presentation with an AIDS defining illness at diagnosis

Figure 3: New diagnoses January 2013 to September 2018 by reported HIV risk exposure

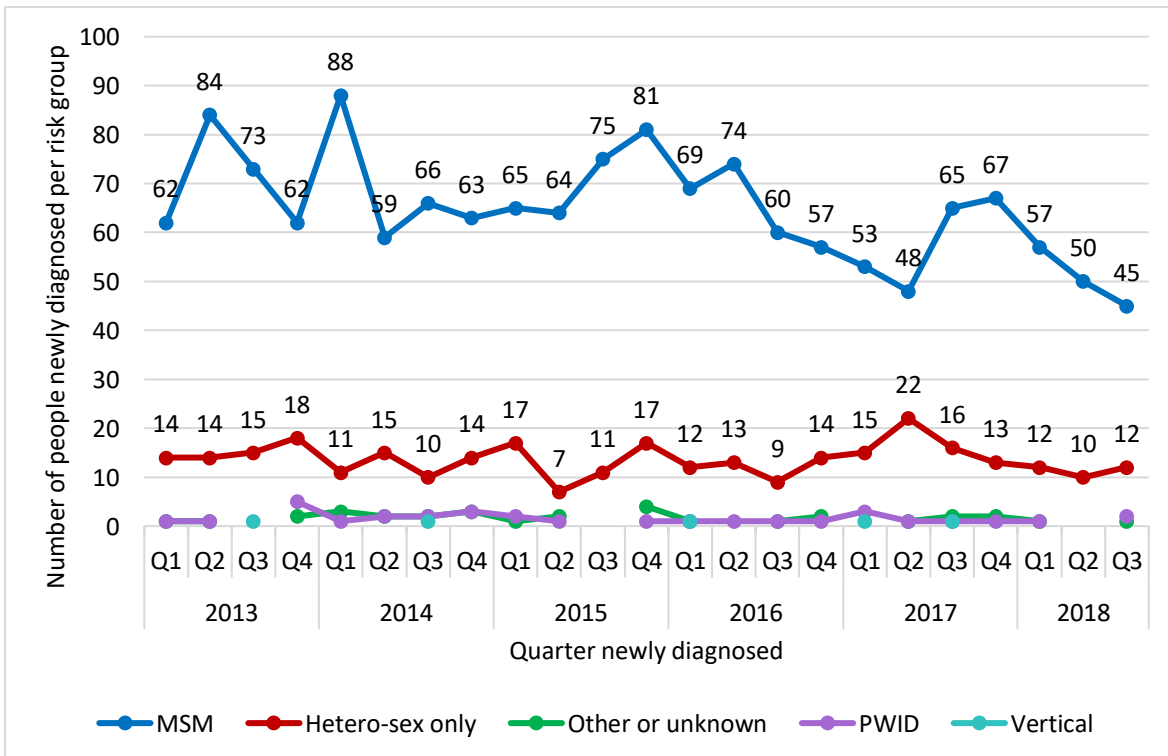
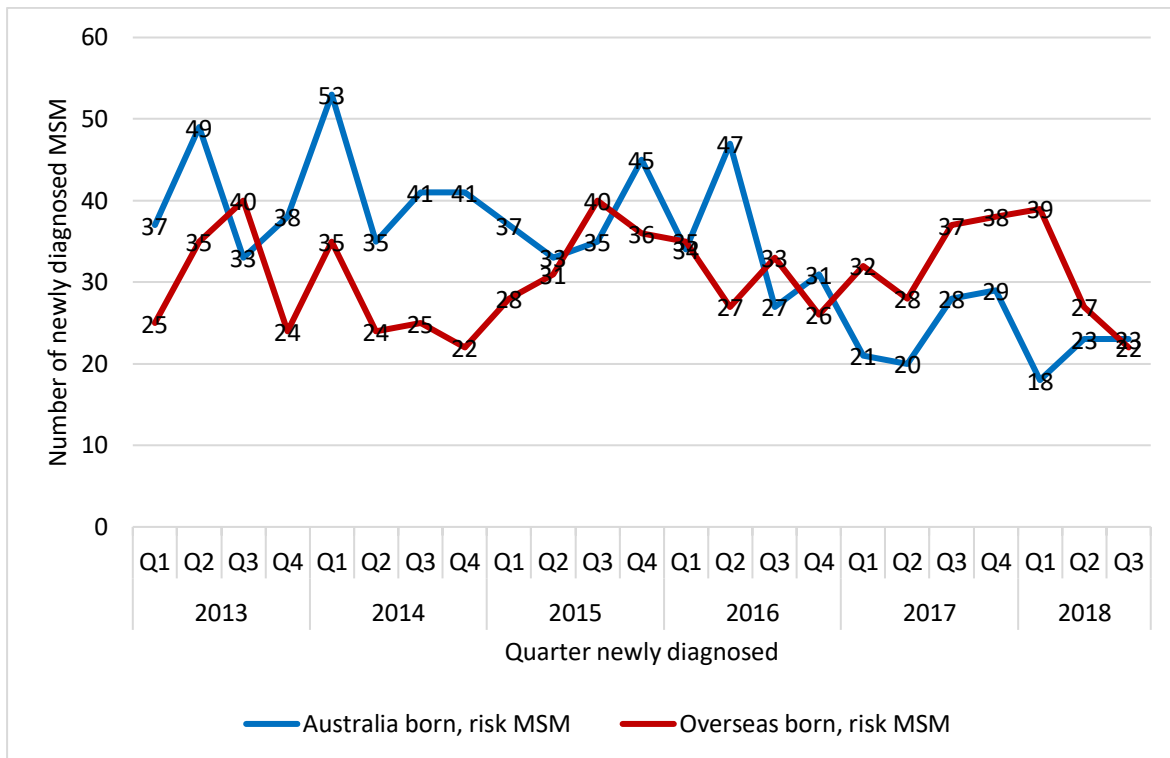


Figure 4: New diagnoses January 2013 to September 2018 in Australian versus overseas-born MSM



In July to September (Q3) 2018:

- Twenty-three of the 45 (51%) MSM newly diagnosed were Australian-born, which was 30% less than the average for Q3 2013-2017 (av. n=32.8) (Figure 4). Thirteen of 23 (57%) Australian-born newly diagnosed MSM had evidence their infection was acquired within one year of diagnosis (early stage infection), 25% less than the Q3 2013-2017 average of 17.4 (Figure 5).
- Twenty-two of the 45 (49%) MSM newly diagnosed were overseas-born, which was 37% less than the average for Q3 2013-2017 (av. n=35.0). Two of 22 (9%) overseas-born newly diagnosed MSM had evidence of early stage infection, 87% less than the Q3 2013-2017 average of 15.4 (Figure 6).

In January to September 2018:

- Sixty-four of 152 (42%) MSM newly diagnosed were Australian-born, which was 40% less than the average for January to September 2013-2017 (av. n=106.0) (Figure 4). Thirty-one of 64 (48%) Australian-born newly diagnosed MSM had evidence of early stage infection, 42% fewer than the January to September 2013-2017 average (av. n=53.4) (Figure 5).
- Eighty-eight of 152 (58%) MSM newly diagnosed were overseas-born, which was 7% less than the January to September 2013-2017 average (av. n=95.0). Thirty-two of 88 (36%) overseas-born newly diagnosed MSM had evidence of early stage infection, a 27% reduction when compared to the January to September 2013-2017 average (av. n=44.0) (Figure 6). Of 32 overseas-born MSM newly diagnosed in early stage infection, 22 (69%) most likely acquired their infection in Australia.

Figure 5: New diagnoses January 2013 to September 2018 of Australian-born MSM by evidence infected within 12 months of diagnosis

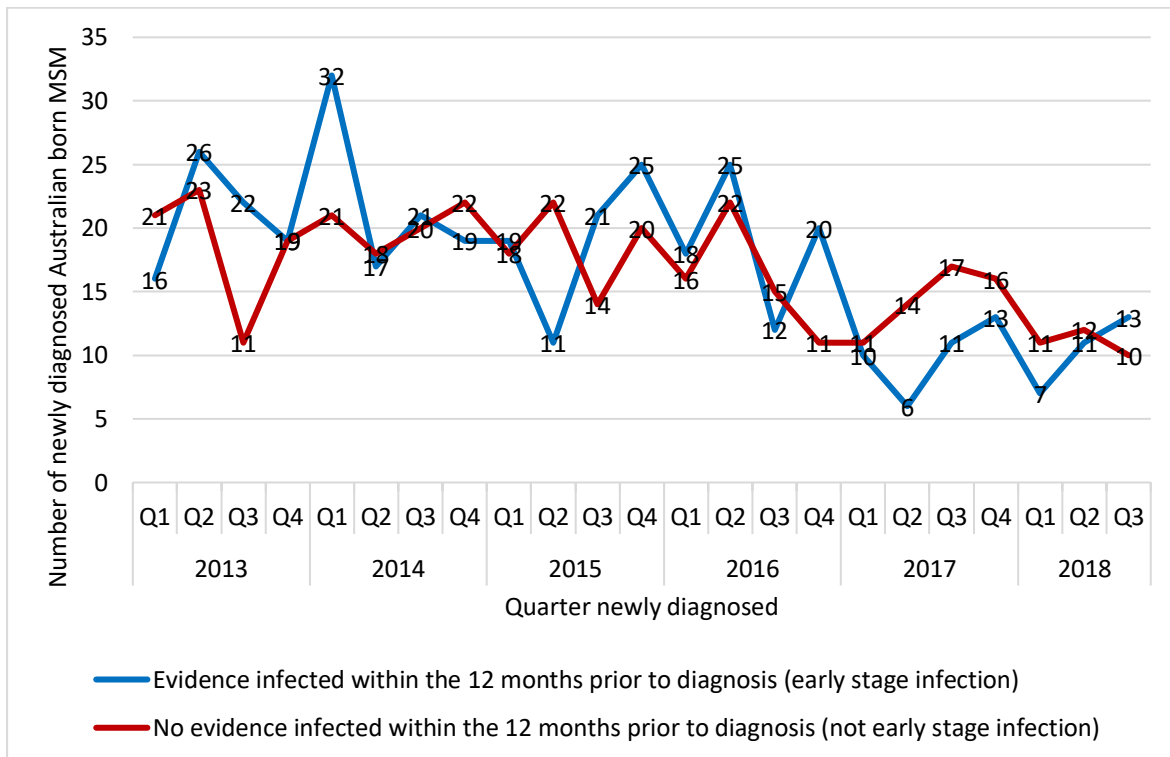


Figure 6: New diagnoses January 2013 to September 2018 of overseas-born MSM by evidence infected within 12 months of diagnosis

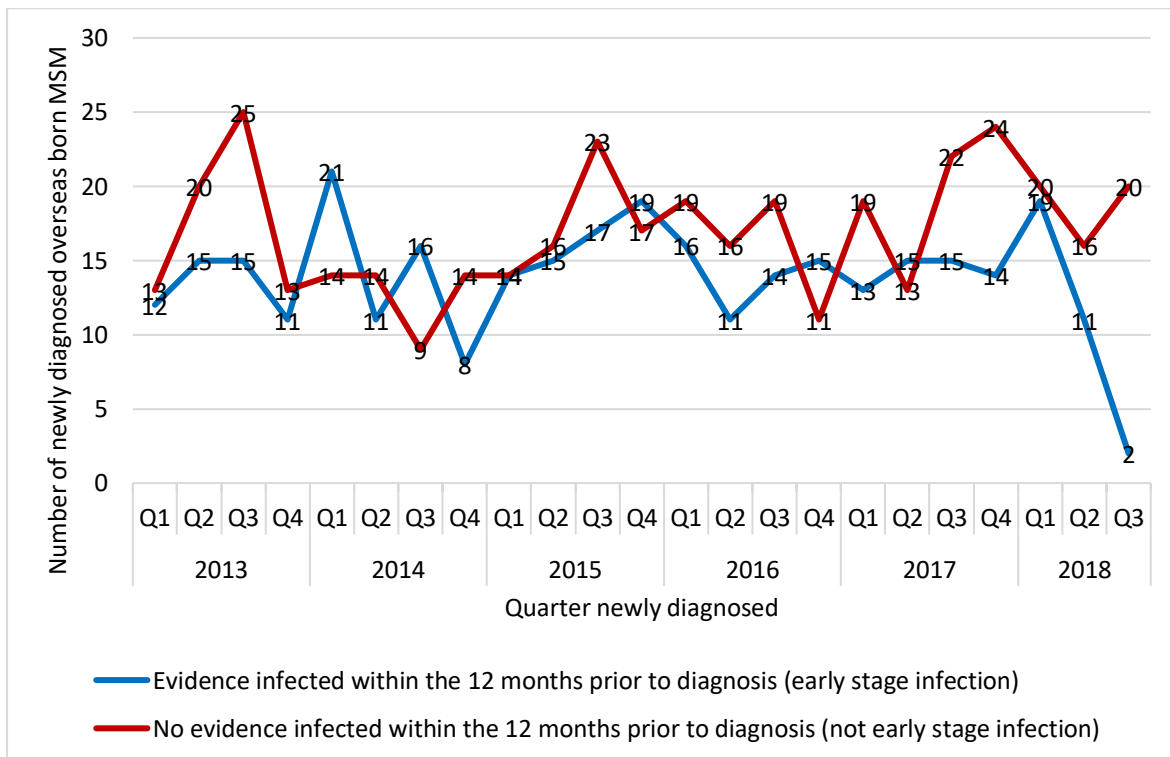
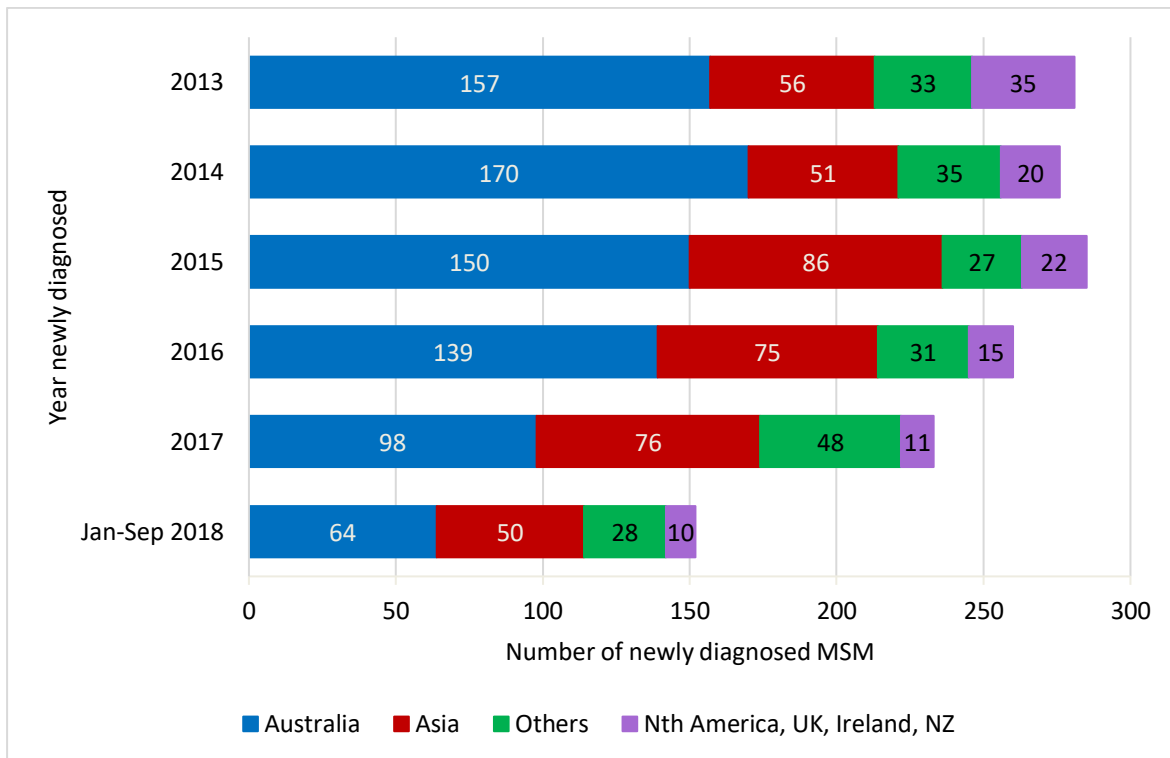


Figure 7: New diagnoses January 2013 to September 2018 of MSM by world area of birth



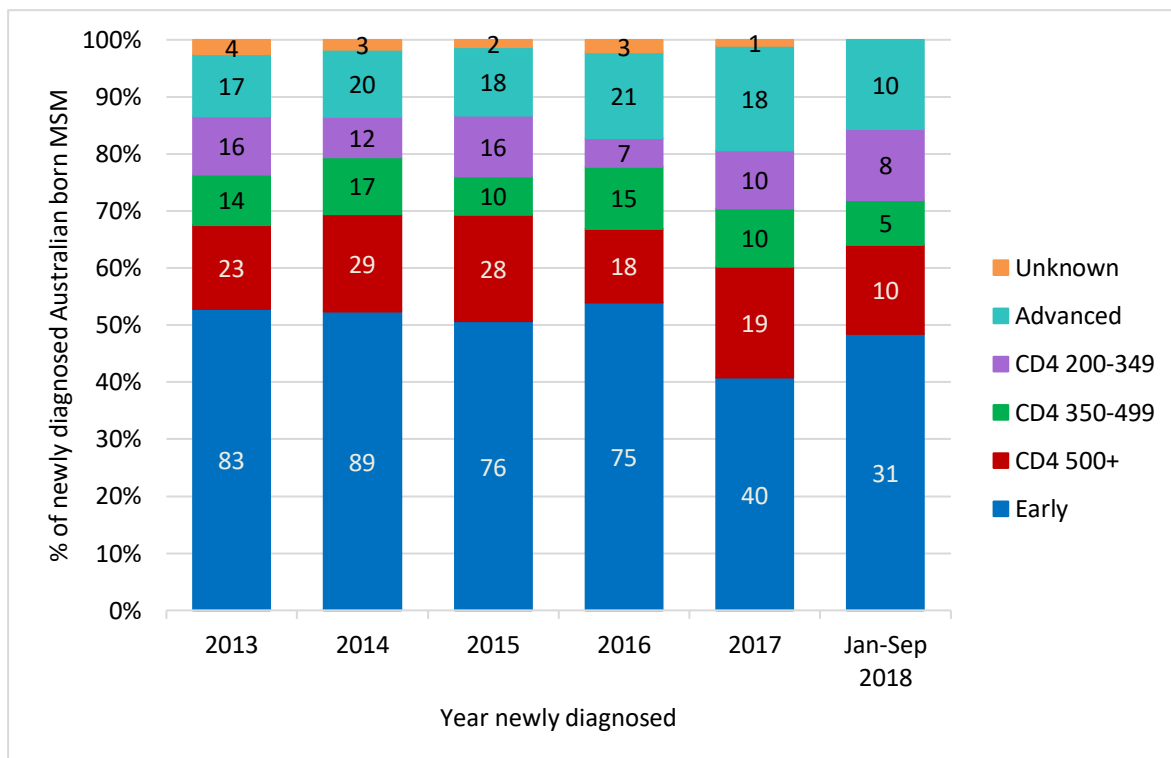
Comments on Figure 7

- Of 152 MSM newly diagnosed in NSW from January to September 2018, 42% were born in Australia, 21% in South-East Asia, 10% in Southern and Central America, 9% in North-East Asia, 5% in each of Oceania and North-West Europe, and less than 5% in each of North Africa & Middle East, Southern and Central Asia and Sub-Saharan Africa (Figure 7).

