

NSW HIV Strategy 2016 – 2020

July – September 2017

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](#).

Executive Summary

Key messages to 30 September 2017

New HIV diagnoses have declined over the past six years

High uptake of pre-exposure prophylaxis (PrEP) to prevent HIV, higher treatment rates, earlier treatment uptake, and more frequent testing that leads to earlier diagnosis have contributed to prevention of HIV transmission in NSW.

In January to September 2017, 24% fewer gay and bisexual men (GBM) were diagnosed with HIV (166), compared to the average for the same period in the last six years (219). The drop in the number of new diagnoses in GBM was due to a fall in the number of infections that were diagnosed within a year of the person acquiring their infection (early diagnoses). Early diagnoses in GBM fell by 36% in January to September 2017 compared to the same period in the previous six years. This fall in early HIV diagnoses at the same time that testing rates have increased indicate that HIV transmission in this population group is declining.

HIV diagnoses in GBM men increased in July to September 2017 (Q3) compared to Q1 and Q2

While the number of diagnoses in GBM has declined in the past 15 months, 25% more GBM were diagnosed in Q3 2017 than the average number diagnosed in Q1 and Q2 2017. This increase in diagnoses occurred mainly in men who were diagnosed late in their infection. Someone who is diagnosed with a late infection was likely infected with HIV five or more years ago, and did not have a test during that time.

In Q3, the number of HIV diagnosed GBM who were infected in the 12 months before their positive test was 25% (28) fewer than the average for the same period in the previous six years (37). However, this still represents 44% of all GBM diagnoses in Q3. Further reductions in new HIV infections will require increased access to PrEP, as well as to continue promoting condom use.

Overseas born GBM HIV notifications now outnumber Australian born GBM notifications

In 2017 to 30 September, for the first time, the number of overseas born GBM diagnosed with HIV exceeds the number of Australian born GBM diagnosed with HIV. This is due to the decline in new diagnoses in Australia born GBM.

Efforts to raise awareness of PrEP in overseas born GBM have led to a greater proportion of overseas born men being enrolled in EPIC-NSW in Q3 and it is hoped that this will result in a fall in the number of diagnoses in overseas born GBM in the future. However increased efforts to provide more equitable access to PrEP and to other HIV prevention interventions in overseas born GBM must be further strengthened.

In the first three quarters of 2017, eighteen Australian born people were diagnosed with a HIV infection that they likely acquired through heterosexual exposure overseas. This is twice as many as the average of nine for the full years of 2011 to 2016. Travel health messages should include that the risk of HIV and other STIs is higher in many other countries than Australia, and all travellers should protect themselves against these infections.

More people with a HIV diagnosis are commencing treatment, and are commencing earlier

Over 94% of people with HIV who attend public HIV and sexual health clinics, and high case load GPs in NSW are on HIV treatment. The time between diagnosis and treatment continues to decline. Of the 72 people who were diagnosed in Q1 2017, 75% commenced treatment within six weeks of diagnosis, 96% within three months and 99% within six months of diagnosis.

The trends in this data report significant progress but suggest further efforts are needed to:

- increase HIV testing amongst people and communities at risk of longstanding HIV infections
- improve engagement with less connected groups who are at risk of HIV, particularly people who identify as heterosexual, and culturally and linguistically diverse backgrounds, including those who are GBM
- continue to increase HIV testing in general practice and other health services
- continue to promote the use of PrEP and condoms for HIV prevention.

Key data to 30 September 2017

HIV INFECTIONS			
	Target group	July-Sept 2017	Compared with July-Sept 2011-2016 average
Number of NSW residents newly diagnosed	Total count	83	6% less (Q3 2011-2016 average=88)
	Count who were men who have sex with men (MSM)	64 (77% of total)	11% less (Q3 2011-2016 average=72)
Number of MSM newly diagnosed with evidence of early stage infection	MSM	28 (44% of MSM)	25% less (Q3 2011-2016 average=37)
Number and proportion of new diagnoses with evidence of late diagnosis	All new diagnoses	37 (45% of total)	23% more (Q3 2011-2016 average=30; 181/527-34% late)
PREVENT			
	Target group	Mar 2016 – September 2017	
Number of people receiving PrEP through EPIC-NSW	People in NSW at high risk of HIV infection	7,284	
TEST			
	Target group	Jul-Sep 2017	Compared with Apr-Jun 2016
Number of HIV serology tests performed in NSW	All	143,220	6% more (n=135,362)
Number of HIV tests performed in NSW public sexual health and HIV clinics, and priority LHD settings	All	16,943	9% more (n=15,564)
	Identifying as MSM	10,416	9.5% more (n=9,515)
Number of DBS tests* (*November 2016-October 2017)		291 (2 HIV positive)	
TREAT			
	Target group	October 2016 – September 2017	Target
Proportion of patients with diagnosed HIV infection in care, who were on treatment	Sexual Health and HIV Clinic attendees	95%	95%
	Select high and medium caseload general practices	94%	95%
Proportion of NSW residents newly diagnosed with HIV who commenced ART within six weeks and six months of diagnosis	Newly diagnosed cohort for Jan-Mar 2017	75% (n=4/72) on ART within six weeks of diagnosis	>90%
		99% (n=71/72) on ART within six months of diagnosis	100%
Proportion of NSW residents newly diagnosed who were on ART and were known to be virally suppressed (VL < 200 copies/mL) at 6-month follow-up	NSW residents newly diagnosed Jan-Mar 2017	97% (n=69/72) with a post-ART VL. 96% (n=66/69) virally suppressed	100%

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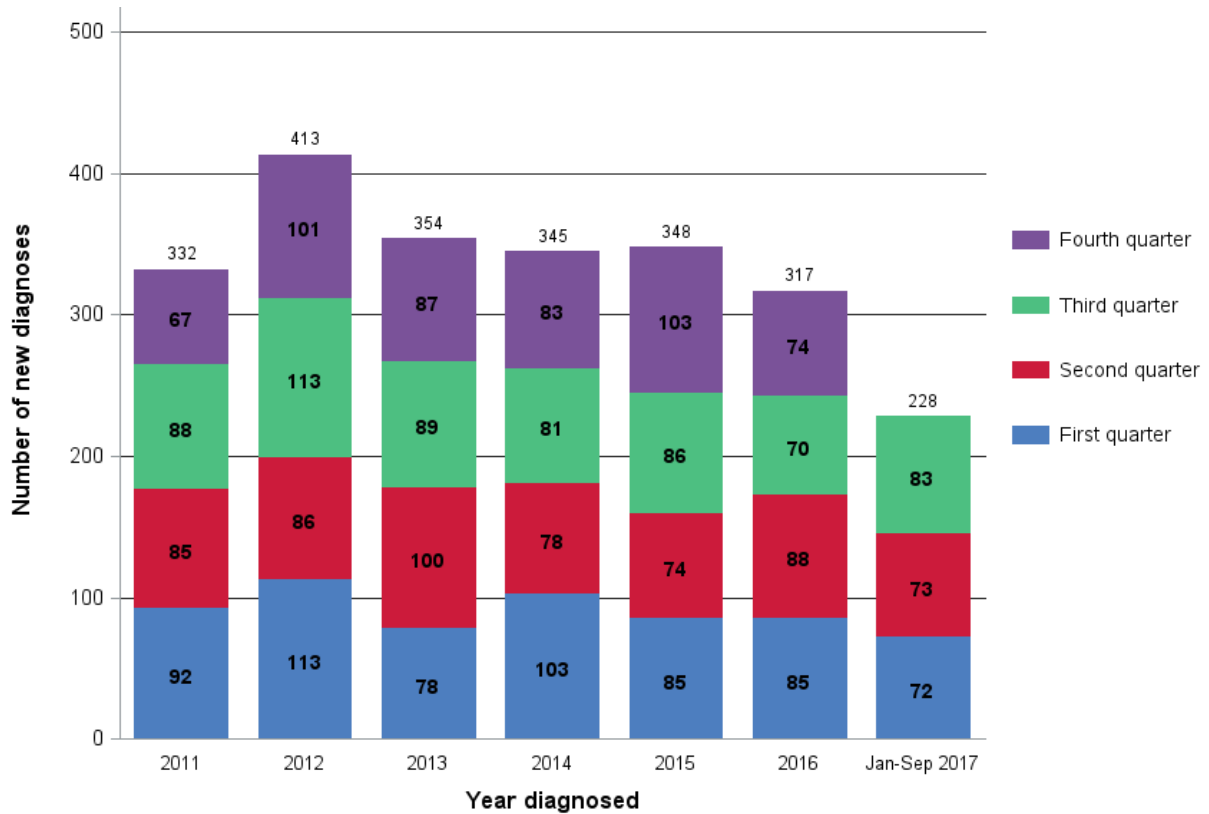
Glossary of Terms

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 notified with newly diagnosed HIV infection from 1 January 2011 to 30 September 2017