1.1 What is the stage of infection at diagnosis?

Stage of infection is reported here among Australian-born MSM (8a), overseas-born MSM (8b), and among all other groups other than MSM (8c). **Early stage** infection is evidence of HIV infection acquired within 12 months of diagnosis, such as a sero-conversion illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or an AIDS defining illness at diagnosis. Categories of **CD4 of 500+, 350-499, 200-349** exclude early and advanced stage categories. **Advanced stage** is a CD4 count less than 200 or an AIDS defining illness in absence of 'Early' criteria.

Figure 8a: Stage of infection among Australian-born MSM newly diagnosed January 2013 to September 2018



Comment on Figures 8a-c

- Of 64 Australian-born newly diagnosed MSM in January to September 2018, 31 (48%) had evidence of early stage infection, 42% less compared to the January to September 2013-2017 average of 53.4 (Figure 8a). Eighteen (28%) had late or advanced stage infection, 18% less than the comparison period (av. n=21.8) (Figure 8a).
- Of 88 overseas-born MSM newly diagnosed during January to September 2018, 32 (36%) had evidence of early stage infection, 27% less compared to the January to September 2013-2017 average of 43.8. Of these 32 early stage infections, ten had been in NSW for less than 3 years, ten for 3-4 years, two for 5-10 years and ten for 11 or more years. Thirty-two (36%) had late or advanced stage disease, 19% greater than the comparison period (av. n=27.0) (Figure 8b). Of these 32, 16 had been here for less than 3 years, three for 3-4 years, four for 5-10 years, seven for 11 or more years and two were unknown.
- The number of new diagnoses in NSW residents who were not MSM was 19% lower in January to September 2018 (n=39) compared to the January to September 2013-2017 average (n=48.2). There were twenty with late and advanced stage infection at diagnosis, a 13% reduction when compared to the January to September 2013-2017 average of 23.0.

Figure 8b: Stage of infection among overseas-born MSM newly diagnosed during January 2013 to September 2018

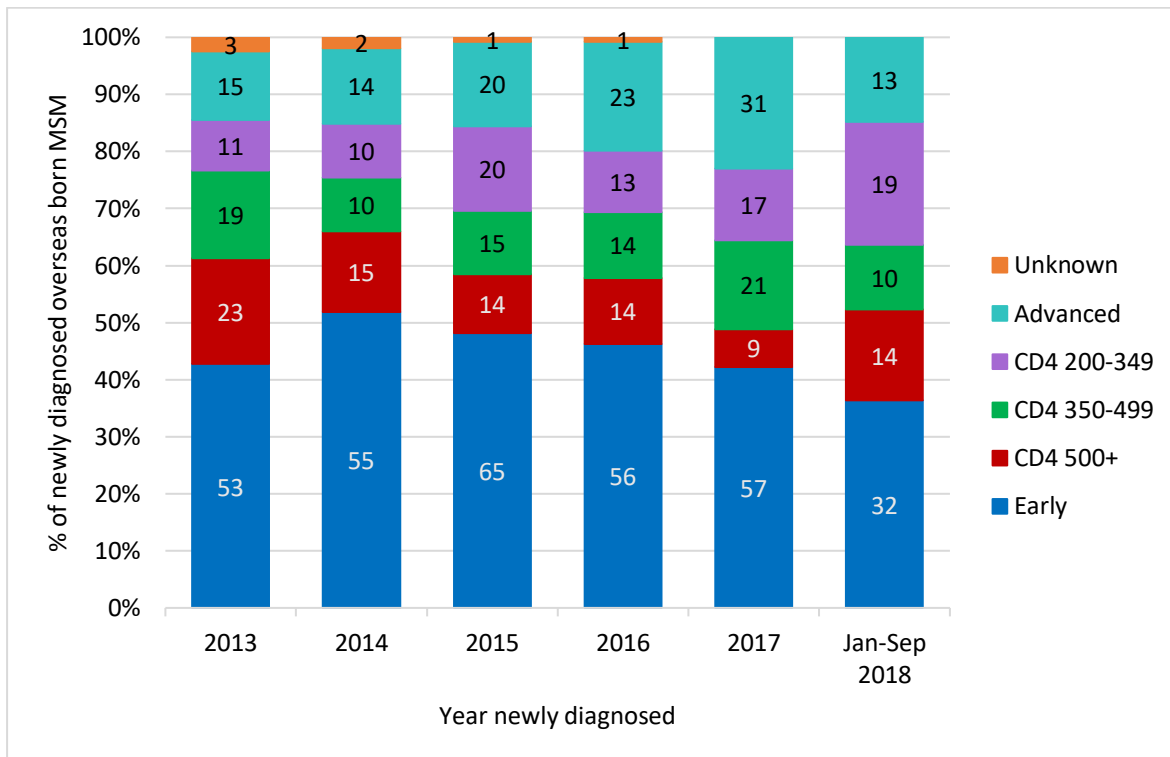


Figure 8c: Stage of infection among new diagnoses Jan 2013-June 2018 with a risk other than MSM

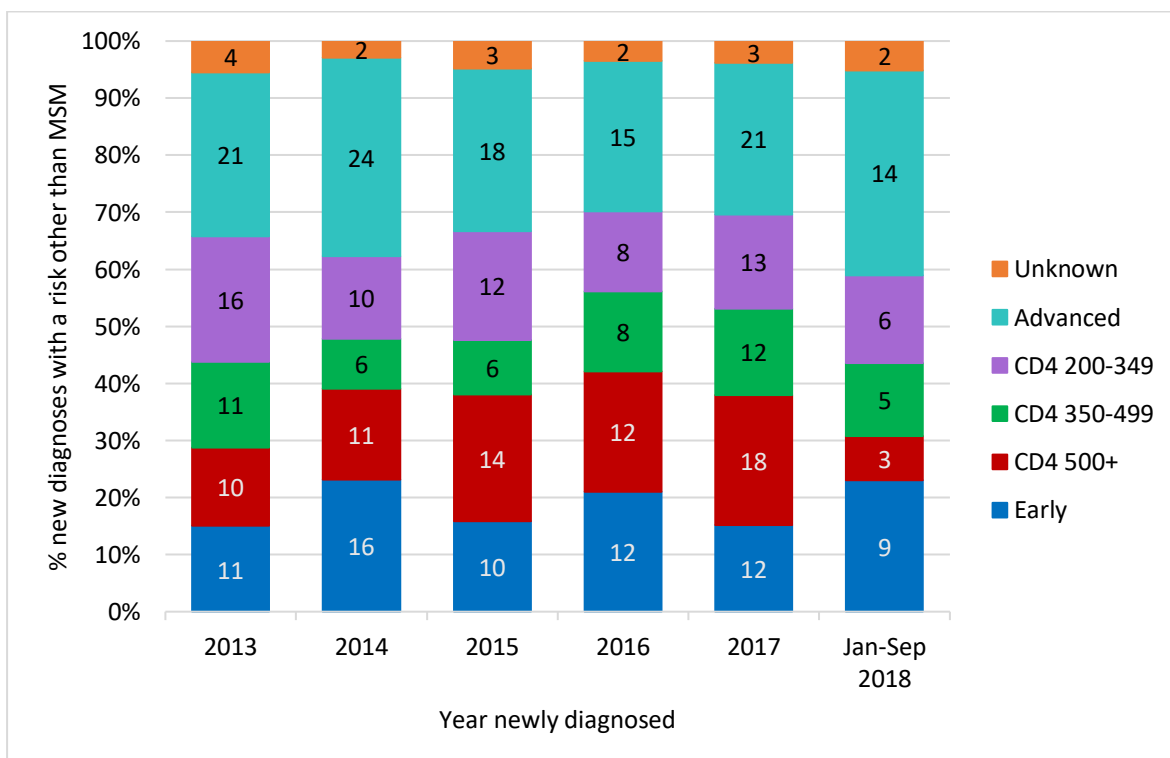
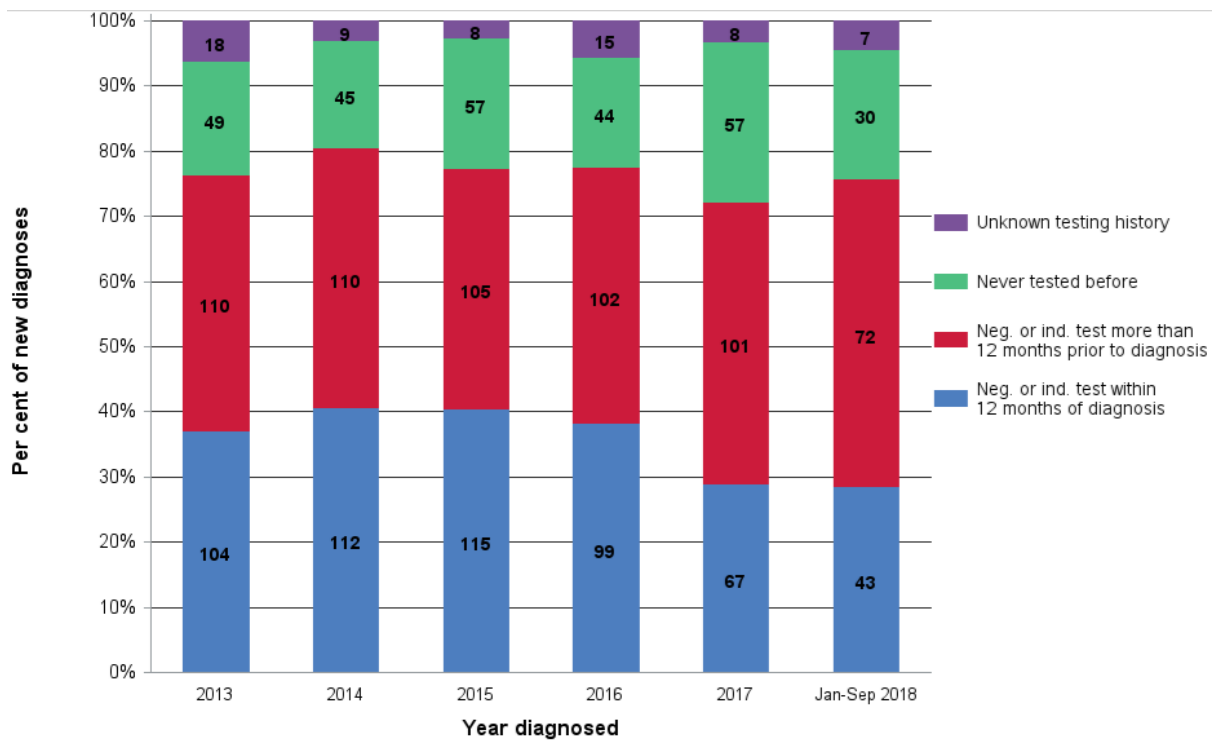


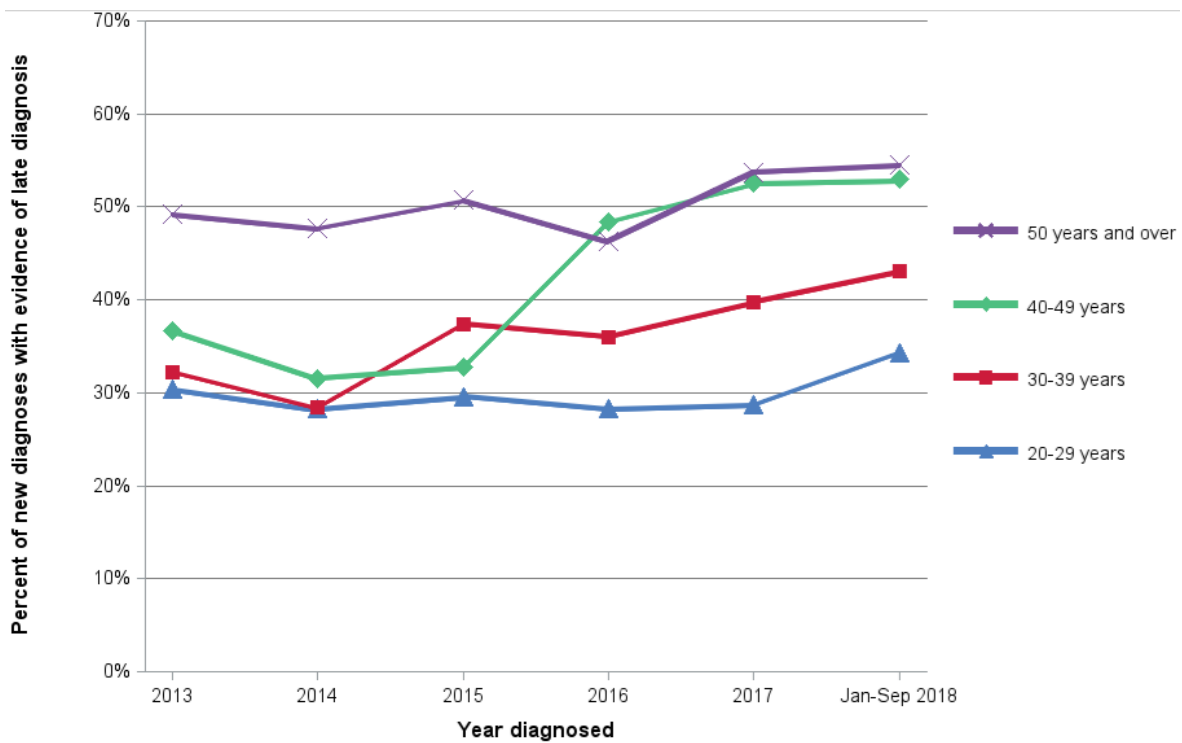
Figure 9: Per cent of new diagnoses from January 2013 to September 2018 in MSM by their HIV testing history



Of 152 men who have sex with men newly diagnosed from January to September 2018:

- Forty-three (28%) were reported (by a laboratory, a doctor, or the patient) to have had a negative or indeterminate HIV test within 12 months of diagnosis.
- Seventy-two (47%) were reported to have had a negative or indeterminate HIV test sometime in the past, but not within 12 months of diagnosis.
- Thirty (20%) reported not ever having had an HIV test prior to diagnosis.
- Over two-thirds had not been testing according to guidelines.
- Sixty (39%) had evidence of late diagnosis.

Figure 10: Per cent of new diagnoses from January 2013 to September 2018 in each age group category with evidence of late diagnosis



- Evidence of late diagnosis was defined as a CD4 count less than 350 or an AIDS defining illness or AIDS death within three months of diagnosis, in the absence of a laboratory confirmed negative HIV test in the 12 months prior to diagnosis.
- Of 60 people newly diagnosed in quarter 3 2018, 23 (38%) had evidence of late diagnosis, a reduction of 26% compared with the 2013-2017 Q3 average count of 31.2.
- Of 191 new diagnoses in January to September 2018, 83 (43%) had evidence of late diagnosis, a 9% reduction when compared to the January to September 2013-2017 average count of 90.8. When separated into age groups:
 - 0% (0/2) of those aged 0-19 years (not shown in Figure 10)
 - 34% (22/64) of those aged 20 to 29 years
 - 43% (25/58) of those aged 30 to 39 years
 - 53% (18/34) of those aged 40 to 49 years
 - 55% (18/33) of those who were aged 50 years or over
- The previously noted upswing in late diagnosis in 20 to 29 year olds is still present, though less pronounced. In the 20 to 29 age group, 20 people with evidence of late diagnosis were MSM, and 15 of these 20 MSM were born overseas.

1.2 What are some of the characteristics of people newly diagnosed?

Table 1: Characteristics of Australian-born and overseas-born MSM newly diagnosed in January to September 2018 vs the January to September 2013-2017 average count, and the count difference

Case characteristics	Australian-born MSM			Overseas-born MSM		
	Jan-Sep 2013-2017 average	Jan-Sep 2018	Count (%) diff.	Jan-Sep 2013-2017 average	Jan-Sep 2018	Count (%) diff.
Number	106	64	-42 (-40%)	95	88	-7 (-7%)
Gender						
<i>Male</i>	105.2	64	-41.2 (-39%)	94	86	-8 (-9%)
<i>Transgender</i>	0.8	0	-0.8 (-100%)	1	2	+1 (+100%)
Age at diagnosis						
<i>0 to 19</i>	1.2	1	-0.2 (-17%)	1.8	1	-0.8 (-44%)
<i>20 to 29</i>	31.2	21	-10.2 (-33%)	34.6	37	+2.4 (+7%)
<i>30 to 39</i>	27.4	14	-13.4 (-49%)	33	33	0 (0%)
<i>40 to 49</i>	24.8	13	-11.8 (-48%)	15.8	11	-4.8 (-30%)
<i>50 and over</i>	21.4	15	-6.4 (-30%)	9.8	6	-3.8 (-39%)
Evidence of early stage infection¹						
<i>Yes</i>	52.6	33	-22.4 (-42%)	43.8	32	-11.8 (-27%)
<i>No</i>	53.4	31	-19.6 (-37%)	51.2	56	+4.8 (+9%)
Evidence of late diagnosis²						
<i>Yes</i>	31.4	21	-10.4 (-33%)	35.2	39	+3.8 (+11%)
<i>No</i>	71.8	43	-28.8 (-40%)	58.4	49	-9.4 (-16%)
<i>Unknown</i>	2.8	0	-2.8 (-100%)	1.4	0	-1.4 (-100%)
Place most likely acquired HIV						
<i>Australia</i>	87.8	49	-38.8 (-44%)	53.8	43	-10.8 (-20%)
<i>Overseas</i>	9.8	14	+4.2 (+43%)	32.2	41	+8.8 (+27%)
<i>Unknown</i>	8.4	1	-7.4 (-88%)	9	4	-5 (-56%)
Reported HIV risks						
<i>MSM</i>	95	57	-38 (-40%)	91.6	84	-7.6 (-8%)
<i>MSM and IDU</i>	11	7	-4 (-36%)	3.4	4	+0.6 (+18%)

¹Evidence of early stage infection/being infected in the 12 months prior to diagnosis: a sero-conversion illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or an AIDS defining illness at diagnosis.

²Evidence of a late diagnosis: a CD4 count less than 350 or an AIDS defining illness or AIDS death within three months of diagnosis, in the absence of a laboratory confirmed negative HIV test in the 12 months prior to diagnosis.

Figure 11a: Per cent of men who have sex with men newly diagnosed from January 2013 to September 2018 by place born and place most likely acquired HIV

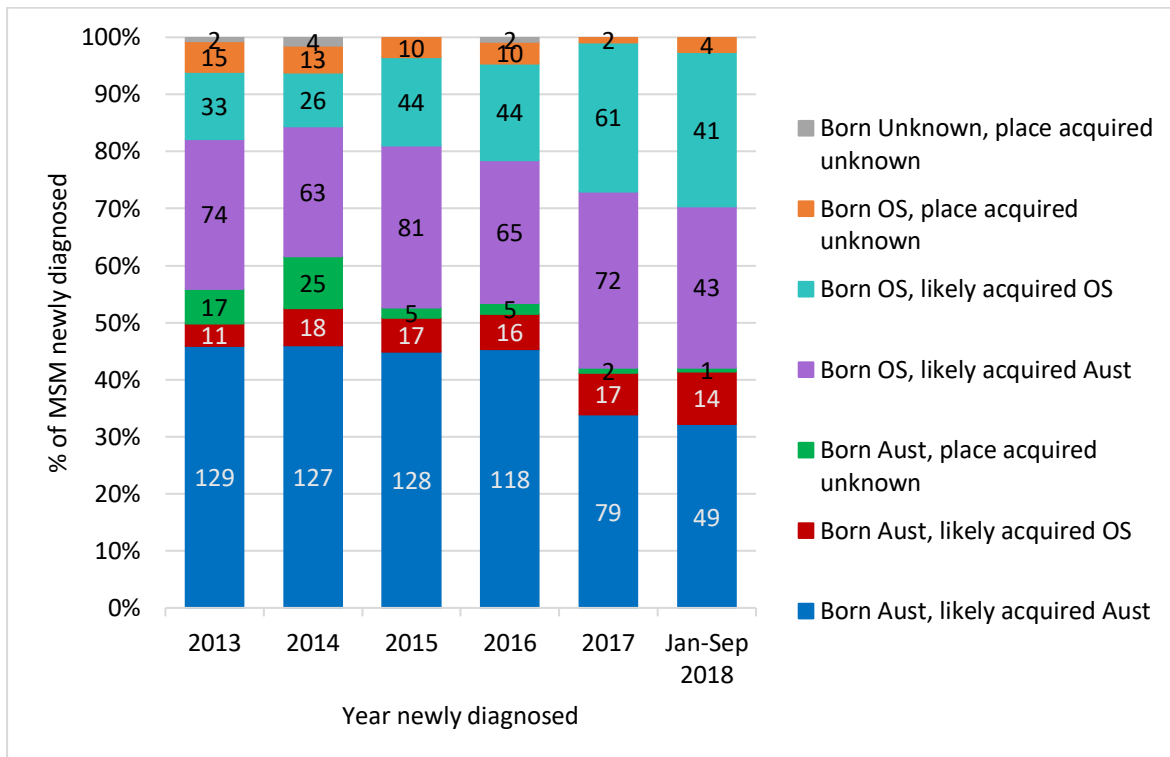
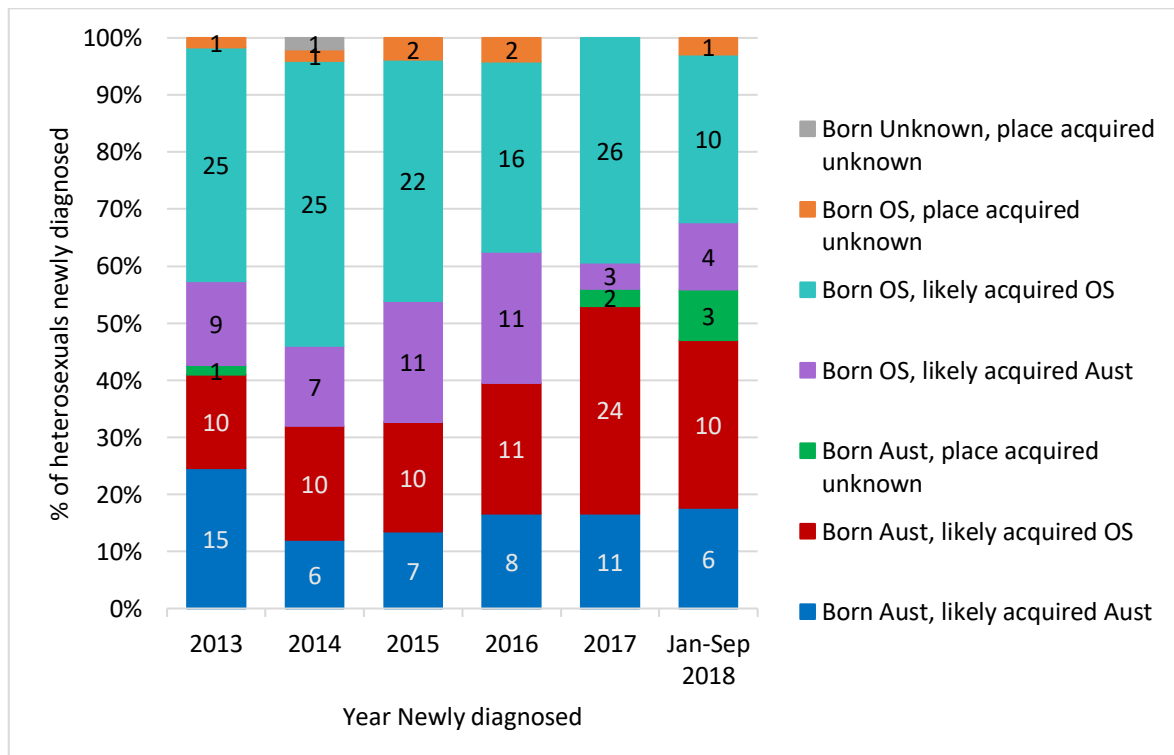


Figure 11b: Per cent of heterosexual people newly diagnosed from January 2013 to September 2018 by place born and place most likely acquired HIV



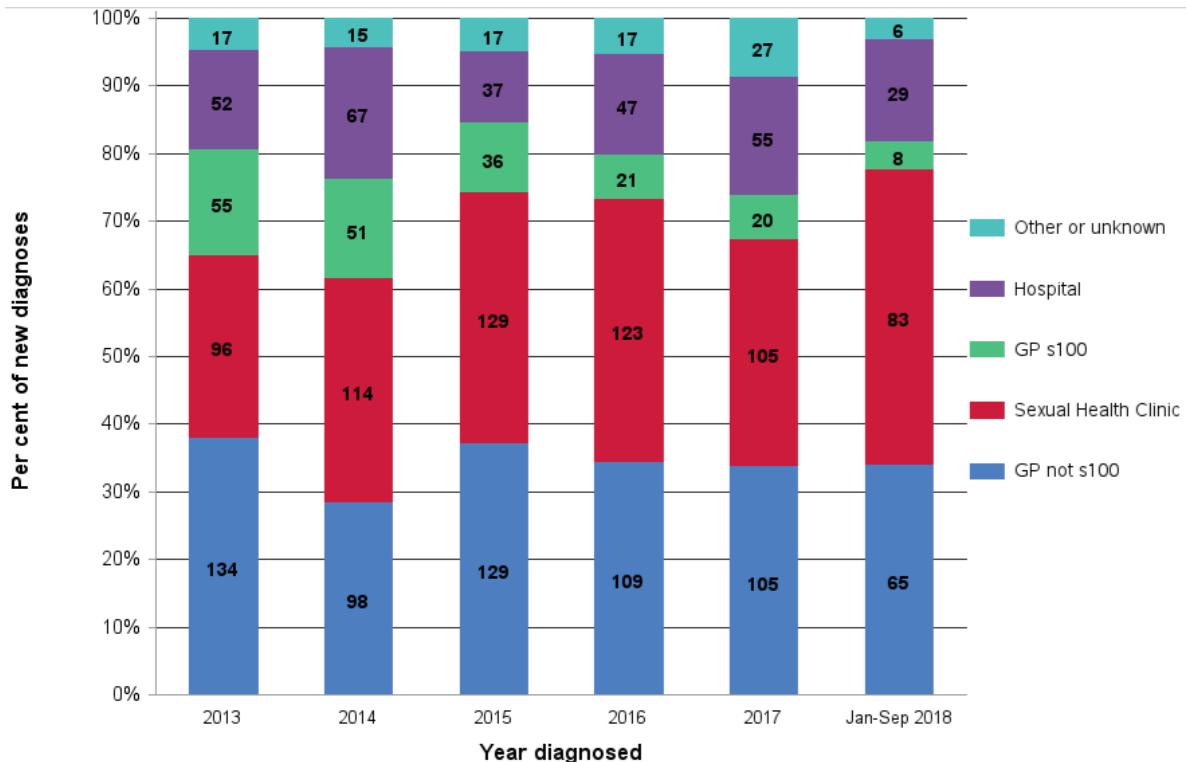
Of 152 MSM newly diagnosed in January to September 2018 (Figure 11a):

- Sixty-four (42%) were Australian-born, 40% less than the average of 106.0 for January to September 2013-2017. Forty-nine of these Australian-born MSM likely acquired HIV in Australia, 44% less than the January to September 2013-2017 average of 87.8, and 14 likely acquired HIV overseas, which is 43% more than in the comparison period (av. n=9.8).
- Eighty-eight (58%) were born overseas, 7% less than the average of 95.0 for January to September 2013-2017. Forty-three of these overseas-born MSM likely acquired HIV in Australia, 20% less than the average for January to September 2013-2017 (av. n=53.8), and 41 likely acquired HIV overseas, 27% more than the comparison period (av. n=32.2).

Of 34 heterosexual people newly diagnosed in January to September 2018 (Figure 11b):

- Nineteen were Australian-born, a 13% increase compared to the average of 16.8 for January to September 2013-2017.
- Fifteen were born overseas, 36% less than the average of 23.4 for January to September 2013-2017.

Figure 12: Per cent of new diagnoses for January 2013 to September 2018 by type of diagnosing doctor



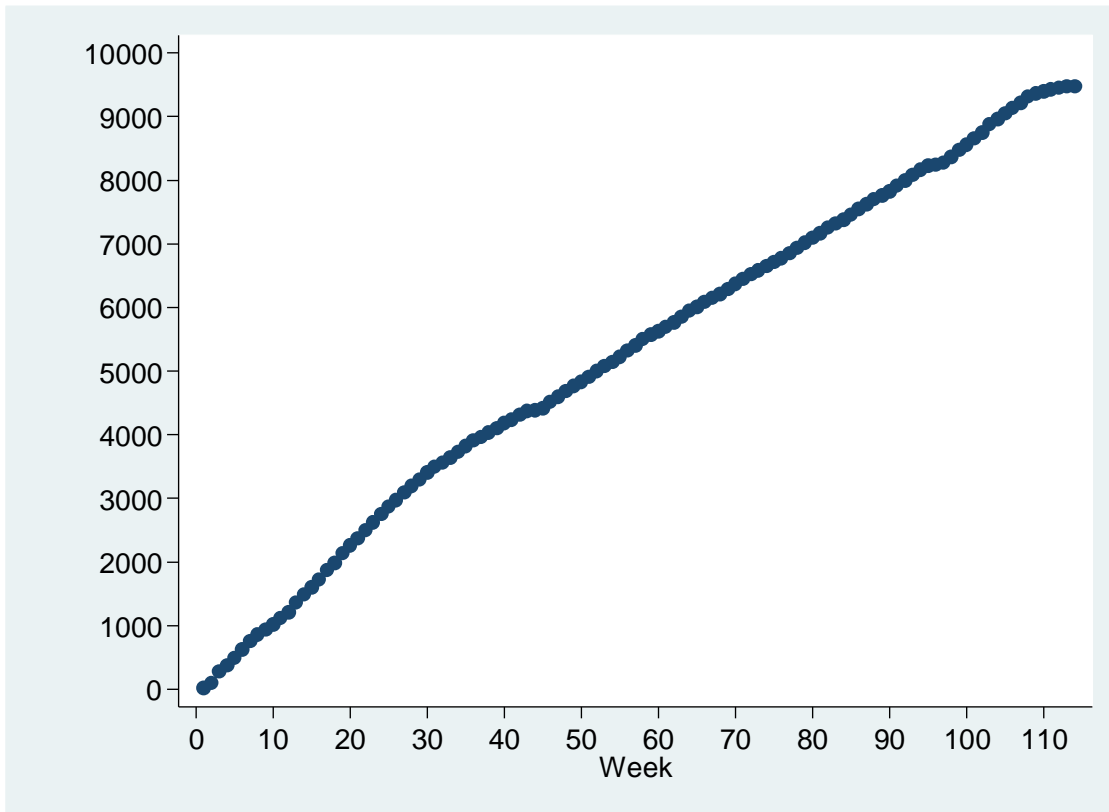
Of 191 NSW residents notified with newly diagnosed HIV infection in January to September 2018:

- Eighty-three (43%) were diagnosed by sexual health centres including community testing sites, similar to the January to September 2013-2017 average (av. n=84.2) (Figure 12);
- Sixty-five (34%) were diagnosed by general practitioners (GPs) not accredited to prescribe antiretroviral therapy (GP not-s100), 23% less than the comparison period (av. n=84.6);
- Twenty-nine (15%) were diagnosed by hospital doctors, 25% less than the comparison period (av. n=38.4);
- Eight (4%) were diagnosed by GP s100 doctors (HIV specialised and accredited to prescribe ART), 72% less than 28.4, the average for January to September 2013-2017, and;
- Six (3%) were diagnosed by other doctor types, 41% less than the average in January to September 2013-2017 (av. n=13.6).

2. Expand HIV Prevention

2.1 Who is accessing PrEP through EPIC-NSW?

Figure 13: Enrolment of participants in EPIC-NSW, by study week, from 1 March 2016 to 30 April 2018



Comments on Figure 13:

- A total of 9,477 participants enrolled in EPIC-NSW between 1 March 2016 and 30 April 2018.
- No new HIV diagnoses have been made in EPIC-NSW participants who continued to take PrEP as directed throughout the trial
- Participating clinics were: The Albion Centre (SESLHD), Albury Sexual Health (MLHD), Brookong Centre Wagga (MLHD), Clinic 16 (NSLHD), Coffs Harbour Sexual Health (MNCLHD), Dubbo Sexual Health (WNSW LHD), Dr Doong's Surgery, East Sydney Doctors, Holdsworth House, Hunter New England Sexual Health (HNE LHD), Holden Street Clinic (CCLHD), Illawarra Shoalhaven Sexual Health (ISLHD), Kirketon Road Centre (SESLHD), Lismore Sexual Health Clinic (NNSW LHD), Liverpool Sexual Health (SWSLHD), MacCleay Street Medical Practice, Nepean Sexual Health and HIV Clinics (NBMLHD), Orange Sexual Health (WNSW LHD), RPA Sexual Health (SLHD), Short Street Clinic (SESLHD), St Vincent's Hospital (SVHN), Sydney Sexual Health Centre (SESLHD), Taylor Square Private Clinic, Western Sydney Sexual Health (WSLHD).

Table 2: Demographic data for EPIC-NSW participants enrolled between 1 March 2016 – 30 April 2018 (not including screen fails and duplicates. N=9,415)

Gender	N	%
Male	9,281	98.8
Female	13	0.2
Transgender, male-to-female	78	0.8
Transgender, female-to-male	11	0.1
Other	12	0.1
Total	9,395	100.0
Sexual identity		
Gay/Homosexual	8,582	93.2
Bisexual	524	5.7
Heterosexual	47	0.5
Other*	54	0.6
Total	9,207	100.0
Age at enrolment (years)		
Median (Inter-quartile range)	34 (28 to 43)	
Age group		
< 20	100	1.1
20-29	2,817	30.6
30-39	3,204	34.8
40-49	1,887	20.5
≥50	1,208	13.1
Total	9,216	100.0
Aboriginal and/or Torres Strait Islander status		
Non-Indigenous	8,292	97.9
Aboriginal and/or Torres Strait Islander **	176	2.1
Total	8,468	100.0
Country/Region of birth		
Australia	4,704	59.5
Oceania	291	3.7
Asia	1,180	14.9
Northern America	208	2.6
South America, Central America & the Caribbean	355	4.5
Europe	895	11.3
Middle East	129	1.6
Africa	139	1.8
Total	7,901	100.0
Area of residence		
Major cities	8,727	94.1
Inner Regional	502	5.4
Outer Regional	38	0.4
Remote	8	0.1
Very Remote Australia	2	0.0
Total	9,277	100.0

Gender, age, Aboriginal and/or Torres Strait Islander status, country of birth, and area of residence (based on participant postcode) were obtained from enrolment, risk assessment, behavioural survey, and/or ACCESS databases, where available. Number of participants for whom data were available for is presented in **Appendix C**.

* Other sexual identity as indicated by participants, including queer, pansexual, gender fluid, sapio, transgender, gender neutral, men who have sex with men, non-specified and not sure.

** Of the 1,208 (12.9%) participants whose Indigenous status was not stated, 11 participants' country/region of birth was available and not Australia, so these people were counted as Non-Indigenous, as it was assumed that there would be very few Indigenous Australian or Torres Strait Islander people born outside Australia.

Comments on Table 2

- Almost 99% of participants were male. Around 93% identified as gay/homosexual
- More than 65% of the participants were between 20-39 years, and 21% were 40-49 years old
- Of the 7,901 participants who answered the question in the behavioural survey about place of birth, 60% were born in Australia, 15% were born in Asia and 11% were born in Europe
- A majority of participants (94%) resided in major cities. Only 5% of participants resided in an inner regional area and 0.5% resided in an outer regional or remote area
- Of 8,468 participants who answered the question in the behavioural survey about Aboriginality, 2.1% identified as Aboriginal or Torres Strait Islander

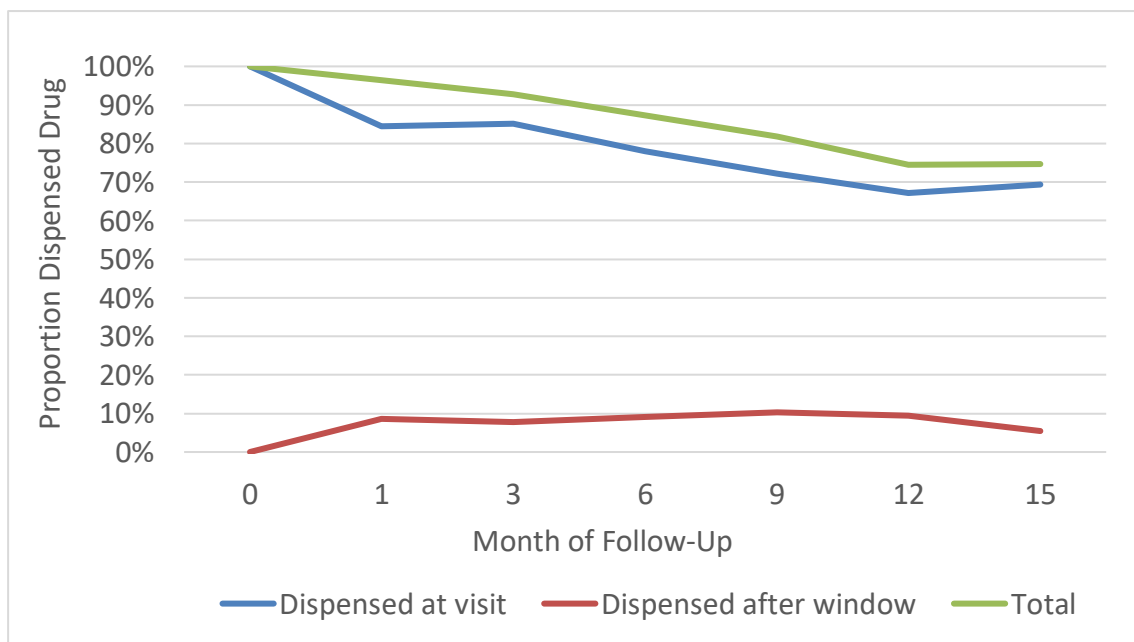
PrEP use over time by EPIC-NSW participants

Analysis of data from dispensing logs of the first 3700 EPIC-NSW participants (who enrolled prior to 31 October 2016) provides information on PrEP use in the first 15-months of follow-up.

The following dispensing patterns were observed:

1. Dispensed drug at a visit: defined as being dispensed drug at the relevant visit (within the pre-specified window period (± 45 days))
2. Dispensed drug after window: defined as NOT being dispensed drug during the current visit window, but being dispensed drug within a later visit window.

Figure 14: PrEP dispensing in the first 15 months of follow-up, using dispensing log data



Comments on Figure 14

- Approximately 70% of the first 3,700 participants enrolled in EPIC-NSW presented for their clinic visit, and were dispensed PrEP within the window period (estimated date ± 45 days).
- There was group of about 10% of study participants who did not collect their PrEP within their scheduled visit window, but return to collect it in a later window. It is likely that these 10% of participants were non-adherent to daily PrEP. This may be people who took intermittent PrEP, people who took breaks from PrEP (“periodic PrEP”), or people who were not-adherent to ongoing, daily PrEP.