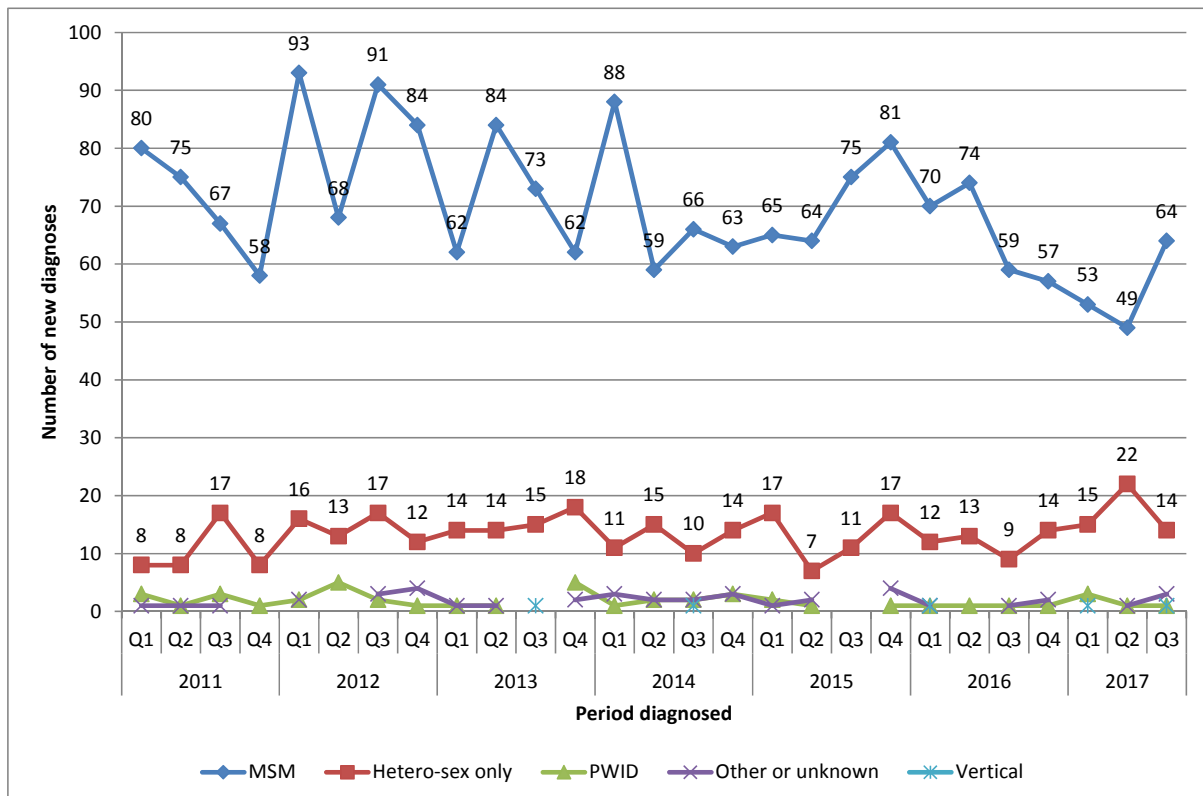


Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017

Comment

- From 1 July to 30 September 2017 (quarter 3 2017), 83 NSW residents were newly diagnosed with HIV infection, 6 per cent (%) less than the quarter 3 average 2011-2016 (n=88). The new diagnoses count per month for quarter 3 was 38 for July, 21 for August and 24 for September.
- From January to September 2017, 228 people were newly diagnosed, 14% less than the January to September average 2011-2016 (n=266). The decline in new diagnoses has occurred among men who have sex with men (MSM) (Figure 2).

Figure 2: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2011 to 30 September 2017 by reported HIV risk exposure

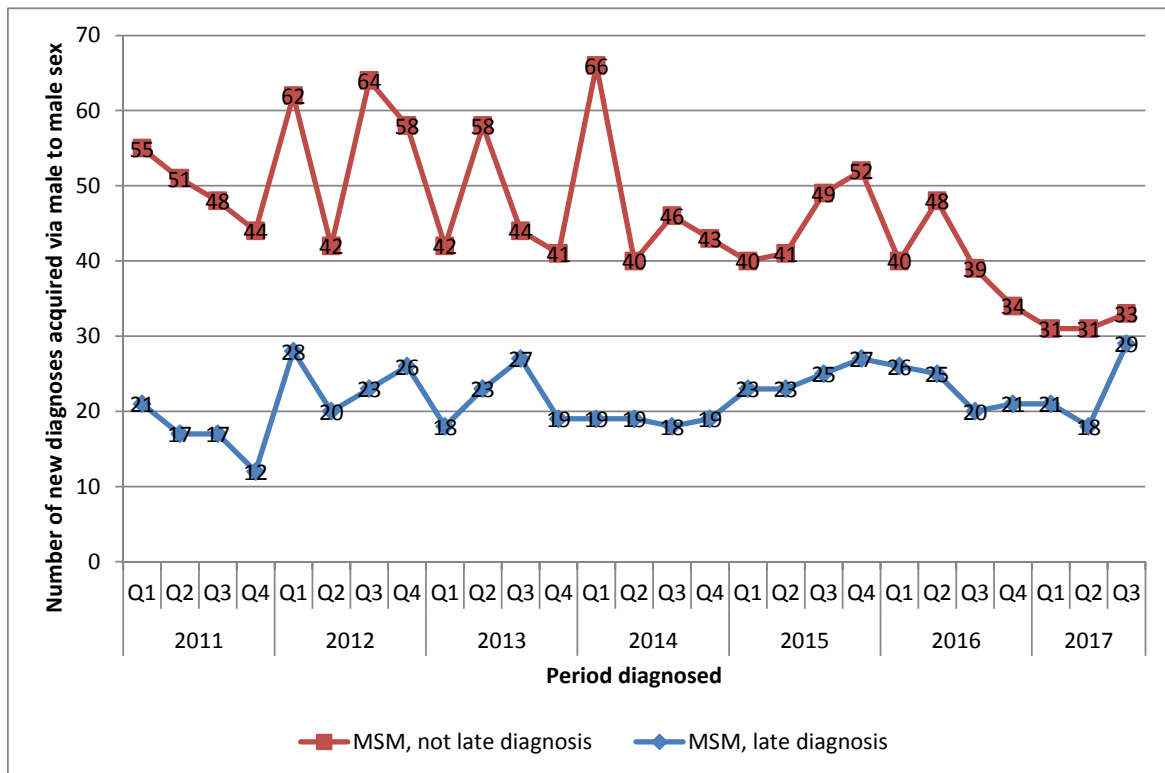


Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017

Comment

- In quarter 3 2017, 64 of 83 (77%) people newly diagnosed reported being men who have sex with men, 11% less than the average number of new diagnoses in MSM in quarter 3 2011-2016 (n=72).
- The new diagnoses count in MSM per month for quarter 3 was 30 for July, 16 for August and 18 for September. The higher number of new diagnoses in quarter 3 (relative to quarter 1 and 2) were due to an excess of MSM diagnosed late who were both Australian born and overseas born (Figures 3 and 4). There was no increase in acute infection (Figure 5).
- In January to September 2017, 166 of 228 (73%) people newly diagnosed reported being MSM, 24% less than the average number of new diagnoses in MSM in January to September of 2011-2016 (n=219).
- Among the 166 MSM newly diagnosed with HIV in January to September 2017, 37 (22%) had evidence of being infected in the three months prior to diagnosis, 39% less than the average number of MSM in January to September 2013-2016 (n=60.25). Evidence of being infected in the three months prior to diagnosis was defined as a negative or indeterminate Western Blot test, or a sero-conversion like illness or a report of a negative HIV test within 3 months of diagnosis.

Figure 3: Number of new diagnoses acquired via male to male sex per quarter from 1 January 2011 to 30 September 2017, by evidence of late diagnosis*



* Evidence 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 4: Number of new diagnoses acquired via male to male sex per quarter from 1 January 2011 to 30 September 2017, by place born (Australia versus overseas)