2.2 What is the prevalence of STIs among EPIC-NSW participants?

Overall, 9,412 unique individuals were enrolled at the 29 NSW sites in EPIC-NSW between 1 March 2016 and 30 April 2018. This report contains only one additional month of baseline STI data and is the final quarterly report.

STI prevalence at enrolment

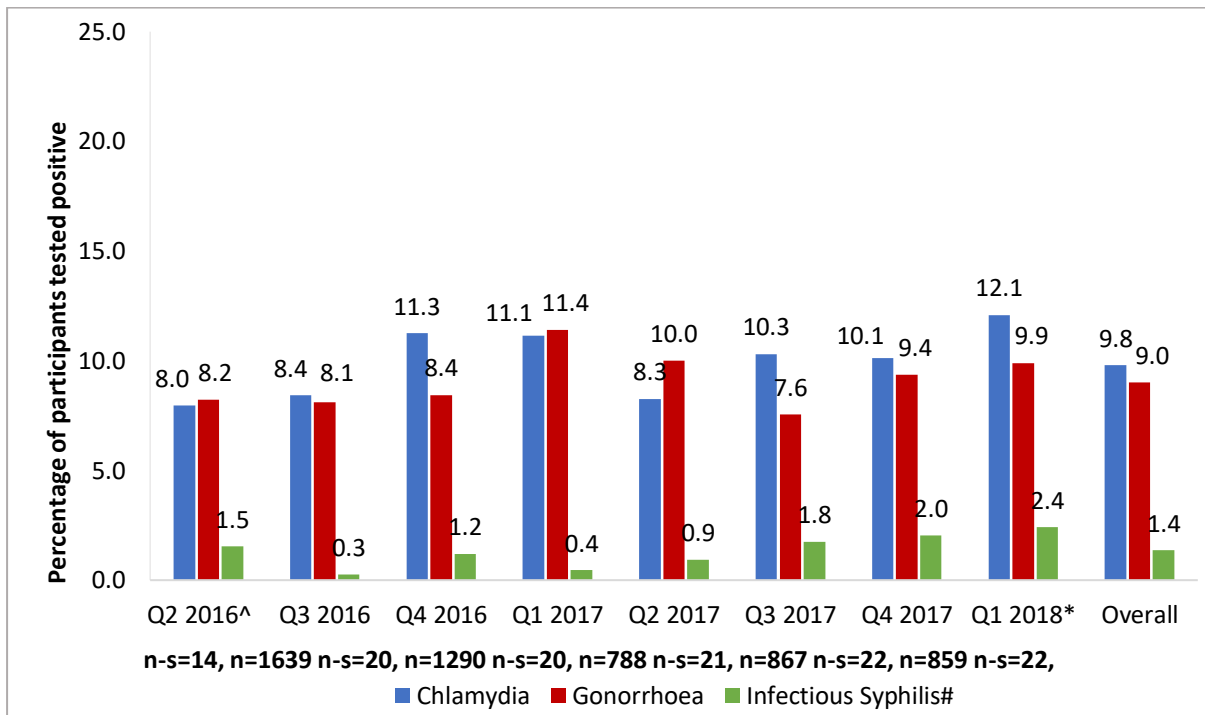
Monitoring the STI prevalence of EPIC-NSW participants when enrolled provides a marker of sexual risk, and how well the program is being targeted. STI prevalence is defined here as the proportion of individuals tested for an STI who had a positive result.

Of the 9,412 participants enrolled in the EPIC-NSW Study, STI testing data were available for 8,296 (88.1%) participants. The number of sites included in each quarter has increased over time - 14 in Q2 2016, 20 in Q3 and Q4 2016, 21 in Q1 2017, and 23 in Q2 2017. By the end of Quarter 1 2018 STI testing data were available from 28 of the 29 sites that had enrolled patients by 30 April 2018 (92.5% of participants at the available sites).

The 28 sites are: Albion Street, Albury Sexual Health, Brookong Centre Wagga Wagga, Clinic 16, Coffs Harbour Sexual Health, Dubbo Sexual Health, HNE Sexual Health, Holden St Clinic, Illawarra Shoalhaven Sexual Health, Kirketon Road Centre, Lismore Sexual Health, Liverpool Sexual Health, Nepean Sexual Health, Orange Sexual Health, RPA Sexual Health, Short Street Clinic, Site 203, Site 206, Site 215, Site 229, Site 266, Site 267, Site 269, Site 271, Site 272, Site 276, Sydney Sexual Health and Western Sydney Sexual Health.

STI tests are included in the analysis if they were conducted within 3 weeks of the enrolment date and recorded in the standard test result fields at the enrolment clinic or at another clinic within ACCESS network (captured via data linkage between ACCESS sites).

Figure 15: Proportion of individuals tested for chlamydia, gonorrhoea and infectious syphilis# at baseline with a positive result, by quarter, 1 March 2016 to 30 April 2018



Note: CT, chlamydia; NG, gonorrhoea; SY, infectious syphilis. n-s, the number of sites.

[^]Q2 2016 data was from 1 March 2016 to 30 June 2016 (four months)

^{*}Q1 2018 data was from 1 January 2018 to 30 April 2018 (four months)

#Infectious syphilis was based on pathology test results and clinical information available from public clinics only.

Comment on Figure 15

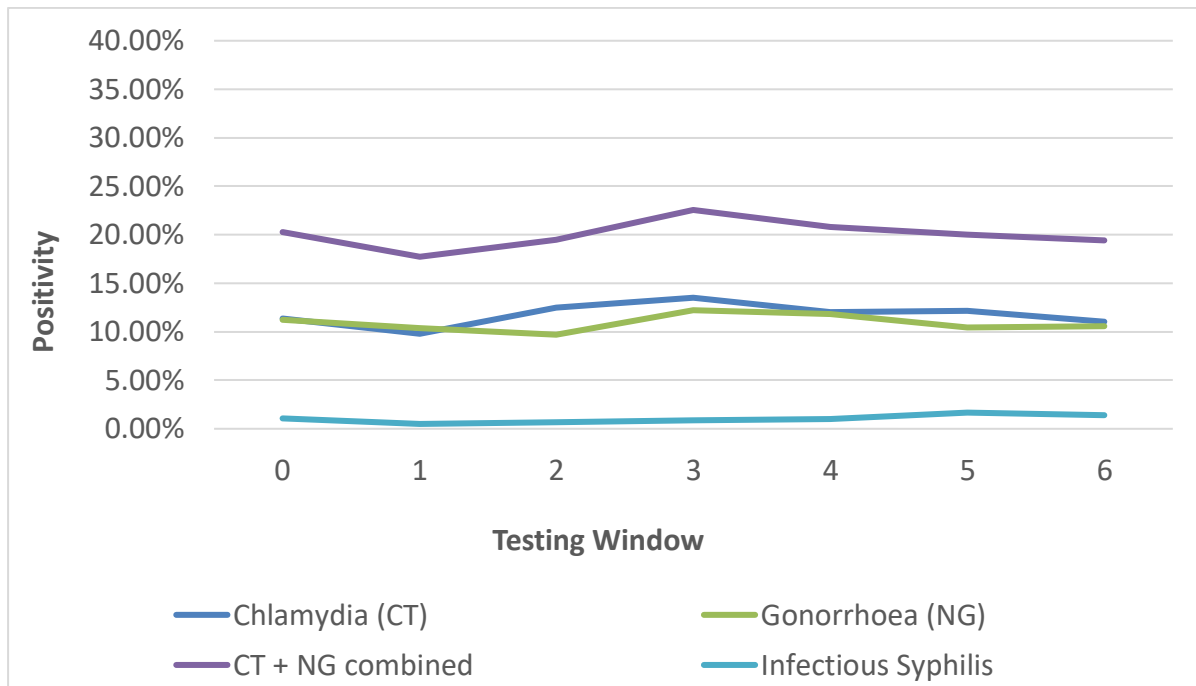
Overall, of the EPIC-NSW participants tested for STIs at baseline between 1 March 2016 and 30 April 2018:

- 9.8% and 9.0% had a positive test result for chlamydia and gonorrhoea respectively
- The diagnosis rate for infectious syphilis in public clinics was 1.4%.

There was a statistically significant increase in chlamydia positivity and infectious syphilis positivity at baseline over time. This means the study continued to recruit higher-risk men throughout the enrolment period.

EPIC-NSW Report to NSW Health: STI positivity over 18 months of follow-up, October 2018

EPIC-NSW collected STI longitudinal trends in chlamydia, gonorrhoea, and infectious syphilis positivity among the first 3700 participants enrolled in EPIC-NSW during their first 18 months of study follow-up. Enrolment was completed by 31 October 2016, and follow-up data was included up until 30 June 2018. A total of 3564 (96.3%) of participants had a record of one or more STI tests and were included in this analysis. Not every participant had an STI test conducted at baseline, as this was not a study eligibility requirement.

Figure 16: STI positivity over 18 months of follow-up

Testing window 1 represents the first recommended STI test after enrolment, at 3 months after enrolment ± 45 days, and each subsequent window covers a similar three-month period.

Comments on Figure 16

The number of chlamydia/gonorrhoea tests conducted in each testing window declined over time; from 3057 in testing window 0, to 2188 in testing window 6. Data on infectious syphilis were only available from public clinics, with 1338 tests conducted in window 0 and 858 in window 6.

- Chlamydia positivity increased slightly from 9.8% in window 1, to 13.5% in window 3, and was 11.0% in window 6.
- Gonorrhoea positivity ranged from 10.4% in window 1, 12.2% in window 3, and 10.6% in window 6, and infectious syphilis from 0.5% in window 1 to 0.9% in window 3 and 1.4% in testing window 6.
- In each 3-month testing window about 20% of participants who were tested were diagnosed with chlamydia and/or gonorrhoea, and over time the rate of detection remained fairly stable.

2.3 How many people were prescribed PrEP on the Pharmaceutical Benefits Scheme (PBS)?

PrEP was listed on the PBS on 1 April 2018, making it accessible to people at high and medium risk of HIV infection through community pharmacies.

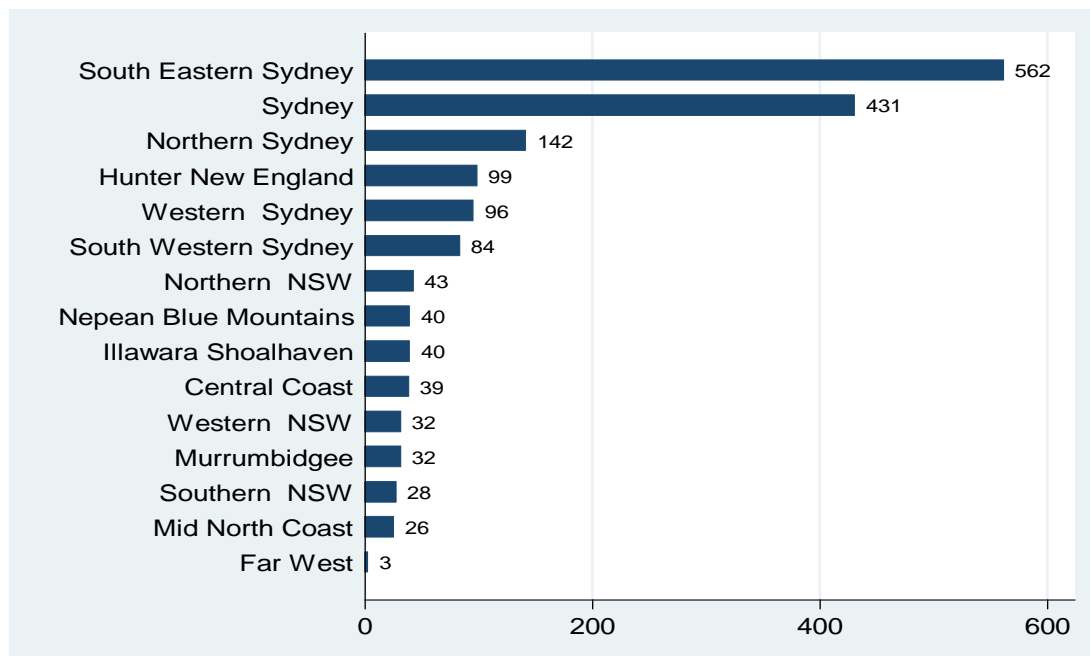
On 30 April 2018, following PBS listing, the EPIC-NSW PrEP access trial ceased enrolling new patients. At the close of enrolments 9,414 people were enrolled on the trial in NSW.

A PrEP transition plan has been implemented to support EPIC-NSW participant access to PBS PrEP, and to support expanded and ongoing access to PrEP throughout NSW.

Between 1 April and 30 June 2018:

- A total of 1,689 (unique number) NSW residents were dispensed PrEP for HIV prevention at least once within the quarter.
- Of the 1,689 residents initiated PrEP, 99.0% were male. The age among residents on treatment ranged from 18 to 77 years old. The distribution among age groups included: 13 (0.8%) between 0 and 19 years old, 415 (24.6%) between 20 and 29, 545 (32.3%) between 30 and 39, 393 (23.2%) between 40 and 49 and 323 (19.1%) aged older than 50 years old.
- Among those who initiated PrEP treatment, 82% (1,351) were prescribed by GP; 99.0% were dispensed by a community pharmacy.
- As most EPIC-NSW study participants receive their last 3-month prescription of PrEP *after* 30 April, 2018, it is likely that the 1,689 people who were prescribed PrEP on the Pharmaceutical Benefits Scheme are not EPIC-NSW trial participants.

Figure 17: The Number of NSW residents dispensed PrEP by LHDs of patient residence from 1 April to 30 June 2018¹



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme (PBS) data from April 2018 to June 2018.

Comments on Figure 17

- More than half (58%) of people dispensed PrEP under the PBS in NSW between 1 April and 30 June 2018 were residents of South Eastern Sydney and Sydney LHDs, followed by Northern Sydney (8.4%), Hunter New England (5.8%), Western Sydney (5.7%) and South Western Sydney (5.0%).

2.4 How many men who have sex with men use condoms and other HIV risk reduction practices?

Condom use and other HIV risk reduction strategies used by gay and bisexual men are measured through the annual Sydney Gay Community Periodic Survey (SGCPS), conducted each year during

¹ PrEP data become available from PBS since April 2018.

February/March. With the introduction of pre-exposure prophylaxis (PrEP) in NSW and the focus on the preventative benefits of HIV treatment in the current NSW HIV Strategy, reporting of condomless anal intercourse with casual partners (CAIC) in the SGCPs has been modified, distinguishing between CAIC that is safe and unlikely to lead to HIV transmission (because of HIV treatment and viral suppression or PrEP use) or CAIC that is unprotected and poses a risk for transmission. Detailed data for 2018 were reported in the January – March 2018 HIV Data Report. Briefly, the proportion of gay men with casual partners reporting consistent condom use has declined, particularly since 2016, falling to 26.4% in 2018. Between 2016 and 2018, HIV-negative men on PrEP who reported CAIC increased from 3.6% to 22.5% of men with casual partners. In 2018, HIV-negative men not using PrEP who reported any CAIC (insertive or receptive) fell to 27.0% of casual partners.

2.5 Community mobilisation “Ending HIV”

Since 2013, ACON has monitored the knowledge and attitudes of gay men in regards to key messages in the NSW ‘Ending HIV’ campaign. Key findings and a description of the evaluation is provided in Appendix B.

2.6 How accessible is the Needle and Syringe Program in NSW?

From April 2017 to March 2018,

- 13,987,840 injecting units were distributed in NSW.
- The LHDs with the highest number of units of injecting equipment distributed were Hunter New England, Sydney, South Western Sydney, Western Sydney and Western NSW.

2.7 What proportion of people re-use other people’s needles and syringes (receptive syringe sharing) in NSW?

- In 2017, 20% of respondents reported receptive syringe sharing in the previous month (NSW Needle and Syringe Program Enhanced Data Collection, 2017)².

² Geddes, L, Iversen J, and Maher L. NSW Needle and Syringe Program Enhanced Data Collection Report 2017, The Kirby Institute, UNSW Australia, Sydney 2017.

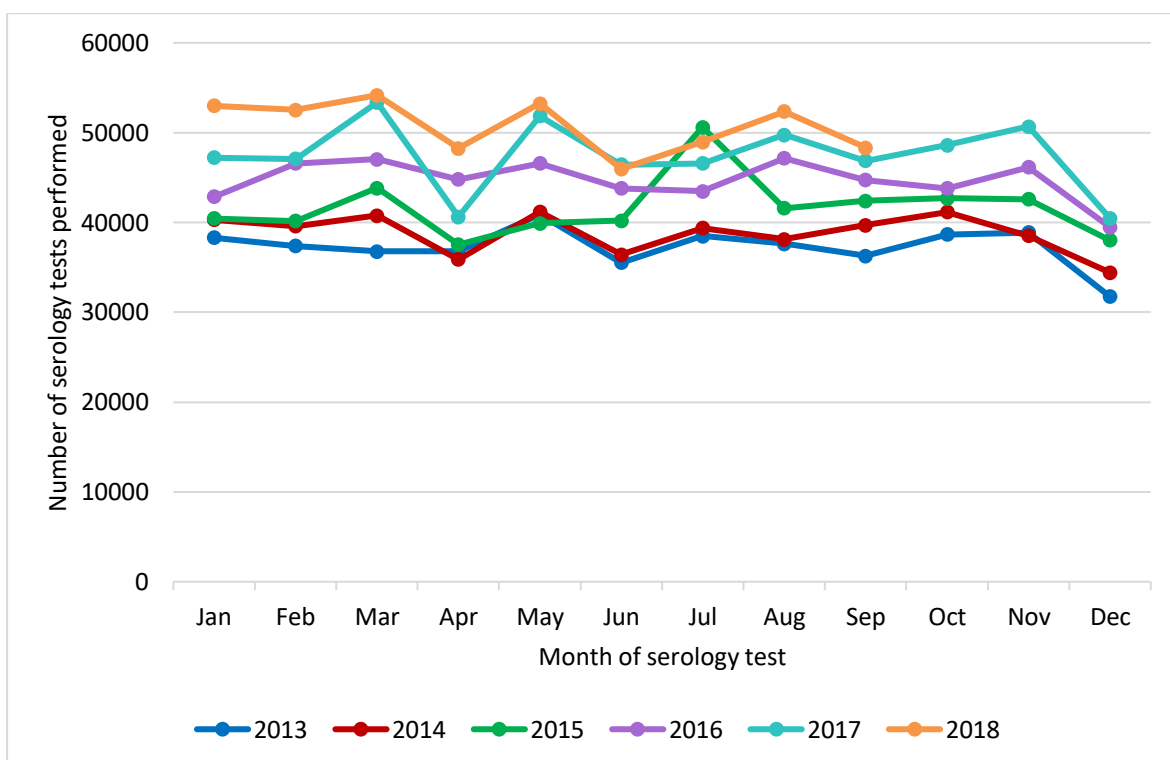
3. Increase HIV testing frequency

3.1 Is HIV testing increasing in NSW?

NSW overall

In 2012, NSW Health commenced collection of testing data for selected notifiable conditions, including HIV, from 15 NSW laboratories. These laboratories represent about 95% of the laboratory testing for HIV in NSW residents. Information from laboratories does not provide any indication on the purpose of testing (screening of high risk individuals, routine antenatal, post-exposure testing), nor whether there are repeat tests on the same individual.

Figure 18: Number of HIV serology tests performed in 15 NSW laboratories, January 2013 to September 2018



Data source: NSW Health denominator data project, out 7 November 2018.