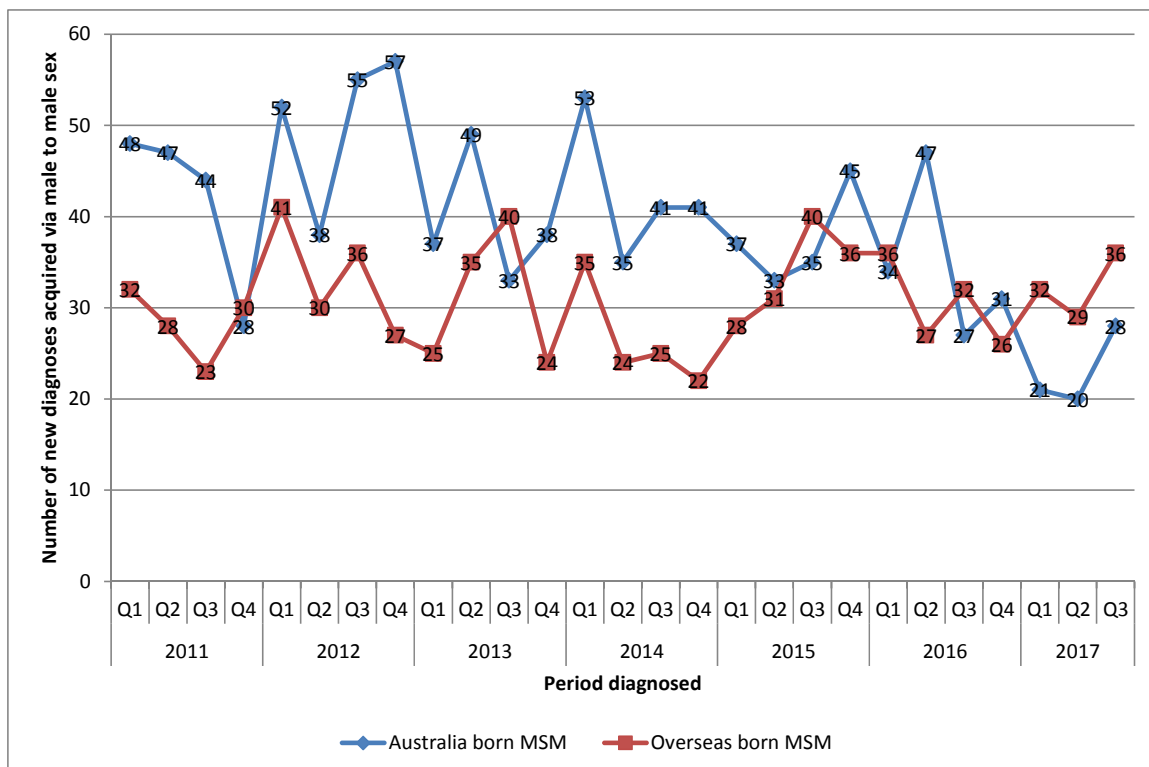
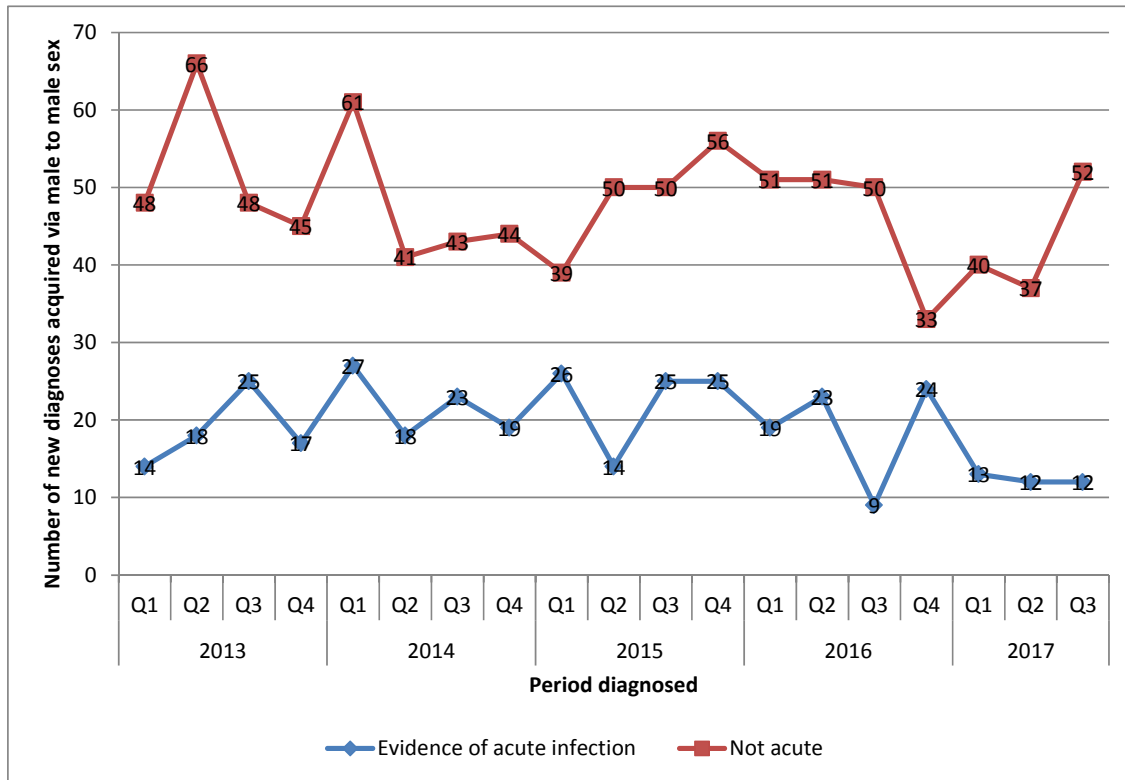


Figure 5: Number of new diagnoses acquired via male to male sex per quarter from 1 January 2011 to 30 September 2017, by evidence of acute infection*

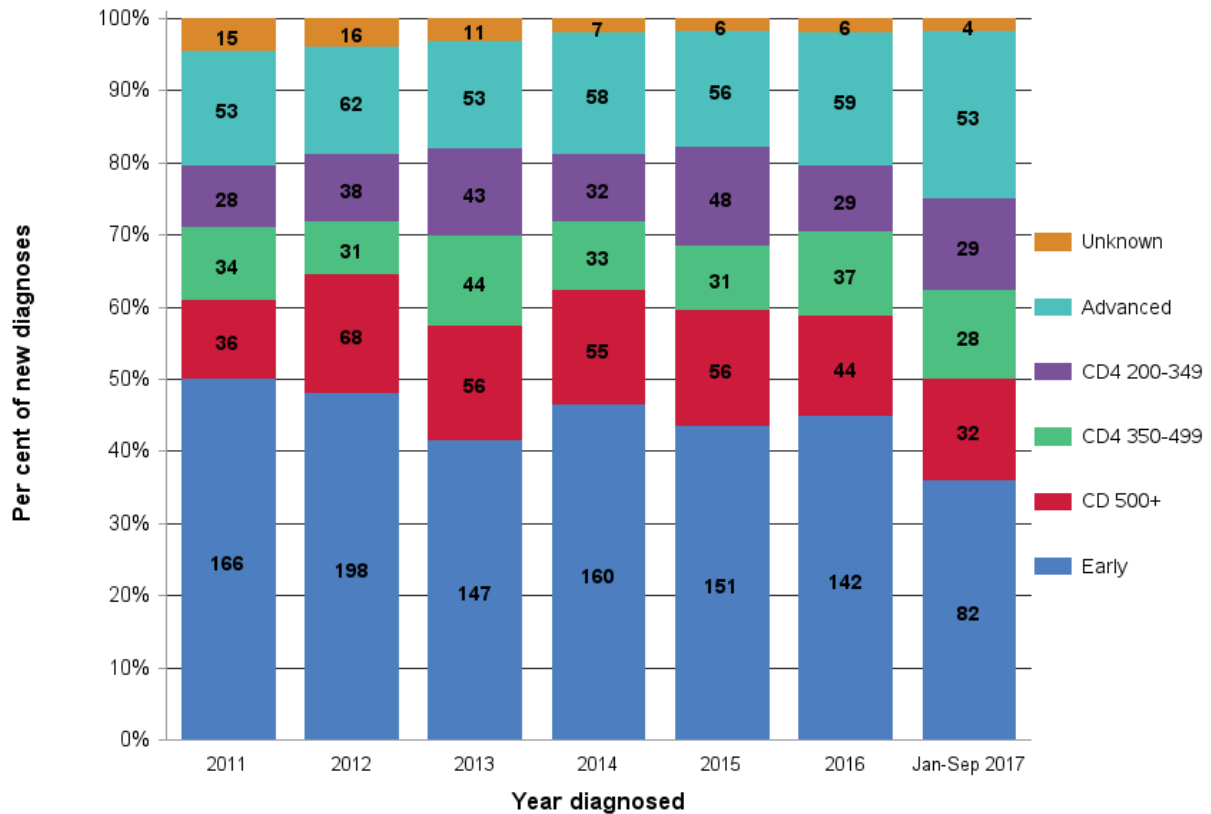


*Evidence of acute infection = a negative or indeterminate Western Blot test, or a seroconversion like illness or a report of a negative HIV test within 3 months of diagnosis. Full lab details were included on notification form in 2013.

What proportion of HIV notifications are newly acquired infections?

Trends in the stage of infection at which people are diagnosed with HIV provide an indication as to the timeliness of diagnosis over time. Figure 6a (all new diagnoses) and 6b (new diagnoses reporting to be MSM) draws on a combination of clinical symptoms at diagnosis (sero-conversion like illness, AIDS), HIV testing history and CD4 count at diagnosis to describe 'stage of infection'¹ at the time of diagnosis.