Comments on Figure 18

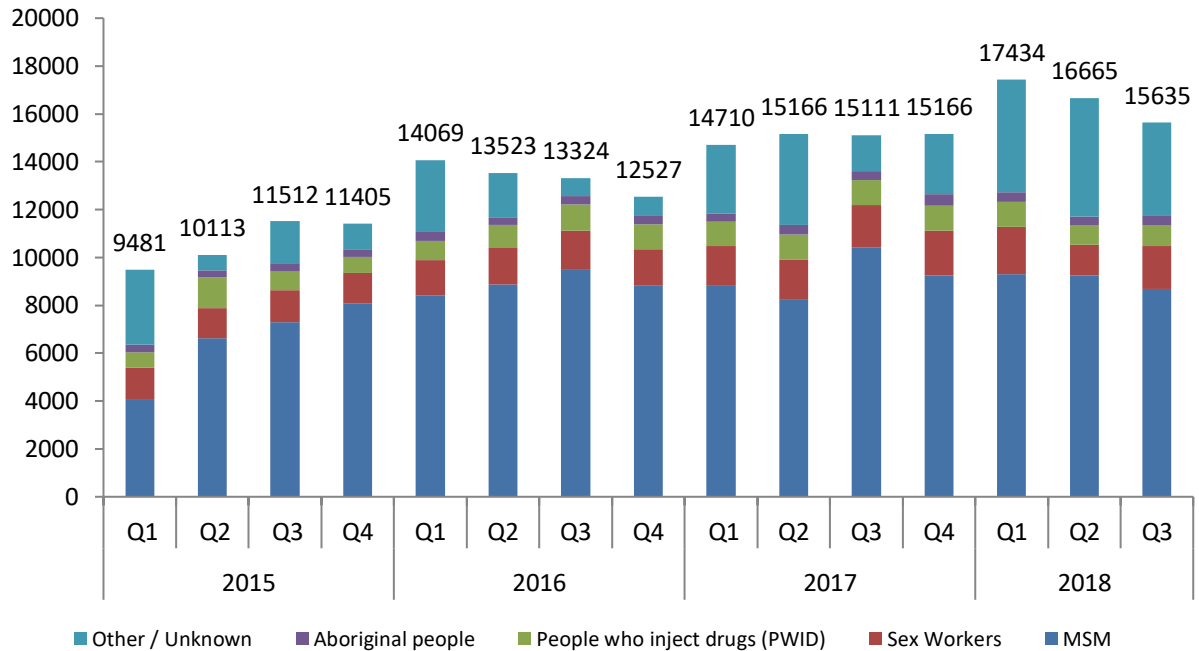
In July to September (Q3) 2018:

- 149,641 HIV serology tests were performed in 15 laboratories in NSW, which was 4% more than in Q3 2017 (n=143,220), 11% more than in Q3 2016 (n=135,362), 11% more than in Q3 2015 (n=134,596), 28% more than in Q3 2014 (n=117,196), and 33% more than in Q3 2013 (n=112,403).

In January to September 2018:

- 456,797 HIV serology tests were performed in 15 laboratories in NSW, which was 6% more than in January to September 2017 (n=429,846), 12% more than in January to September 2016 (n=407,029), 21% more than in January to September 2015 (n=376,671), 30% more than in January to September 2014 (n=351,375), and 35% more than in January to September 2013 (n=338,018).

Figure 19: Number of HIV rapid and serology tests performed in public sexual health clinics and priority LHD settings in NSW between 1 January 2015 and 30 September 2018, by quarter and priority population



Data source: NSW Health HIV Strategy Monitoring Database

Notes: Data for sex workers, PWID and Aboriginality not available in 2014; patients have been classified as other/unknown where priority population data is not available. Includes data from St Vincent’s Hospital.

Comments on Figure 19

- In 2017 (July-Sept, 2018), 8,684 HIV tests were conducted in MSM in PFSHCs.
- Both rapid HIV testing and HIV serology are included. Priority settings include mental health, drug and alcohol, and emergency departments.

Dried Blood Spot testing

[Dried Blood Spot](#) (DBS) is an innovative finger stick test for HIV and hepatitis C that is accessed by eligible people online or via a settings based approach. The NSW DBS Self-Sampling HIV Testing Pilot Program aims to increase testing among high-risk populations who experience barriers to testing through conventional services.

Table 3: Recruitment data for the NSW DBS Self-Sampling HIV Testing Pilot, November 2016 to September 2018

Recruitment indicators	Q3 2018 (July-Sept)	Total (Nov 2016 - Sept 2018)
Number of registrations for HIV DBS test	349	1431
Number (%) of people who registered for a DBS kit who had never tested before or had tested over 2 years ago	194/349 (56%)	802/1431 (56%)
Return rate of DBS kits	-	947/1431 (66%)
Number (%) of reactive HIV tests	0	5/947 (0.5%)

Data Source: NSW Dried Blood Spot Research database

Comments on Table 6

- 56 per cent of people who registered for the test had never previously tested for HIV or had tested more than 2 years ago
- 1,431 test HIV test kits have been ordered, with a return rate of 66%
- The positivity rate of returned HIV test kits is 0.5%

Table 4: Number per target population who registered for the NSW DBS Self-Sampling HIV Testing Pilot, November 2016 to September 2018*

Target population	Q3 2018 (July to Sept)	Total from Nov 2016 to Sept 2018
MSM	131 (38%)	881 (62%)
Partners from Asia or Africa continents	90 (26%)	442 (31%)
From Asia or Africa continents	69 (20%)	337 (24%)
Ever injected drugs**	151 (43%)	284 (20%)
Aboriginal or Torres Strait Islander People**	47 (13%)	113 (8%)

Data Source: NSW Dried Blood Spot Research database

*Participants can have the profile for more than one target population

**Included as target populations for the pilot since September 2017

Table 5: Number of tests done per target population for the NSW DBS Self-Sampling HIV Testing Pilot, November 2016 to September 2018

Target population	Number (%) of tests done	
	1 Nov 2016 – 30 Sept 2018	
Aboriginal people*	75	8%
MSM	565	60%
Ever injected drugs*	230	24%
From Asia/Africa	220	23%
Partners from Asia/Africa	280	30%

Data Source: NSW DBS Research Database

*Aboriginal people and people who have ever injected drugs included from September 2017.

Comment on Table 8

- Majority of the individuals who returned a DBS test were MSM (60%). Almost quarter of participants were from Asia/Africa and nearly a third of participants had partners from Asia/Africa.

Table 6: Registrations for the NSW DBS Self-Sampling HIV Testing Pilot per LHD of participant from November 2016 to September 2018, and number of tests done (kits returned) in Q3 2018

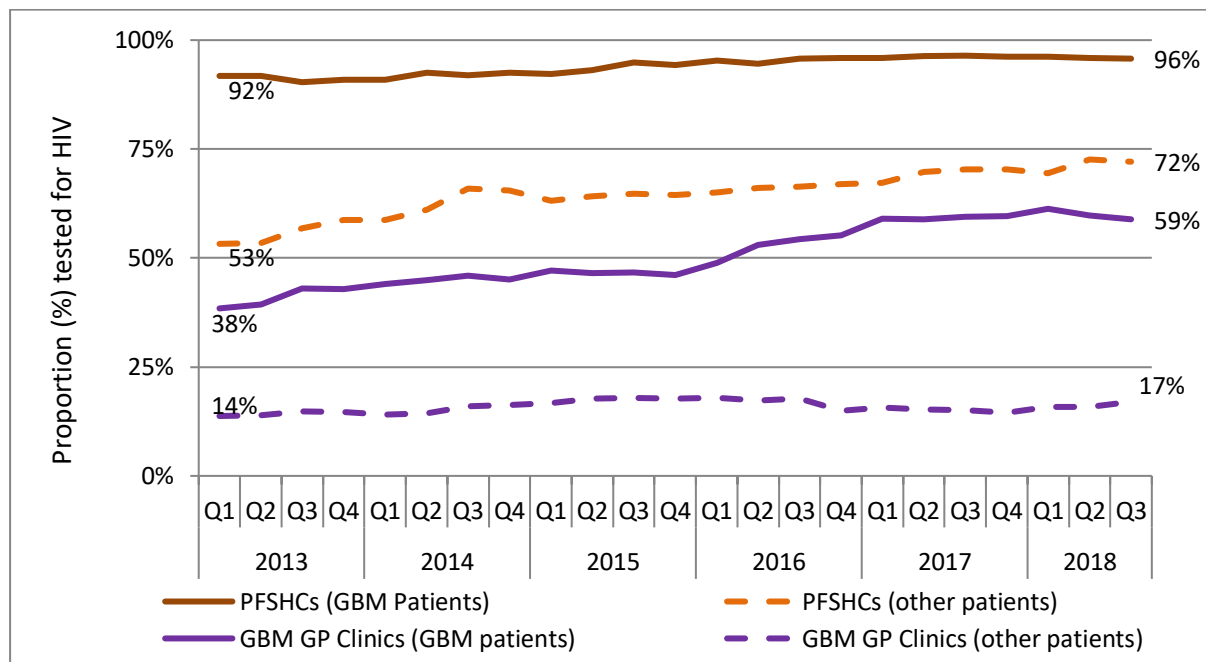
LHD	Total number of registrations in Nov 2016 - Sept 2018	Number of registrations in Q3 2018 (July - Sept)	Number of tests done (kits returned) in Q3 2018 (July - Sept)
Central Coast	48	2	2
Far West	20	9	9
Hunter New England	223	28	19
Illawarra Shoalhaven	98	23	17
Justice Health	106	47	44
Mid North Coast	34	5	1
Murrumbidgee	62	13	9
Nepean Blue Mountains	38	2	2
Northern NSW	24	3	0
Northern Sydney	124	26	15
South Eastern Sydney	268	116	104
Southern NSW	11	1	1
South Western Sydney	71	11	7
Sydney	180	37	29
Western NSW	22	8	5
Western Sydney	54	18	13

Data Source: NSW Dried Blood Spot Research database

3.2 What are the HIV testing patterns in NSW?

HIV testing takes place in a range of clinical and community settings, including general practice, PFSHCs and community HIV testing sites.

Figure 20: Proportion of patients³ attending PFSHCs and GBM GP clinics⁴ tested at least once for HIV at any clinic in the ACCESS network in the previous year, by quarter and service type, 1 January 2013 to 30 September 2018⁵



Data source: ACCESS Database, The Kirby Institute and the Burnet Institute

Comments on Figure 20

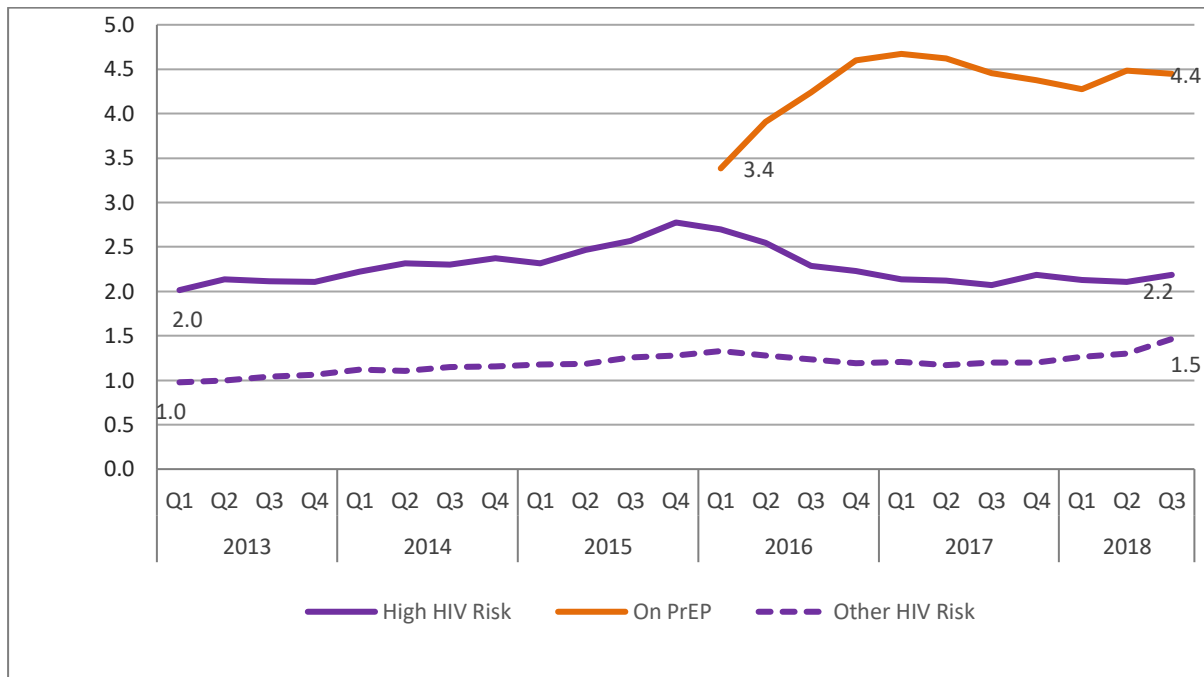
- HIV testing uptake among GBM attending PFSHCs remained consistently high in the third quarter of 2018 (96%), stable since midway through 2016.
- Testing uptake increased over time among other patients attending PFSHCs, rising from 53% in Q1 of 2013 to 72% in Q3 of 2018.
- Testing uptake also increased among GBM attending GBM GP clinics (from 38% in Q1 of 2013 to 59% in Q3 of 2018).

³ Excludes patients known to be HIV positive

⁴ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually; attendance data for patients not tested for HIV was unavailable for at GP clinics prior to 2013 and has been excluded

⁵ The testing period is retrospective; the proportion represents those who attended in a quarter and had at least one HIV test in the previous 12 months

Figure 21: Average number of annual HIV tests among GBM patients⁶ attending any clinic in the ACCESS network⁷, by HIV risk⁸ and quarter, 1 January 2013 to 30 September 2018



Data source: ACCESS Database, The Kirby Institute and the Burnet Institute

Comments on Figure 21

- The average number of HIV tests among high risk GBM increased from 2.0 per year in Q1 of 2013 to 2.2 per year in Q3 of 2018 and, during the same period, increased from 1.0 to 1.5 among men of other risk profiles.
- Men identified within ACCESS as accessing PrEP through the EPIC-NSW study were considered 'low risk' for HIV and, as per the protocol for that study, had consistently high rates of HIV testing. The average number of tests per EPIC participant was 4.3.

In this report, the definition of risk relative to HIV has been adapted to reflect a more nuanced assessment of clinical data that explicitly excludes men accessing PrEP. The updated categories for risk are defined as follows:

- **High risk:** assigned to men not on PrEP who, on the basis of a hierarchical decision tree, had a history of a rectal STI in the 24 months prior, or over the past 12 months evidence of inconsistent condom use, 20 or more partners, or evidence of injecting drug use
- **Other risk:** Any man not on PrEP not otherwise meeting the criteria of 'high risk'
- **On PrEP:** Any man enrolled in the EPIC-NSW study that accessed any clinic within the ACCESS network.

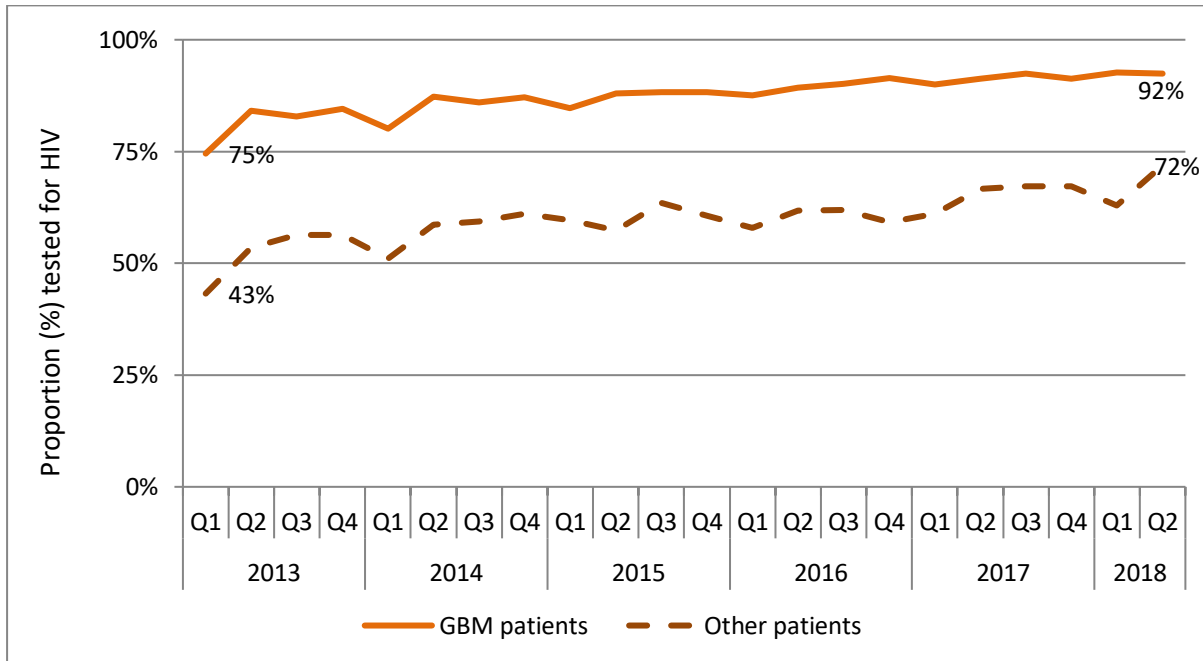
This change to the definition of 'high risk' means that the frequency of HIV testing among this group is lower than in previous reports because it excludes men accessing PrEP.

⁶ Excludes patients known to be HIV positive

⁷ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

⁸ High risk defined by GBM patients who are not on PrEP and reported injecting drug use in the last year, more than 12 partners/year and inconsistent condom use or history of a rectal STI in the past two years.

Figure 22: Proportion of patients⁹ attending PFSHCs and GBM GP clinics¹⁰ combined who received an HIV test at any clinic in the ACCESS network in conjunction with an STI diagnosis¹¹, by GBM status and quarter, 1 January 2013 to 30 June 2018



Data source: ACCESS Database, The Kirby Institute and the Burnet Institute

Comment on Figure 22

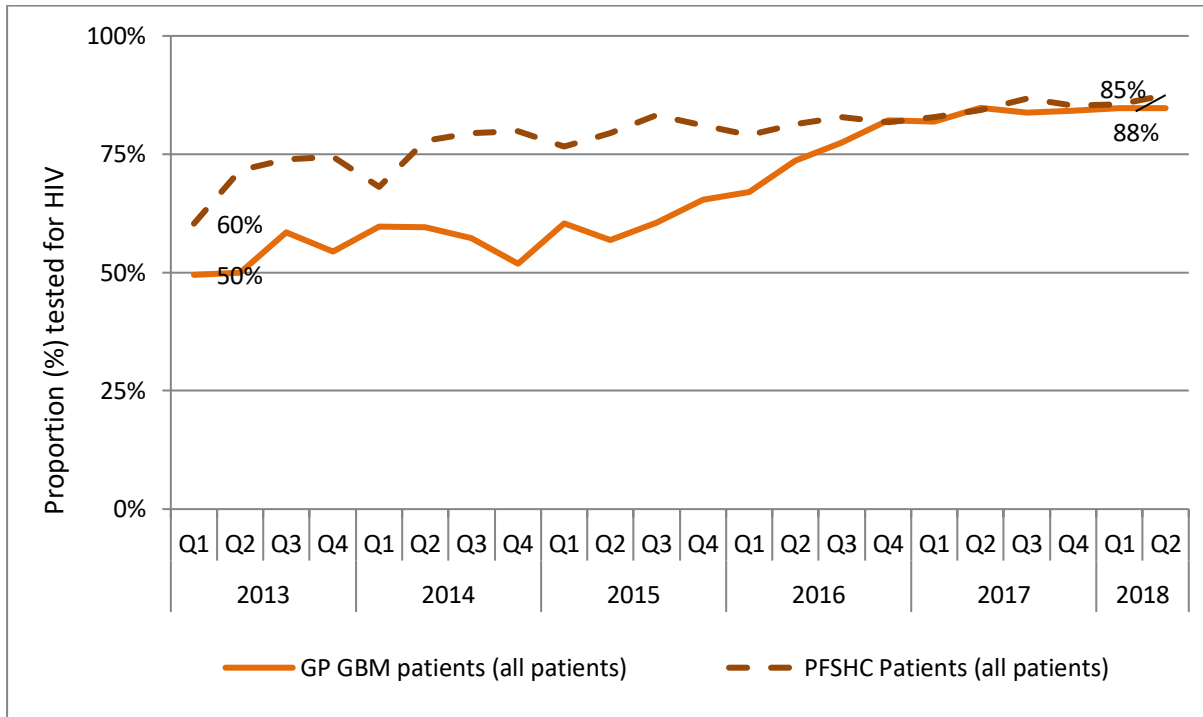
- The proportion of GBM who received an HIV test in conjunction with an STI diagnosis increased from 75% in early 2013 to 92% in Q2 of 2018.
- Testing in conjunction with STI diagnoses was less common among other patients but increased during this period from 43% to 72%.