Figure 6a: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2011 to 30 September 2017 by stage of infection at diagnosis¹

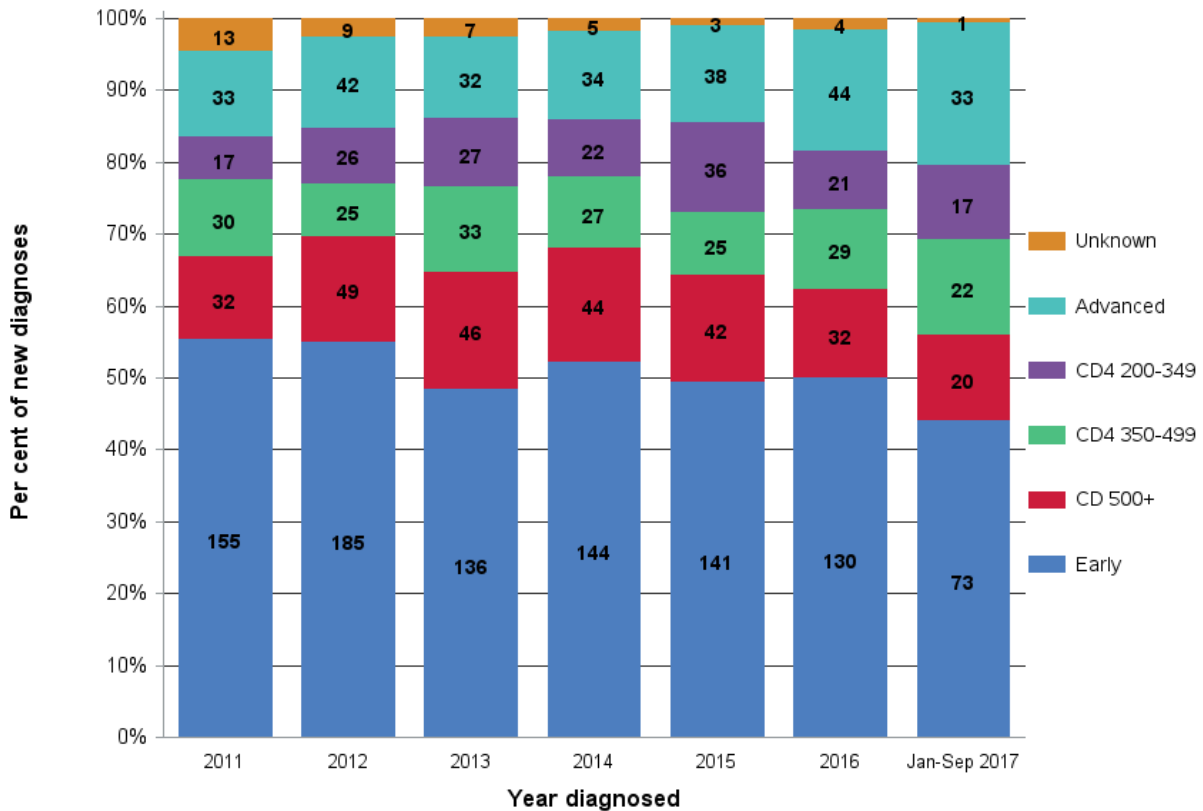


Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017
¹Stage of infection at diagnosis: Early = Evidence of HIV infection acquired within 12 months of diagnosis, which was defined as notification of a sero-conversion like illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or presentation with an AIDS defining illness at diagnosis. CD4 500+, CD4 350 to 499, CD4 200 to 349 each excludes early and advanced categories. Advanced = CD4 count less than 200 or AIDS defining illness in absence of evidence of 'Early' diagnosis

Comment

- Of 83 people newly diagnosed in quarter 3 2017:
 - 31 (37%) were in early stage infection, 22% less compared with an average number of 40 people in quarter 3 2011-2016.
 - 21 (25%) were in advanced stage infection, 45% more compared with an average number of 14.5 people in quarter 3 2011-2016.
- Of 228 people newly diagnosed in January to September 2017:
 - 82 (36%) were in early stage infection, 33% less compared with an average number of 121.5 people in January to September 2011-2016.
 - 53 (23%) were in advanced stage infection, 25% more compared with the average number of 42.5 people in January to September 2011-2016.

Figure 6b: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2011 to 30 September 2017 reporting to be men who have sex with men (MSM) by stage of infection at diagnosis¹

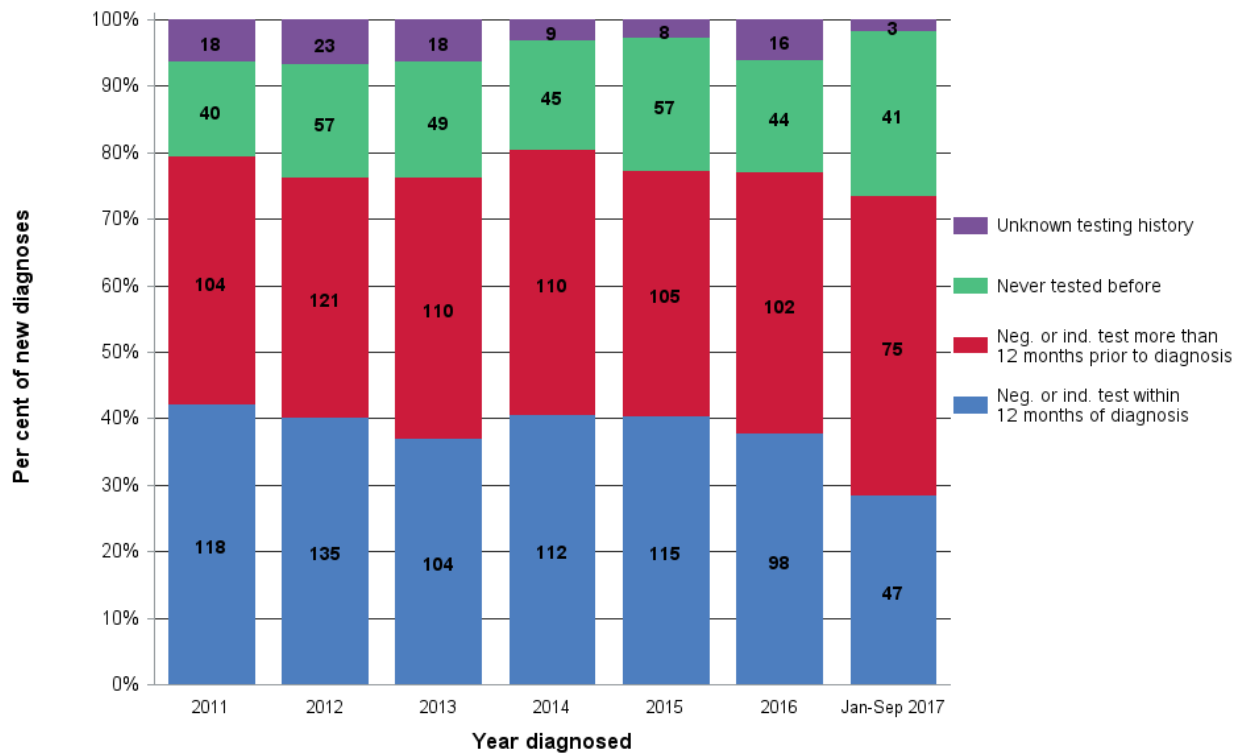


Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017

Comment

- Of 64 MSM newly diagnosed in quarter 3 2017:
 - 28 (44%) were in early stage infection, 25% less compared with an average number of 37 MSM in quarter 3 2011-2016 (224/431 [52%] were early stage).
 - 15 (23%) were in advanced stage infection, 58% more than the average number of 9.5 MSM in quarter 3 2011-2016 (57/431 [13%] were advanced stage).
- Of 166 MSM newly diagnosed in January to September 2017:
 - 73 (44%) were in early stage infection, 36% less compared with an average number of 113 MSM in January to September 2011-2016 (680/1313 [52%] were early stage).
 - 33 (20%) were in advanced stage infection, 14% more compared with an average number of 29 MSM in January to September 2011-2016 (173/1313 [13%] were advanced stage).