⁹ Excludes patients known to be HIV positive

¹⁰ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

¹¹ Diagnosis for chlamydia, gonorrhoea and/or infectious syphilis; any HIV test conducted at least 60 days before or at most 30 days after a diagnosis was recorded

Figure 23: Proportion of patients¹² attending PFSHCs and GBM GP clinics¹³ who received an HIV test at any clinic in the ACCESS network in conjunction with an STI diagnosis¹⁴, by service type and quarter, 1 January 2013 to 30 June 2018



Data source: ACCESS Database, The Kirby Institute and the Burnet Institute

Comment on Figure 23

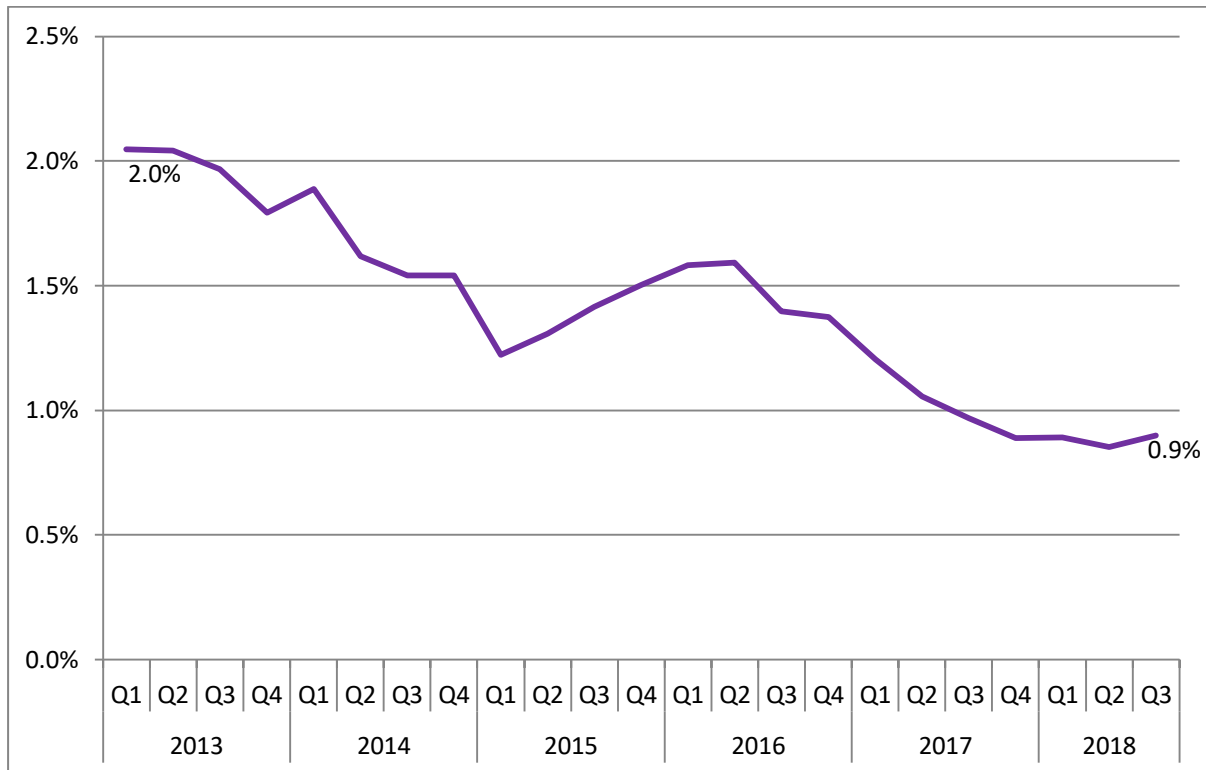
- By clinic type, differences in HIV testing in conjunction with an STI diagnosis disappeared over time.

¹² Excludes patients known to be HIV positive

¹³ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

¹⁴ Diagnosis for chlamydia, gonorrhoea and/or infectious syphilis; any HIV test conducted at least 60 days before or at most 30 days after a diagnosis was recorded

Figure 24: Proportion of individual GBM patients¹⁵ tested for HIV with a positive result (*HIV positivity*¹⁶) at any clinic in the ACCESS network, by quarter, 1 January 2013 to 30 September 2018



Data source: ACCESS Database, The Kirby Institute and the Burnet Institute

Comment on Figure 24

- Over time, HIV positivity among GBM attending PFSHCs and GBM GP clinics has decreased from 2.0% of Q1 2013 to 0.90% in the Q3 2018. Positivity has remained stable at 0.9% between Q1 and Q3 of 2018.

¹⁵ Excludes patients known to be HIV positive

¹⁶ HIV positivity is calculated as the proportion of individuals tested in a retrospective year period (discounting repeat tests among individuals) with an HIV diagnosis or confirmed pathology (positive p24 antigen or western blot test)

3.3 How is testing being made more accessible?

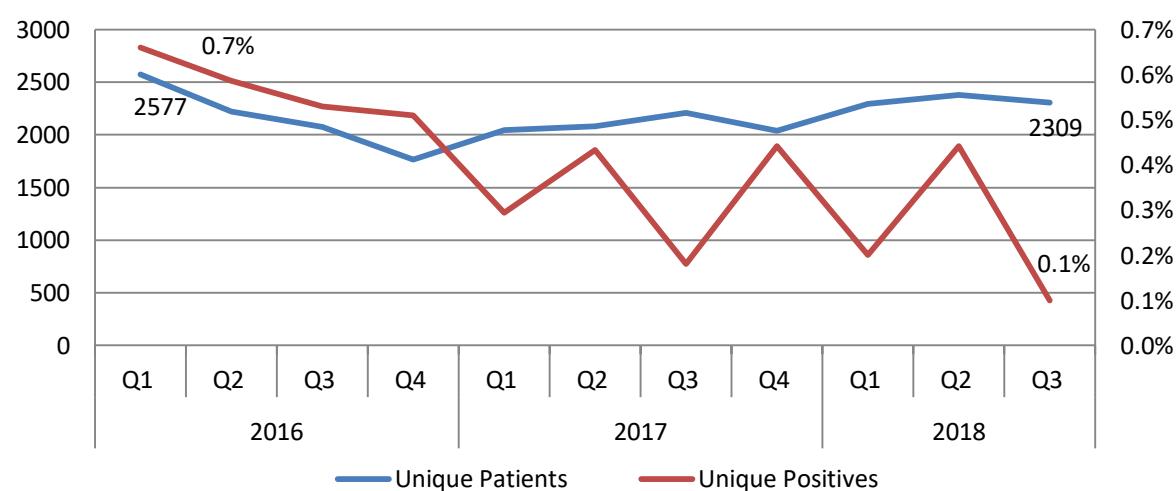
Table 7: Number of rapid HIV tests in community based sites and proportion of clients with high risk behaviour and infrequent testing history in June-September 2018

Non-traditional Settings	Number of RHT and (unique)	% Unique Positive	% never previously tested	% tested more than 12 months ago [#]	% with > 5 sexual partners in last 3 months*
Community-based					
<i>aTEST Oxford ST</i>	1,940	0.1%	8.8%	12.8%	30.6%
<i>aTEST Kings Cross</i>	108	0.0%	20.4%	27.8%	19.3%
<i>aTEST Newtown</i>	261	0.4%	12.6%	14.9%	18.8%

Data sources: NSW Health HIV Strategy Monitoring Database¹⁷

Note: [#]Does not include 'never tested'; ^{*}Only patients who provided information on this characteristic have been included

Figure 25: The number of unique patients who had a rapid HIV test at a community based site between January 2016 and September 2018 and the proportion of tests that were positive



Data sources: NSW Health HIV Strategy Monitoring Database¹⁸

Comments on Figure 25

- NSW data suggests community-based testing sites are an effective testing model for engaging GBM.
- Rapid HIV testing has been effectively embedded into the mix of the testing options in NSW.

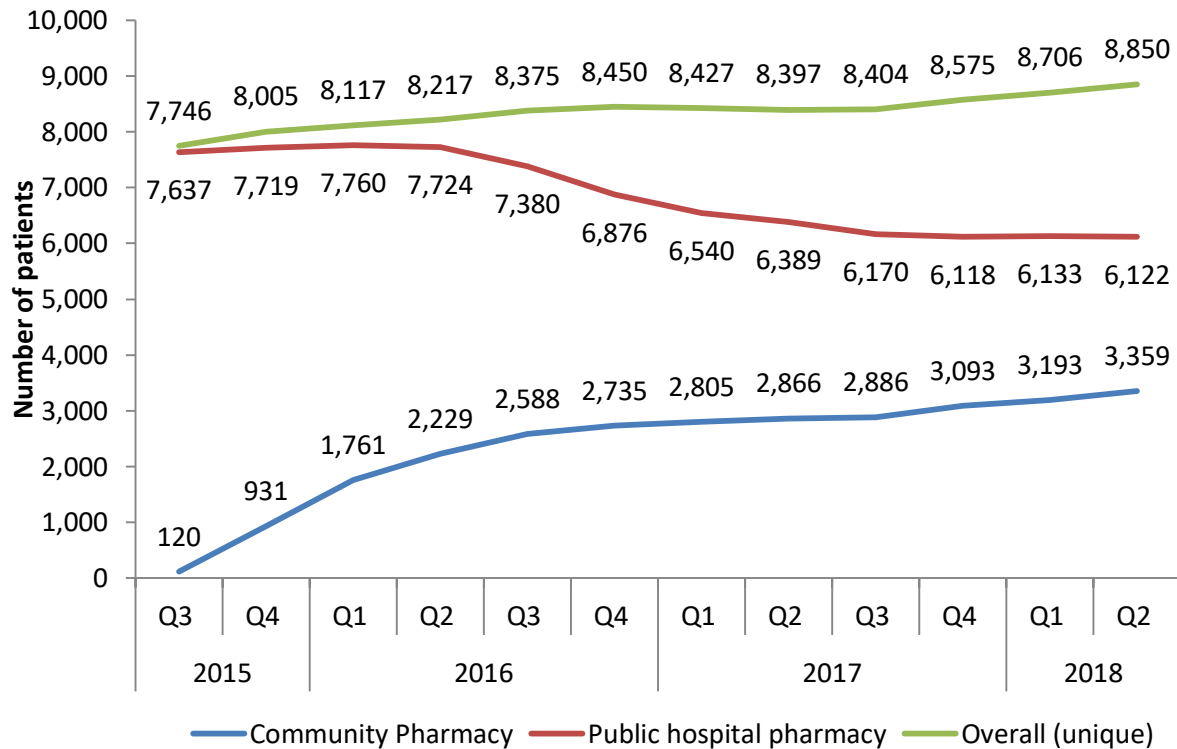
¹⁷ Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

¹⁸ Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

4. Increase HIV Treatment

4.1 How many people in NSW are on antiretroviral therapy?

Figure 26: The number of NSW residents who have been dispensed ART for HIV, by pharmacy type and by quarter, in the previous 12 months from 1 July 2015 to 30 June 2018

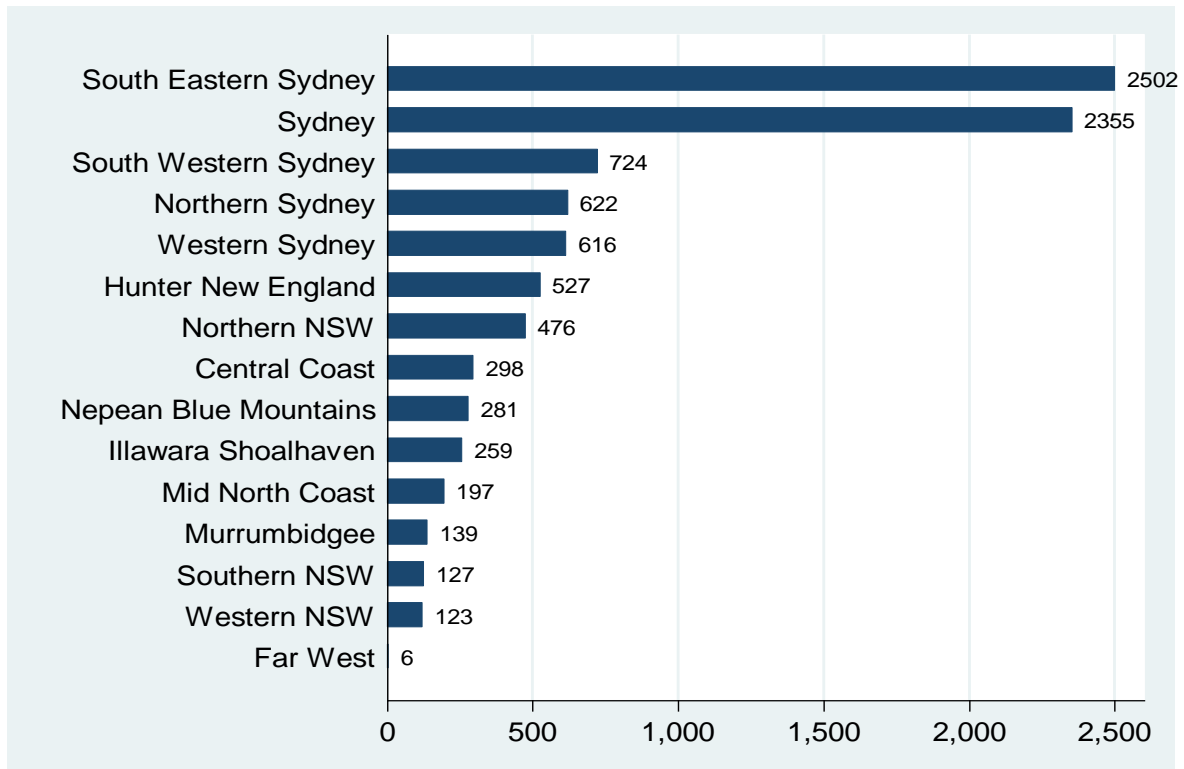


Data source: PBS Highly Specialised Drugs Programme data from 1 July 2015 to 30 June 2018 prepared for NSW Health.
Note: The number of patients dispensed via community and public hospital pharmacies may add to a figure greater than the overall unique patients as some patients receive treatment from more than one pharmacy type within a year. Due to boundary changes or movements in and or out of NSW, the overall unique number of individuals presented in the above graph may differ slightly from previous reports.

Comments on Figure 26

- Between 1 July 2017 and 30 June 2018, a total of 8,850 NSW residents were dispensed ART for HIV at least once within the previous 12 months.
- Of the 8,850 residents dispensed ART, 90.0% were male. The majority (54.0%) were 50 years or older, 26.0% were aged 40-49 years, and about 20.0% aged 39 years or younger.

Figure 27: The number of NSW residents dispensed ART for HIV, by the LHD of patient residence, from 1 July 2017 to 30 June 2018¹⁹



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data from July 2017 to June 2018

Comments on Figure 27

- About three-quarters (74%) of the ART dispensed in the 12 months ending 30 June 2018 was to patients residing in the following five LHDs: South Eastern Sydney, Sydney, South Western Sydney, Northern Sydney and Western Sydney LHDs.

¹⁹ The sum of the numbers displayed in the graph is higher than the total of 8,490 patients as some patients resided in more than one LHD.

4.2 Is the proportion of people on antiretroviral treatment coverage increasing in NSW?

Data on the treatment status of clients who received HIV care in NSW public sexual health and HIV services between October 2017 and September 2018 is summarised at Table 8²⁰.

Table 8: Clients who received HIV care in NSW public sexual health and HIV services from 1 October 2017 and 30 September 2018

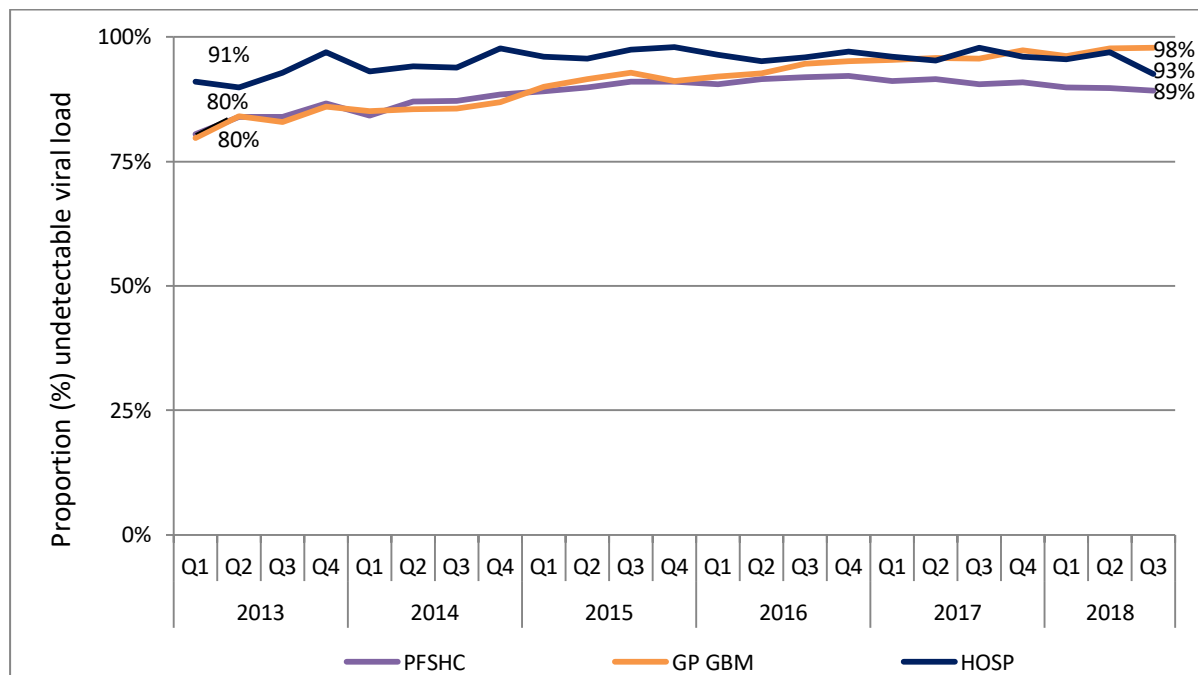
Number (%) of patients for whom treatment information was available	5751
Number (%) on ART	5,579 (97%)

Data sources: NSW Health HIV Strategy Monitoring Database²¹

Comment

- During period from October 2017 to September 2018, treatment information was available for 5,159 clients with HIV who received care in public HIV and sexual health clinics in NSW. The available data indicates treatment coverage in NSW PFSHCs is high at 97%.