Figure 7: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2011 to 30 September 2017 reporting to be MSM by HIV testing history

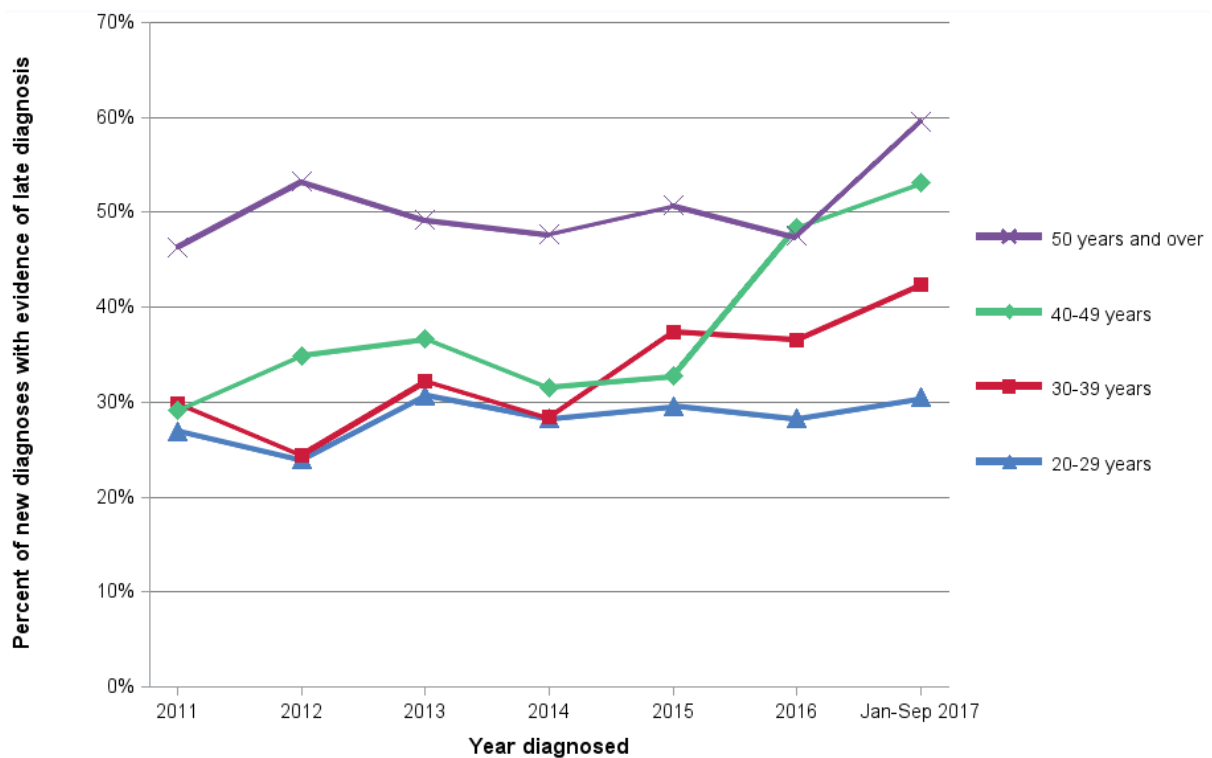


Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017

Comment

- Of 64 MSM newly diagnosed in quarter 3 2017:
 - 18 (28%) were reported to have had a negative or indeterminate HIV test in the 12 months prior to diagnosis, 38% less compared with an average number of 29 MSM in quarter 3 2011-2016.
 - 12 (19%) were reported to have never had an HIV test prior to diagnosis, 33% more the average number of 9 MSM in quarter 3 2011-2016.
- Of 166 MSM newly diagnosed in January to September 2017:
 - 47 (28%) were reported to have had a negative or indeterminate HIV test in the 12 months prior to diagnosis, 45% less compared with an average number of 86 MSM in January to September 2011-2016.
 - 41 (25%) were reported to have never had an HIV test prior to diagnosis, 7% more than the average number of 38 MSM in January to September 2011-2016.

Figure 8: Late diagnosis¹ by age group at diagnosis in NSW residents notified with newly diagnosed HIV infection from 1 January 2011 to 30 September 2017



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017
¹Evidence 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.

Comment

- Late diagnosis is increasing in those diagnosed 30 years or over.
- Of 83 people newly diagnosed in quarter 3 2017, 45% (n=37) had evidence of late diagnosis, compared with 34% (181/527) in quarter 3 2011-2016 (average number late=30).
- Of 228 people newly diagnosed with HIV infection in January to September 2017, the proportion with evidence of late diagnosis was:
 - 44% (n=101) overall, compared with 33% (535/1594) in January to September 2011-2016 (average number late=89).
 - 14% (1 of 7) in those 0-19 years of age (not in figure);
 - 31% (18 of 59) in those 20-29 years;
 - 42% (28 of 66) in those 30-39 years;
 - 53% (26 of 49) in those 40-49 years, and;
 - 60% (28 of 47) in those 50 years and over.

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

Table 1: Characteristics of new diagnoses Jan-Sep 2011-2016 average count versus Jan-Sep 2017

Case characteristics	Jan-Sep 2011-2016 average	Jan-Sep 2017	Difference
Number	265.7	228	-14.2%
Gender			
Male	246.3	207	-16%
Transgender	0.7	5	650%
Female	18.7	16	-14%
Aboriginal person status			
Aboriginal or Torres Strait Islander person	5.7	7	24%
Not Aboriginal or Torres Strait Islander	257.2	217	-16%
Unknown	2.8	4	41%
Place born			
Australia	143.0	102	-29%
Overseas	122.7	126	3%
Age in years at diagnosis			
0 to 19	5.3	7	31%
20 to 29	77.8	59	-24%
30 to 39	84.3	66	-22%
40 to 49	54.2	49	-10%
50 and over	44.0	47	7%
Reported HIV risk exposure			
MSM	218.8	166	-24%
Hetero-sex only	37.8	51	35%
PWID	4.8	5	3%
Other or unknown	3.7	4	9%
Vertical	0.5	2	300%
Evidence of late diagnosis			
Late	89.2	101	13%
Not late	166.3	121	-27%
Unknown	10.2	6	-41%
Evidence of acute infection (full lab data collected since 2013)			
Acute infection	64.5	44	-32%
Not an acute infection	189.8	184	-3%

Notes:

- Cases of vertical transmission: occurred overseas.
- Evidence 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.
- Evidence of acute infection/being infected in the three months prior to diagnosis: a negative or indeterminate Western Blot test, or a sero-conversion like illness or a report of a negative HIV test within 3 months of diagnosis.

Figure 9: Number newly diagnosed HIV infection from 1 January 2011 to 30 September 2017 by place born and place most likely acquired HIV infection, via male to male sex

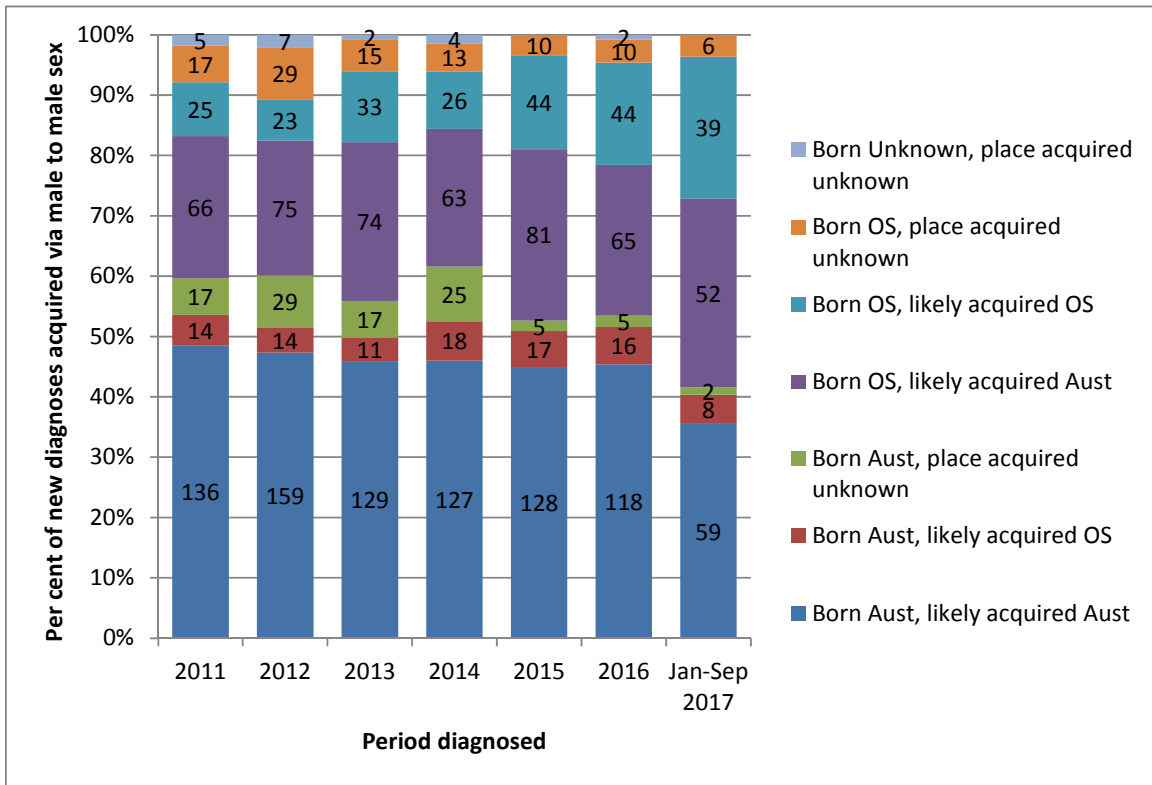
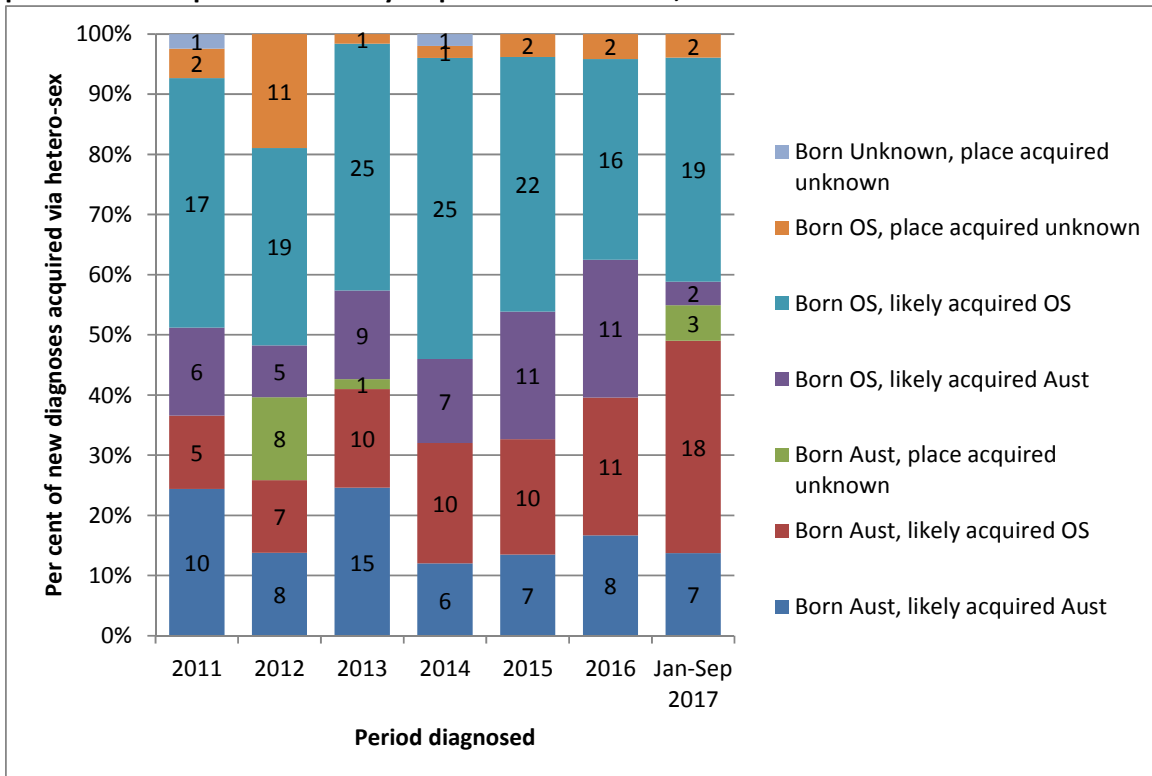


Figure 10: Number newly diagnosed HIV infection from 1 January 2011 to 30 September 2017 by place born and place most likely acquired HIV infection, via hetero-sex



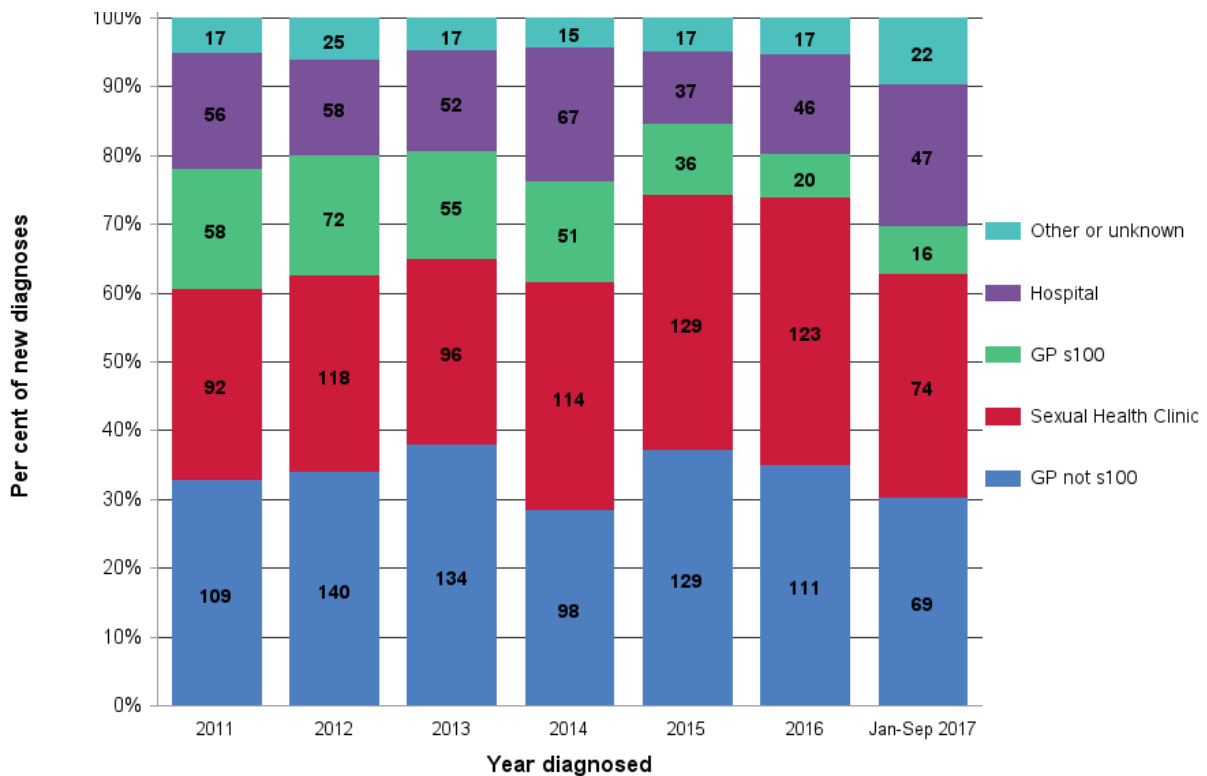
Comment on Figure 9

- Of 166 MSM newly diagnosed from January to September 2017, 69 (42%) were Australian born, a 44% decrease compared with 124, the average for January to September 2011-2016.
- Of 166 MSM newly diagnosed from January to September 2017, 97 (58%) were overseas born, a 5% increase compared with 92, the average for January to September 2011-2016.

Comment on Figure 10

- Of 51 heterosexuals newly diagnosed from January to September 2017, 28 (55%) were Australian born, an 87% increase compared with 15, the average for January to September 2011-2016.
- Of 51 heterosexuals newly diagnosed from January to September 2017, 23 (45%) were overseas born, the same number compared the average for January to September 2011-2016, although in Jan-Sept 2011-2016 62% of heterosexuals newly diagnosed were overseas born.

Figure 11: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2011 to 30 September 2017 by type of diagnosing doctor



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017

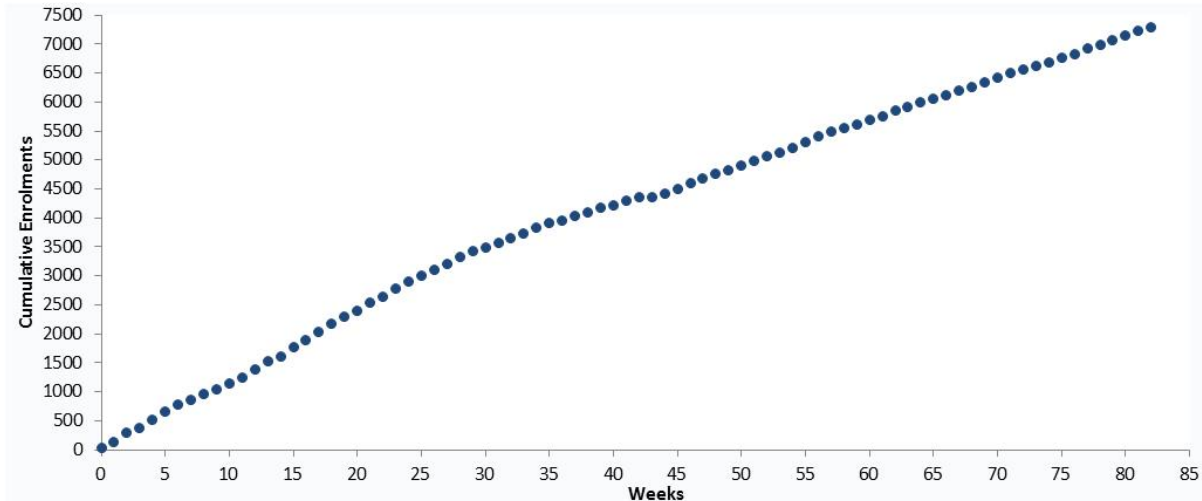
Comment

- Of 83 people newly diagnosed in quarter 3 2017:
 - 29 (35%) were diagnosed by sexual health clinics (SHC) (includes linked community testing sites), compared with 28 or 32% in quarter 3 2011-2016;
 - 26 (31%) were diagnosed by medical general practitioners (GPs) not accredited to prescribe ART (GP not-s100), compared with 30 or 34% in quarter 3 2011-2016;
 - 15 (18%) were diagnosed by hospital located doctors, compared with 12 or 13% in quarter 3 2011-2016;
 - 4 (5%) were diagnosed by GP s100 doctors (HIV specialised and accredited to prescribe ART), compared with 14 or 16% in quarter 3 2011-2016, and;
 - 9 (11%) were diagnosed by other doctor types such as immigration services and private medical specialists, compared with 5 or 5% in quarter 3 2011-2016.
- Of 144 people newly diagnosed in January to September 2017:
 - 74 (32%) were diagnosed by sexual health clinics (SHC) (includes linked community testing sites), compared with 85 or 32% in in January to September 2011-2016;
 - 69 (30%) were diagnosed by GP not-s100, compared with 90 or 34% in January to September 2011-2016;
 - 47 (21%) were diagnosed by hospital located doctors, compared with 39 or 15% in January to September 2011-2016;
 - 16 (7%) were diagnosed by GP s100 doctors, compared with 38 or 14% in January to September 2011-2016, and;
 - 22 (10%) were diagnosed by other doctor types, compared with 14 or 5% in January to September. Examples of 'Other' types of doctor are private medical specialists, immigration services and blood bank.