Figure 28: Proportion of HIV positive patients²² attending any clinic in the ACCESS network²³ who received treatment or were recorded as on treatment in the previous year at any clinic in the ACCESS network, by service type and quarter, 1 January 2013 to 30 September 2018



Data source: ACCESS Database, The Kirby Institute and the Burnet Institute

²⁰ Data is representative of all clients who has received HIV care in NSW public HIV and sexual health services in the last 12 months where treatment information is available.

²¹ Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

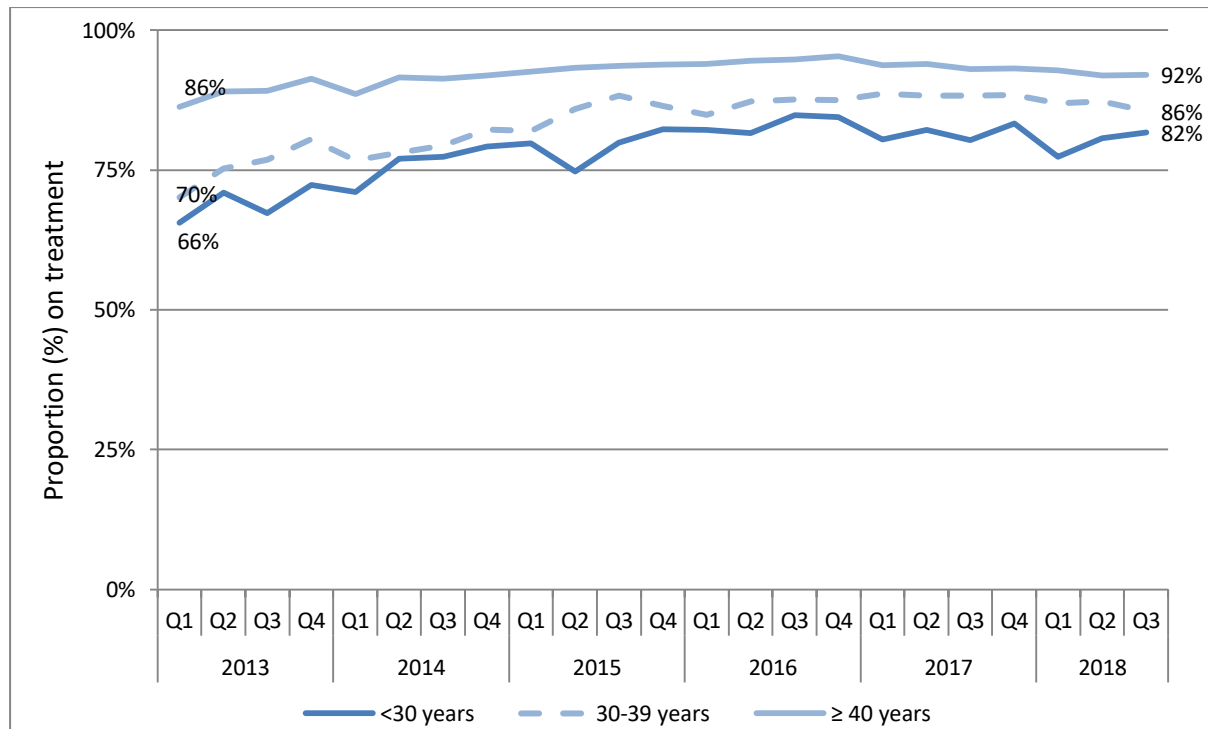
²² Excludes patients for whom HIV care was recorded as managed elsewhere

²³ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

Comment on Figure 28

- Over time, treatment uptake for people living with HIV increased across service types. The greatest increase was among patients attending GBM GP clinics, rising from 80% in early 2013 to 98% in Q3 of 2018.

Figure 29: Proportion of HIV positive patients attending any clinic in the ACCESS network²⁴ who received treatment or were recorded as on treatment in the previous year at any clinic in the ACCESS network, by age group and quarter, 1 January 2013 to 30 September 2018



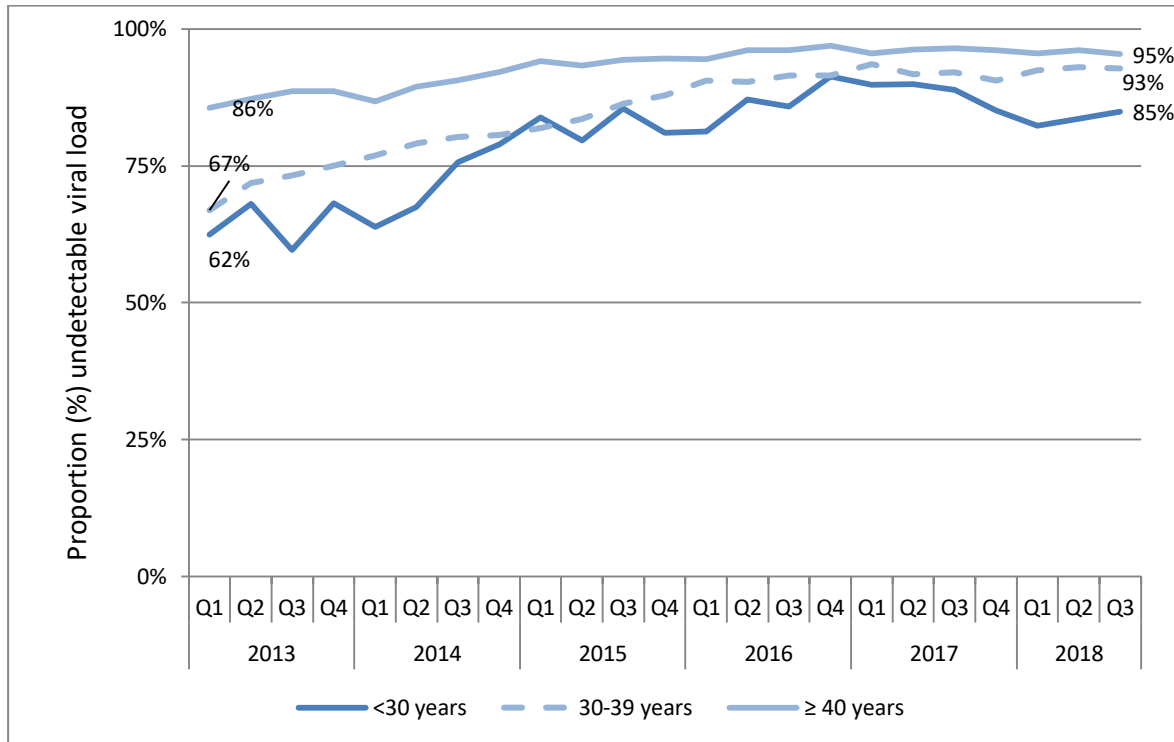
Data source: ACCESS Database, The Kirby Institute and the Burnet Institute

Comment on Figure 29

- Although, in general, uptake of treatment for HIV was highest among patients aged 40 years and older, the greatest change observed over time was among those aged 30 years and younger. The proportion increased from 66% in early 2013 to 82% by the end of Q3 of 2018.

²⁴ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

Figure 30: Proportion of HIV positive patients on treatment at any clinic in the ACCESS network²⁵ with an 'undetectable'²⁶ viral load at their most recent test in the previous 12-month period at any clinic in the ACCESS network²⁷, by age group and quarter, 1 January 2013 to 30 September 2018



Data source: ACCESS Database, The Kirby Institute and the Burnet Institute

Comment on Figure 30

- The proportion of HIV positive patients with an undetectable viral load was consistently highest among older patients: 95% of patients 40 years and older had undetectable viral loads in Q3 of 2018.
- The greatest change over time, however, was among 30-39 years old and younger patients (less than 30 years old), increasing around 37.5% from 2013 to Q3 2018.

²⁵ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

²⁶ 'Undetectable' defined as <200 RNA copies/mm³ of blood

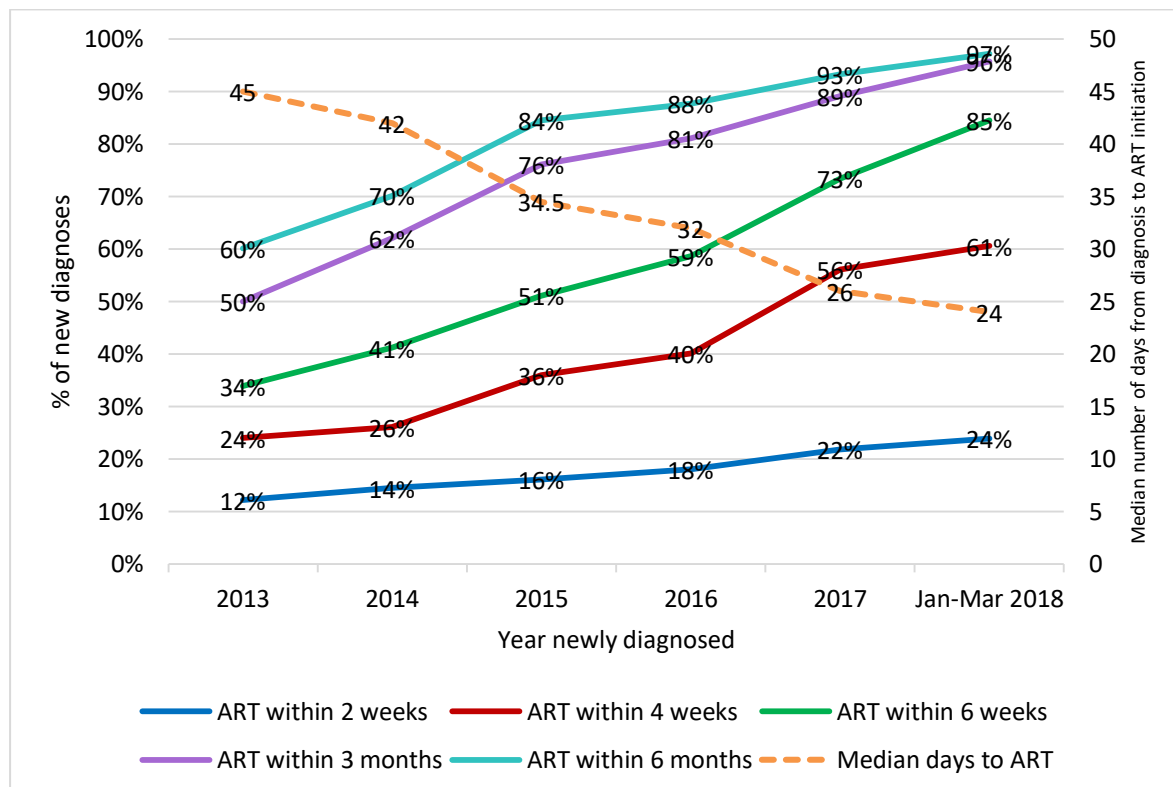
²⁷ Excludes patients for whom viral load test information was not available

4.3 How quickly are people newly diagnosed with HIV commencing antiretroviral therapy and achieving undetectable viral load in NSW?

Under the 2016-2020 HIV Strategy the aim is to ensure that at least 90% of people newly diagnosed with HIV are on ART within 6 weeks of diagnosis and to further reduce the time from diagnosis to ART over the life of the Strategy. In 2013 HIV surveillance in NSW was enhanced to collect at six months post diagnosis, via doctors, information on retention in care, ART commencement, pre-ART and latest HIV viral load and CD4 count.

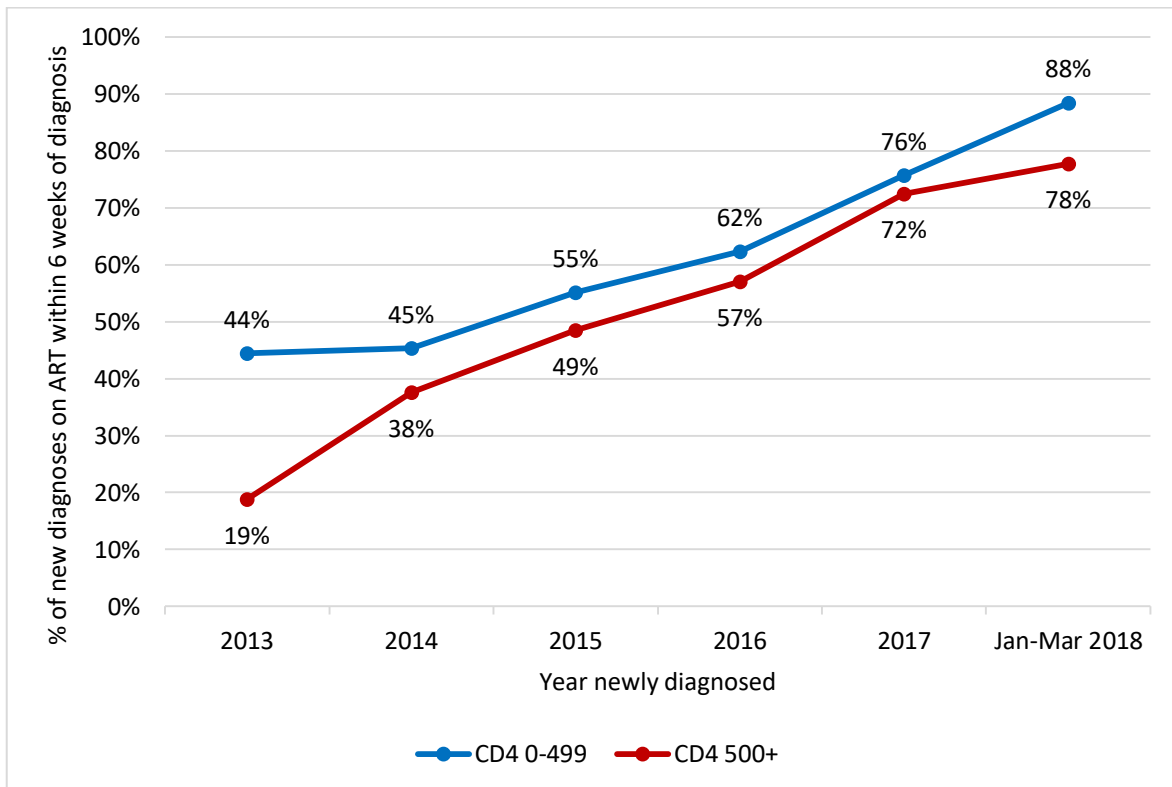
At the time of preparing this Q3 2018 report, six months post diagnosis follow up had been done on NSW residents newly diagnosed from 1 January 2013 to 31 March 2018 (n=1747). Data on initiation of ART was drawn from six months post diagnosis follow up form (FUF) data and HIV notification form data and combined for analysis. All new diagnoses were included irrespective of whether eligible for follow up and of care outcome.

Figure 31: Time to ART for NSW residents newly diagnosed in January 2013 to March 2018



- Of the 71 people newly diagnosed in January to March 2018 now followed up six months post diagnosis, 24% initiated ART within two weeks, 61% within four weeks, 85% within six weeks, 96% within three months and 97% within six months of diagnosis. The median time to ART initiation was 24 days. Of the 69 on ART within six months of diagnosis, 63 (91%) were already virally suppressed at six months follow up.

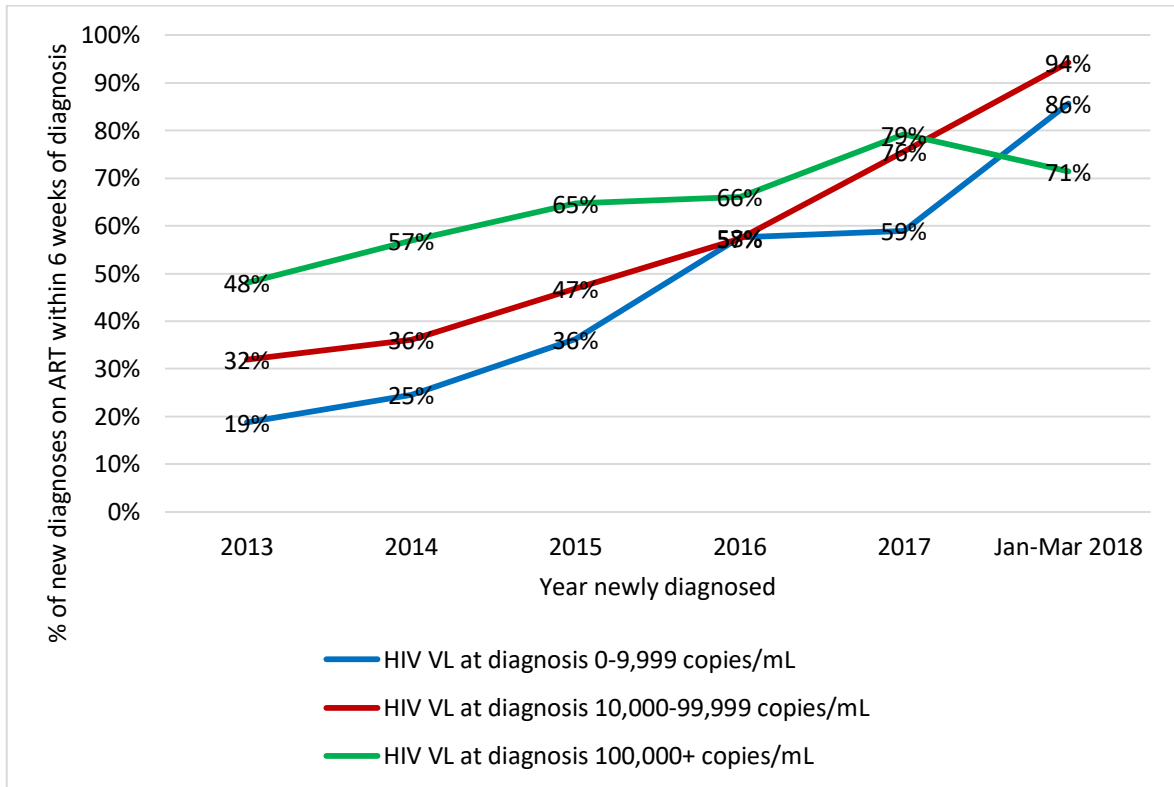
Figure 32: CD4 count at diagnosis of NSW residents notified with newly diagnosed HIV infection from January 2013 to March 2018 and % on ART within six weeks of diagnosis



Note: excludes 48 new diagnoses with missing CD4 at diagnosis, some of whom had commenced ART within 6 months.

- The proportion of people newly diagnosed with a CD4 count of 0-499 cells/ μ L who commenced ART within six weeks of diagnosis was 44% of the 2013, 45% of the 2014, 55% of the 2015, 62% of the 2016, 76% of the 2017 new diagnoses and 88% of the Q1 2018 new diagnoses.
- The proportion of people newly diagnosed with a CD4 count of 500 or over who commenced ART within six weeks of diagnosis was 19% of the 2013, 38% of the 2014, 49% of the 2015, 57% of the 2016, 72% of the 2017 new diagnoses and 78% of the Q1 2018 new diagnoses.

Figure 33: HIV viral load at diagnosis of NSW residents notified with newly diagnosed HIV infection from January 2013 to March 2018 and % on ART within six weeks of diagnosis



Note: excludes 63 new diagnoses with missing HIV VL at diagnosis, some of whom had commenced ART within 6 months.

- Of people with a HIV VL of 0-9,999 copies/mL, 19% of the 2013, 25% of the 2014, 36% of the 2015, 58% of the 2016, 59% of the 2017 and 86% of the Q1 2018 new diagnoses had commenced ART within six weeks of diagnosis.
- Of people with a HIV VL of 10,000-99,999 copies/mL, 32% of the 2013, 36% of the 2014, 47% of the 2015, 57% of the 2016, 76% of the 2017 and 94% of the Q1 2018 new diagnoses had commenced ART within six weeks of diagnosis.
- Of people with a HIV VL of 100,000 or over, 48% of the 2013, 57% of the 2014, 65% of the 2015, 66% of the 2016, 79% of the 2017 and 71% of the Q1 2018 new diagnoses had commenced ART within six weeks of diagnosis.