2. Expand HIV Prevention

2.1 Who is accessing PrEP through the EPIC-NSW trial?

Figure 12: Cumulative enrolment of participants in EPIC-NSW, by study week, from 1 March 2016 to 30 September 2017



Comment

- 7,284 were enrolled in EPIC-NSW sites between 1 March 2016 and 30 September 2017.
- 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), Kirkeaton 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 from 1 Aug 2016 to 30 Sept 2017

Characteristic	N	%
Gender		
Male	7,201	98.9
Female	10	0.1
Transgender, male-to-female	57	0.8
Transgender, female-to-male	11	0.2
Other	5	0.1
Total	7,284	100
Sexual identity		
Gay/Homosexual	6,833	93.8
Bisexual	371	5.1
Heterosexual	39	0.5
Other [£]	41	0.6
Total	7,284	100
Age at enrolment (years)		
Median (Inter-quartile range)	35 (28 to 44)	
Age group		
< 20	82	1.2
20-29	1,972	28.3
30-39	2,428	34.8
40-49	1,530	22
≥50	956	13.7
Total *	6,968	100
Aboriginal and/or Torres Strait Islander status		
Non-Indigenous	6,390	98.3
Aboriginal and/or Torres Strait Islander	109	1.7
Total **	6,499	100
Country/Region of birth		
Australia	3,593	61
Oceania	233	4
Asia	818	13.9
Northern America	171	2.9
South America, Central America & the Caribbean	211	3.6
Europe	664	11.3
Middle East	92	1.6
Africa	112	1.9
Total **	5,894	100
Area of residence		
Major cities	6,697	94.2
Inner Regional	377	5.3
Outer Regional	29	0.4
Remote	5	0.1
Total ***	7,108	100

Data Sources: EPIC-NSW enrolment and behavioural survey databases, and ACCESS Study database

Notes: As indicated by participants, include queer, pansexual, gender fluid, sapio, transgender, gender neutral, men who have sex with men, non-specified and not sure.

Demographic data was not available for all participants: **Age was obtained from the enrolment¹ and ACCESS databases. Data were missing for 316 (4.3%) of total participants. ** Aboriginal and/or Torres Strait Islander status and country/region of birth were obtained from the behavioural survey² and ACCESS databases, where available, and data were missing for 785 (10.8%) and 1390 (19.1%) participants respectively. *** Area of residence (based on participant postcode) was obtained from the enrolment, behavioural survey² and ACCESS databases, where available. Data were missing for 176 (2.4%) participants.

¹In the enrolment database, date of birth (used to calculate age) was recorded for participants who consented to data linkage; 5,651 (77.6%) provided consent and data are available for 5,643 participants.

²6,525 (89.6%) participants consented to participate in the behavioural survey and 5072 (69.6% of the total sample) completed it.

Comment

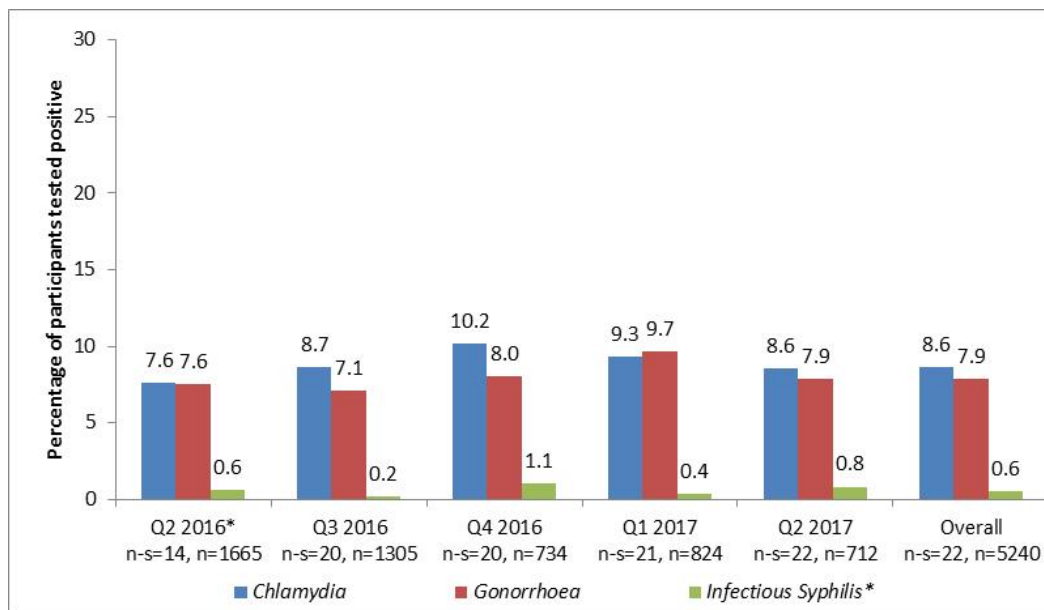
- The participants enrolled between 1 August 2016 and 30 September 2017, for whom data was available, were predominately male (99%), 94% identified as gay/homosexual, 61% were born in Australia, 94% live in a major city and the median age was 35 years.
- Smaller proportions were born in Asia (13.9%) or Europe (11.3%), live in an inner regional, outer regional or remote area (5.8%), or identify as Aboriginal or Torres Strait Islander (1.7%).

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

The STI prevalence of EPIC-NSW participants at enrolment provides a marker of sexual risk and how well the program is targeted. STI prevalence is defined here as the proportion of individuals tested for an STI, with a positive result.

Of the 6,336 participants up to the end of June 2017, STI testing data was available for 82.7% (5,240) participants. The number of sites included in each quarter has increased over time, reflecting more sites joining EPIC-NSW. The 22 sites represent 92% of the EPIC-NSW participants enrolled by June 2017 are: Albion Centre, Albury Sexual Health, Brookong Centre Wagga, Clinic 16, Coffs Harbour, Dubbo, HNE Sexual Health, Holden St Clinic, Illawarra, KRC, Lismore, Liverpool, Nepean Sexual Health, Orange, RPA Sexual Health, Short Street Clinic, Site 203, Site 206, Site 215, Sydney Sexual Health, St Vincent’s Hospital and Western Sydney Sexual Health.

Figure 13: Proportion of EPIC-NSW participants tested for chlamydia, gonorrhoea and/or syphilis* at the time of enrolment and who received a positive result, by quarter of enrolment, 1 March 2016 to 30 June 2017



Data Source: ACCESS study database and EPIC-NSW Temporary Data Collection.

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

Comment

- Of the EPIC-NSW participants tested for STIs at baseline between 1 March 2016 and 30 June 2017, 8.6% had a positive test result for chlamydia and 7.9% for gonorrhoea.
- The diagnosis rate for infectious syphilis in public clinics was 0.6%.

2.3 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 February/March. The data for 2017 were reported in the January - March 2017 HIV Data Report, briefly, the combined proportion of respondents reporting no anal intercourse or consistent condom use with casual partners decreased from 59.1% in 2016 to 48.0% in 2017.

2.4 Community mobilisation “Ending HIV”

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

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

- From July 2016 to June 2017, 13,933,628 units of injecting equipment were distributed in NSW. Compared with July 2015 to June 2016:
 - 1% (133,700 units) more units were distributed overall
 - 74,713 more units (1%) were distributed by Public NSP
 - 38,987 more units (2%) were distributed through the Pharmacy NSP Fitpack® scheme
- As at 30 June 2017, there were 1,134 NSP outlets in NSW³, an increase 11 outlets (1%) compared with 2016 (NSW NSP Data Collection).
 - The Public NSP includes 26 primary and 313 secondary outlets, 268 automatic dispensing machines (ADMs) and internal dispensing chutes (IDCs), and the Pharmacy NSW Fitpack Scheme includes 527 pharmacies.