5. Appendix A: Data Sources

Notifications Data Sources

Name	Custodian	Availability	Details
Notifiable Conditions Information Management System (NCIMS)	Health Protection NSW, NSW Health	Quarterly	State wide coverage of HIV notifications received by NSW Health and their follow-up six months post diagnosis. Quarterly report restricted to notifications on NSW residents who are newly diagnosed with HIV. NCIMS contains de-identified epidemiological information including on: basic demographic data, diagnosis date, reasons for testing, CD4 count, HIV viral load (HIV VL), past testing history, risk exposure, retention in care and ART status six months post diagnosis. HIV surveillance forms available at: http://www.health.nsw.gov.au/Infectious/Pages/notification.aspx

Prevention Data Sources

Name	Custodian	Availability	Details
EPIC-NSW Enrolment and Behavioural survey databases	The Kirby Institute, UNSW Australia	Quarterly	Demographic data on all EPIC-NSW participants. Data fields include: site, age, sex, sexuality, residence, country of birth.
ACCESS study database and EPIC-NSW Temporary Data Collection	The Kirby Institute, UNSW Australia, and Burnet Institute	Quarterly	Deidentified clinical data patients attending sexual health clinics, high caseload general practice clinics and hospital outpatients clinics, which includes details on patient consultations, demographics, behaviour, testing, diagnoses and treatment/prescriptions. ACCESS is a live and real-time database, which means that data are not always available from every service and it is possible for services to be introduced and discontinued over time. These changes may introduce slight variations from one reporting period to the next.
Sydney Gay Community Periodic Survey	Centre for Social Research in Health	Annually	Repeat cross-sectional survey of gay and homosexually active men recruited at a range of gay community sites in Sydney. Data fields include sexual, drug use and testing practices related to the transmission of HIV and other STIs among gay men in Sydney. Data is self-reported. Data is collected in February-March annually and published in the following quarter.
ACON Ending HIV online survey database	ACON	Ad-hoc	Survey respondents are self-selected gay identifying men, recruited mainly through advertisements undertaken by ACON on Facebook. Contains data knowledge and attitudes of respondents towards testing, prevention and treatment.

NSW Health NSP Minimum Data Set	Centre for Population Health, NSW Health	Quarterly	Units of injecting equipment distributed in NSW by pharmacies participating in the Pharmacy NSP Fitpack® scheme and by the Public NSP
NSW NSP Data Collection	Centre for Population Health, NSW Health	6-monthly	Number of public NSP outlets by type in NSW by LHD
NSW Needle and Syringe Program Enhanced Data Collection	The Kirby Institute, UNSW Australia	Annual	Annual Survey of NSP attendees. Provides NSP client demographic, behavioural and drug use data to strengthen the state-wide prevention approach, and inform LHDs in planning for NSP service delivery at the local level. Data is self-reported. Data is collected over a two week period in late Feb/early March. The reports are circulated to CEs and key stakeholders in August. (The report may be published for the first time in 2017 TBC)

Testing Data Sources

Name	Custodian	Availability	Coverage
NSW Health denominator data project	Health Protection NSW, NSW Health	Quarterly	Number of tests in NSW
NSW Health HIV Strategy Monitoring Database	NSW Ministry of Health, NSW Health	Quarterly	Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy, includes aggregate testing data by priority population for relevant tests conducted within the LHD and community sites.
ACCESS Database	The Kirby Institute, UNSW Australia, and Burnet Institute	Quarterly	Deidentified clinical data patients attending sexual health clinics, high caseload general practice clinics and hospital outpatients clinics, which includes details on patient consultations, demographics, behaviour, testing, diagnoses and treatment/prescriptions. ACCESS is a live and real-time database, which means that data are not always available from every service and it is possible for services to be introduced and discontinued over time. These changes may introduce slight variations from one reporting period to the next.
Sydney Gay Community Periodic Survey	Centre for Social Research in Health	Annually Note: collected February-March	Repeat cross-sectional survey of gay and homosexually active men recruited at a range of gay community sites in Sydney. Data fields include sexual, drug use and testing practices related to the transmission of HIV and other STIs among gay men in Sydney. Data is self-reported. Data is collected in February-March annually and published in the following quarter.

Treatment Data Sources

Name	Custodian	Availability	Coverage
Pharmaceutical Benefits Schedule (PBS) Highly Specialised Drugs Programme data	Centre for Population Health, NSW Health	Quarterly Note: 4-6 month lag in data being provided to NSW Health.	PBS dispensing data for HIV treatments for all NSW residents from July 2014. This data is prepared by the Commonwealth Government for NSW Health and captures all HIV treatment dispensing in NSW through the PBS from a public hospital, private hospital or community pharmacies.
NSW Health HIV Strategy Monitoring Database	NSW Ministry of Health, NSW Health	Quarterly	Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy, includes summarised data on treatment coverage among patients diagnosed with HIV who are 'in care'.
ACCESS Database	The Kirby Institute, UNSW Australia, and Burnet Institute	Quarterly	Deidentified clinical data patients attending sexual health clinics, high caseload general practice clinics and hospital outpatients clinics, which includes details on patient consultations, demographics, behaviour, testing, diagnoses and treatment/prescriptions. ACCESS is a live and real-time database, which means that data are not always available from every service and it is possible for services to be introduced and discontinued over time. These changes may introduce slight variations from one reporting period to the next.
Notifiable Conditions Information Management System (NCIMS)	Health Protection NSW, NSW Health	Quarterly	State wide coverage/representation of HIV notifications received by NSW Health under public health legislation and of their follow up six months post diagnosis. Quarterly report restricted to notifications on people who are NSW residents and who are newly diagnosed with HIV. NCIMS contains de-identified epidemiological information on people notified with HIV infection including on: basic demographic data, diagnosis date, reasons for testing, CD4 count, HIV viral load (HIV VL), past testing history, risk exposure, retention in care and ART status six months post diagnosis. HIV surveillance forms available at: http://www.health.nsw.gov.au/Infectious/Pages/notification.aspx

6. Appendix B: Characteristics of NSW residents notified with newly diagnosed HIV infection 1981 to 30 September 2018 (continues over page) Data extracted from NCIMS, Health Protection NSW, 2 November 2018.

Case characteristics	2010		2011		2012		2013		2014		2015		2016		2017		Jan-Sep 2018		1981-Sep 2018	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total (ALL)	305	100.0%	332	100.0%	412	100.0%	354	100.0%	345	100.0%	348	100.0%	317	100.0%	312	100.0%	191	100.0%	18456	100.0%
Gender																				
Male	280	91.8%	311	93.7%	375	91.0%	324	91.5%	319	92.5%	319	91.7%	291	91.8%	282	90.4%	177	92.7%	16968	91.9%
Female	23	7.5%	21	6.3%	36	8.7%	27	7.6%	25	7.2%	28	8.0%	22	6.9%	24	7.7%	12	6.3%	1188	6.4%
Transgender	2	0.7%	0	0.0%	1	0.2%	3	0.8%	1	0.3%	1	0.3%	4	1.3%	6	1.9%	2	1.0%	52	0.3%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	248	1.3%
Aboriginal or Torres Strait Islander person status																				
Aboriginal person	7	2.3%	5	1.5%	13	3.2%	8	2.3%	7	2.0%	7	2.0%	9	2.8%	8	2.6%	7	3.7%	203	1.1%
Torres Strait Islander	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.3%	0	0.0%	0	0.0%	1	0.0%
Non-Aboriginal person	293	96.1%	324	97.6%	393	95.4%	344	97.2%	331	95.9%	338	97.1%	306	96.5%	304	97.4%	184	96.3%	11344	61.5%
Not stated	5	1.6%	3	0.9%	6	1.5%	2	0.6%	7	2.0%	3	0.9%	1	0.3%	0	0.0%	0	0.0%	6908	37.4%
Age in years at diagnosis																				
0-4	1	0.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	39	0.2%
5-9	0	0.0%	0	0.0%	0	0.0%	1	0.3%	0	0.0%	0	0.0%	1	0.3%	1	0.3%	0	0.0%	25	0.1%
10-14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	36	0.2%
15-19	5	1.6%	6	1.8%	9	2.2%	8	2.3%	2	0.6%	6	1.7%	3	0.9%	5	1.6%	2	1.0%	318	1.7%
20-24	29	9.5%	34	10.2%	44	10.7%	37	10.5%	41	11.9%	45	12.9%	39	12.3%	29	9.3%	26	13.6%	2240	12.1%
25-29	56	18.4%	55	16.6%	77	18.7%	65	18.4%	51	14.8%	63	18.1%	60	18.9%	58	18.6%	38	19.9%	3632	19.7%
30-34	49	16.1%	65	19.6%	71	17.2%	48	13.6%	64	18.6%	62	17.8%	63	19.9%	58	18.6%	39	20.4%	3672	19.9%
35-39	43	14.1%	59	17.8%	64	15.5%	42	11.9%	45	13.0%	45	12.9%	48	15.1%	35	11.2%	19	9.9%	3031	16.4%
40-44	51	16.7%	46	13.9%	47	11.4%	45	12.7%	46	13.3%	32	9.2%	30	9.5%	38	12.2%	20	10.5%	2238	12.1%
45-49	30	9.8%	26	7.8%	38	9.2%	45	12.7%	30	8.7%	26	7.5%	32	10.1%	21	6.7%	14	7.3%	1333	7.2%
50-54	7	2.3%	25	7.5%	28	6.8%	24	6.8%	26	7.5%	28	8.0%	18	5.7%	19	6.1%	10	5.2%	823	4.5%
55-59	22	7.2%	10	3.0%	14	3.4%	22	6.2%	15	4.3%	13	3.7%	13	4.1%	16	5.1%	11	5.8%	478	2.6%
60-64	5	1.6%	2	0.6%	13	3.2%	6	1.7%	14	4.1%	15	4.3%	6	1.9%	17	5.4%	5	2.6%	266	1.4%
65-69	6	2.0%	2	0.6%	4	1.0%	9	2.5%	7	2.0%	7	2.0%	4	1.3%	5	1.6%	3	1.6%	143	0.8%

NSW HIV STRATEGY 2016-2020: DATA REPORT **2018**
Quarter 3

<i>70 or over</i>	1	0.3%	2	0.6%	3	0.7%	2	0.6%	3	0.9%	6	1.7%	0	0.0%	10	3.2%	4	2.1%	94	0.5%
<i>Unknown</i>	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	88	0.5%
Case characteristics	2010		2011		2012		2013		2014		2015		2016		2017		Jan-Sep 2018		1981-Sep 2018	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total (ALL)	305	100.0%	332	100.0%	412	100.0%	354	100.0%	345	100.0%	348	100.0%	317	100.0%	312	100.0%	191	100.0%	18456	100.0%
Reported HIV risk exposure																				
<i>MSM</i>	226	74.1%	269	81.0%	321	77.9%	265	74.9%	256	74.2%	264	75.9%	235	74.1%	217	69.6%	141	73.8%	11699	63.4%
<i>MSM who injects drugs</i>	8	2.6%	11	3.3%	14	3.4%	16	4.5%	20	5.8%	21	6.0%	25	7.9%	16	5.1%	11	5.8%	575	3.1%
<i>Hetero-sex only</i>	51	16.7%	41	12.3%	58	14.1%	61	17.2%	50	14.5%	52	14.9%	48	15.1%	66	21.2%	34	17.8%	1752	9.5%
<i>PWID</i>	9	3.0%	8	2.4%	10	2.4%	7	2.0%	8	2.3%	4	1.1%	4	1.3%	6	1.9%	3	1.6%	575	3.1%
<i>Blood disorder, blood or tissue recipient</i>	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.3%	0	0.0%	0	0.0%	0	0.0%	277	1.5%
<i>Vertical transmission</i>	1	0.3%	0	0.0%	0	0.0%	1	0.3%	1	0.3%	0	0.0%	1	0.3%	2	0.6%	0	0.0%	53	0.3%
<i>Other</i>	1	0.3%	1	0.3%	2	0.5%	1	0.3%	4	1.2%	3	0.9%	1	0.3%	1	0.3%	1	0.5%	51	0.3%
<i>Unknown</i>	9	3.0%	2	0.6%	7	1.7%	3	0.8%	6	1.7%	3	0.9%	3	0.9%	4	1.3%	1	0.5%	3474	18.8%
LHD of residence																				
<i>South Eastern Sydney</i>	109	35.7%	124	37.3%	150	36.4%	126	35.6%	112	32.5%	128	36.8%	84	26.5%	92	29.5%	60	31.4%	5749	31.1%
<i>Sydney</i>	76	24.9%	88	26.5%	113	27.4%	87	24.6%	82	23.8%	84	24.1%	94	29.7%	66	21.2%	41	21.5%	3136	17.0%
<i>Northern Sydney</i>	19	6.2%	24	7.2%	23	5.6%	25	7.1%	18	5.2%	24	6.9%	19	6.0%	29	9.3%	15	7.9%	1042	5.6%
<i>Western Sydney</i>	20	6.6%	31	9.3%	25	6.1%	27	7.6%	27	7.8%	20	5.7%	24	7.6%	29	9.3%	13	6.8%	790	4.3%
<i>South Western Sydney</i>	25	8.2%	18	5.4%	30	7.3%	33	9.3%	32	9.3%	33	9.5%	32	10.1%	29	9.3%	18	9.4%	772	4.2%
<i>Hunter New England</i>	16	5.2%	11	3.3%	14	3.4%	17	4.8%	27	7.8%	17	4.9%	15	4.7%	7	2.2%	12	6.3%	518	2.8%
<i>Nepean Blue Mountains</i>	3	1.0%	4	1.2%	5	1.2%	3	0.8%	6	1.7%	6	1.7%	2	0.6%	6	1.9%	4	2.1%	272	1.5%
<i>Illawarra Shoalhaven</i>	8	2.6%	5	1.5%	9	2.2%	7	2.0%	6	1.7%	7	2.0%	8	2.5%	10	3.2%	6	3.1%	247	1.3%
<i>Central Coast</i>	5	1.6%	4	1.2%	10	2.4%	5	1.4%	8	2.3%	5	1.4%	11	3.5%	12	3.8%	4	2.1%	223	1.2%
<i>Northern NSW</i>	8	2.6%	11	3.3%	5	1.2%	5	1.4%	7	2.0%	8	2.3%	5	1.6%	11	3.5%	5	2.6%	221	1.2%
<i>Mid North Coast</i>	3	1.0%	4	1.2%	3	0.7%	6	1.7%	7	2.0%	6	1.7%	2	0.6%	4	1.3%	2	1.0%	154	0.8%
<i>Western NSW</i>	4	1.3%	3	0.9%	7	1.7%	5	1.4%	2	0.6%	2	0.6%	5	1.6%	5	1.6%	2	1.0%	134	0.7%
<i>Murrumbidgee-Albury</i>	7	2.3%	2	0.6%	5	1.2%	3	0.8%	3	0.9%	4	1.1%	9	2.8%	6	1.9%	4	2.1%	108	0.6%
<i>Southern NSW</i>	1	0.3%	2	0.6%	8	1.9%	4	1.1%	4	1.2%	2	0.6%	6	1.9%	3	1.0%	2	1.0%	71	0.4%
<i>Far West</i>	0	0.0%	0	0.0%	2	0.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.5%	9	0.0%
<i>Unknown or other</i>	1	0.3%	1	0.3%	3	0.7%	1	0.3%	4	1.2%	2	0.6%	1	0.3%	3	1.0%	2	1.0%	5010	27.1%

7. Appendix C: Demographic profile of participants who participated in EPIC study

Category	Description
Gender	Gender was obtained from the risk assessment, behavioural survey, and ACCESS databases, where available. Risk assessment data were available for 6,554 (70.2%) participants, behavioural survey data for 6,334 (67.8%) participants and ACCESS data for 8,029 (85.9%) participants. Data were not available for 307 (3.3%) participants.
Sexual identity	Sexual identity was obtained from the risk assessment and behavioural survey databases, where available. Risk assessment data were available for 6,554 (70.1%) participants, and behavioural survey data for 6,334 (67.8%) participants. Data were missing for 397 (4.2%) participants.
Age	Age was obtained from the enrolment and ACCESS databases, where available. In the enrolment database, date of birth (used to calculate age) was recorded for participants who consented to data linkage; 7,407 (79.3%) provided consent and data are available for 7,393 participants. Age was available in the ACCESS database for 8,035 participants (86.0%). Data on age were not available from either the enrolment or ACCESS databases for 331 (3.5%) of total participants.
Aboriginal and/or Torres Strait Islander status	Aboriginal and/or Torres Strait Islander status was obtained from the behavioural survey and ACCESS databases, where available. 8116 (87%) participants consented to participate in the behavioural survey and 6344 (67.8% of the total sample) completed it. Of the 1,208 (12.9%) participants whose Indigenous status was not stated, 11 participants' country/region of birth was available and not Australia, so these people were counted as Non-Indigenous, as it was assumed that there would be very few indigenous Australian or Torres Strait Islander people born outside Australia. Overall, after this assumption, data for Indigenous status was missing for 1,197 (12.8%) participants.
Country/region	Country/region of birth was obtained from the behavioural survey and ACCESS databases, where available (see above). Data for country/region of birth was missing for 1,697 (18.2%) participants.
Area of residence	Area of residence (based on participant postcode) was obtained from the enrolment, behavioural survey and ACCESS databases, where available. Data were missing for 222 (2.4%) participants.

8. Appendix D: Ending HIV Seven Statements Evaluation, ACON 2013-2018

Answer Options	FEB 2013	MAY 2013	NOV 2013	APRIL 2014	DEC 2014	APR 2015	MAR 2016	SEP 2016	APR 2017	MAR 2018
Everything has changed, we can now dramatically reduce HIV transmission	48%	59%	59%	67%	61%	71%	77%	86%	77%	87%
Now more than ever, gay men need to know their HIV status	81%	85%	86%	90%	89%	91%	92%	92%	91%	92%
Sexually active gay men should take an HIV test at least twice a year	88%	87%	92%	93%	89%	92%	93%	96%	94%	95%
HIV treatments now offer increased health benefits and fewer side effects	65%	66%	67%	73%	69%	75%	77%	78%	71%	77%
HIV treatments significantly reduce the risk of passing on HIV	33%	42%	50%	64%	59%	69%	73%	83%	78%	84%
Early HIV treatment is better for your health and can help protect your sex partners	74%	80%	89%	91%	92%	93%	93%	95%	93%	95%

Condoms continue to be the most effective way of preventing HIV transmission	95%	92%	92%	91%	91%	85%	94%	94%	94%	94%
---	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

* In March 2016 this statement was changed to reflect advances in bio-medical prevention. On all prior surveys the statement was 'condoms continue to be the most effective way of preventing HIV transmission'.

Survey methodology:

Each of the five online evaluation surveys was developed and analysed by an independent consultant using the Survey Monkey online tool. Each survey was run over a one to three week period. In addition to 30 to 40 mainly multiple choice questions, with a few opportunities for respondents to provide comments, respondents were provided with a set of seven statements and asked to indicate whether they agree or disagree with the statements (using a five point scale)

Recruitment methodology:

Respondents were mainly recruited through the placement of survey advertisements on Facebook undertaken by ACON.

Survey objectives:

The online evaluation survey focussed on measuring a) advertisement awareness, b) engagement with campaign components, and c) self-reported impact and getting answers to seven statements.