2.6 What proportion of people share injecting equipment in NSW?

- In 2017, 20% of respondents reported receptive syringe sharing in the previous month (NSW Needle and Syringe Program Enhanced Data Collection, 2017)⁴.

³ Updated data for NSLHD were not available at the time this report was finalised.

⁴ Geddes, L, Iversen J, and Maher L. NSW Needle and Syringe Program Enhanced Data Collection Report 2017, The Kirby Institute, UNSW Australia, Sydney 2017.

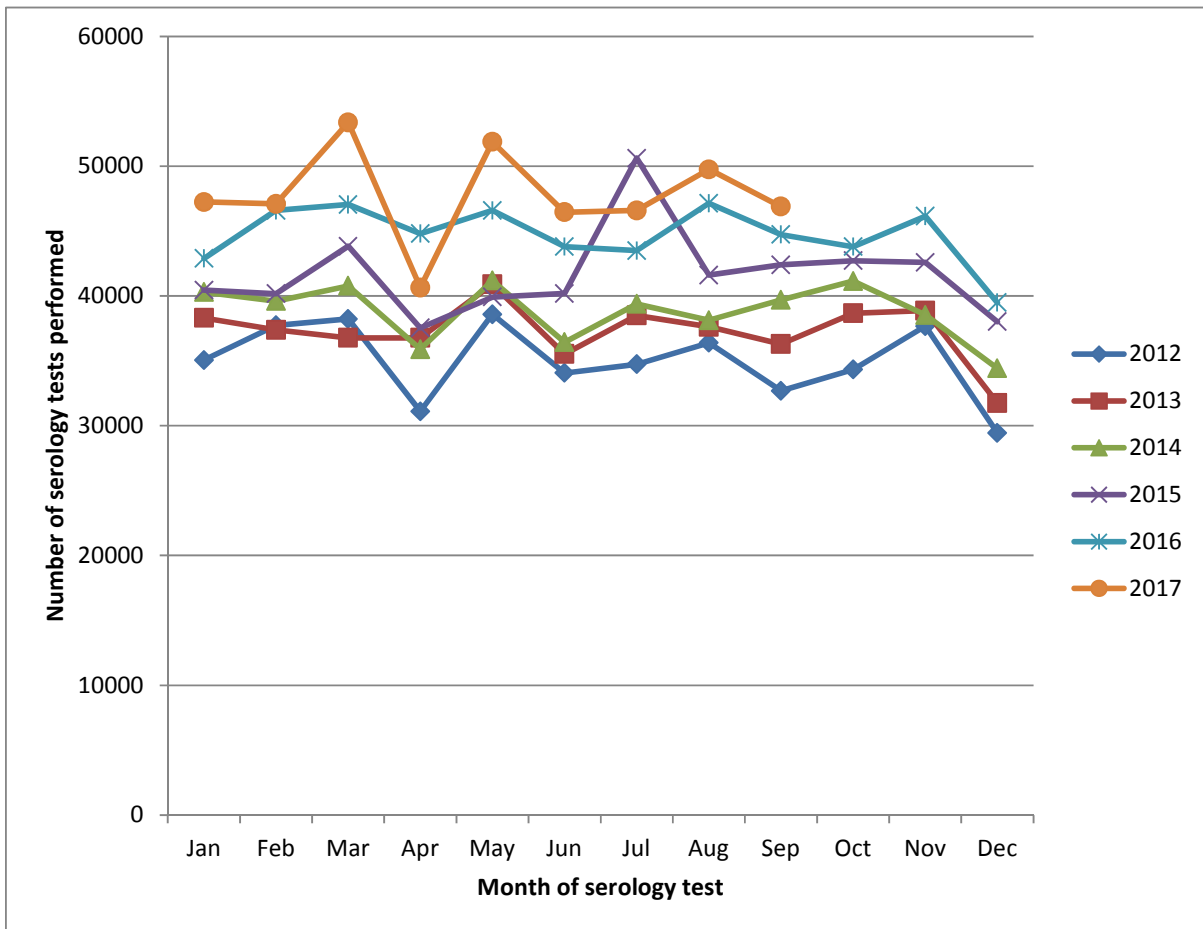
3. Increase HIV testing frequency

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 report 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 14: Number of HIV serology tests performed in 15 NSW laboratories, Jan 2012-Sept 2017



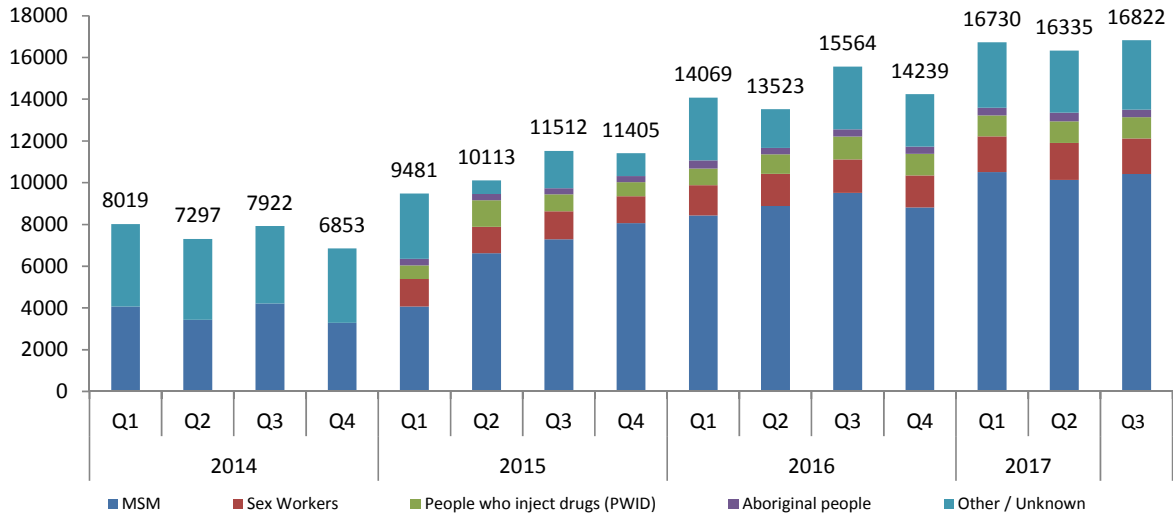
Data source: NSW Health denominator data project, extracted 10 November 2017.

Comment

- From July to September 2017, there were 143,220 HIV serology tests performed in 15 laboratories in NSW, which compared to previous July to September periods, was: 6% more than in 2016 (n=135,362); 6% more than in 2015 (134,596); 22% more than in 2014 (117,196); 27% more than in 2013 (n=112,403), and; 38% more than in 2012 (n=103,803).
- From January to September 2017, there were 429,846 HIV serology tests performed in 15 laboratories in NSW, which compared to previous January to September periods, was: 6% more than in Jan-Sept 2016 (n=407,029); 14% more than in 2015 (376,671); 22% more than in 2014 (351,375); 27% more than in 2013 (n=338,108), and; 35% more than in 2012 (n=318,534).

Local Health Districts

Figure 15: Number of HIV rapid and serology tests performed in public sexual health and HIV clinics and priority LHD settings in NSW between 1 January 2014 and 30 September 2017, 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.

Comment

- From July to September 2017, 16,618 HIV tests were done in NSW public sexual health and HIV clinics and priority LHD settings; an increase of 7% compared with the same period in 2016 (n=15,564) and 110% compared with 2014 (n=7,922).
- This includes 10,416 HIV tests done in MSM in public sexual health and HIV clinics; a 9.5% (n=9515) increase compared with the same period in 2016.
- For the first 9-months of 2017, 50,071 HIV tests in NSW public sexual health and HIV clinics and priority LHD settings; a 16% increase compared with January – September 2016 (n=43,156).
- Both rapid HIV testing and HIV serology are included. Priority settings include mental health, drug and alcohol, and emergency departments. From 1 January 2017, Dried Blood Spot (DBS) self-sampling tests are also included.

Table 3: Recruitment data for NSW HIV and Hepatitis C Dried Blood Spot (DBS) Testing Pilot, 1 Nov 2016 to 31 October 2017

Total Recruitment Data	Number (%)
Number of registrations for HIV DBS test	543
Number of HIV DBS tests done	291
DBS return rate	54%
Proportion of people registering who have never tested or tested more than 2 years ago	54%
Number of reactive results	2 (HIV)

Data Source: NSW Dried Blood Spot Research database

Comment

- From November 2016 to October 2017, 291 DBS tests for HIV and Hepatitis C were carried out in the first pilot phase. More than half of the testers returned the test results.
- Out of 291 tests, 2 testers had HIV positive reactive result.

Table 4: Demographic data for HIV and Hepatitis C DBS Testing Pilot, 1 Nov 2016 to 31 October 2017

Target population	Number (%)
Aboriginal people*	27 (5%)
MSM	414 (76%)
Ever injected drugs*	22 (4%)
From Asia/Africa	143 (26%)
Partners from Asia/Africa	175 (32%)

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

Data Source: NSW Dried Blood Spot Research database

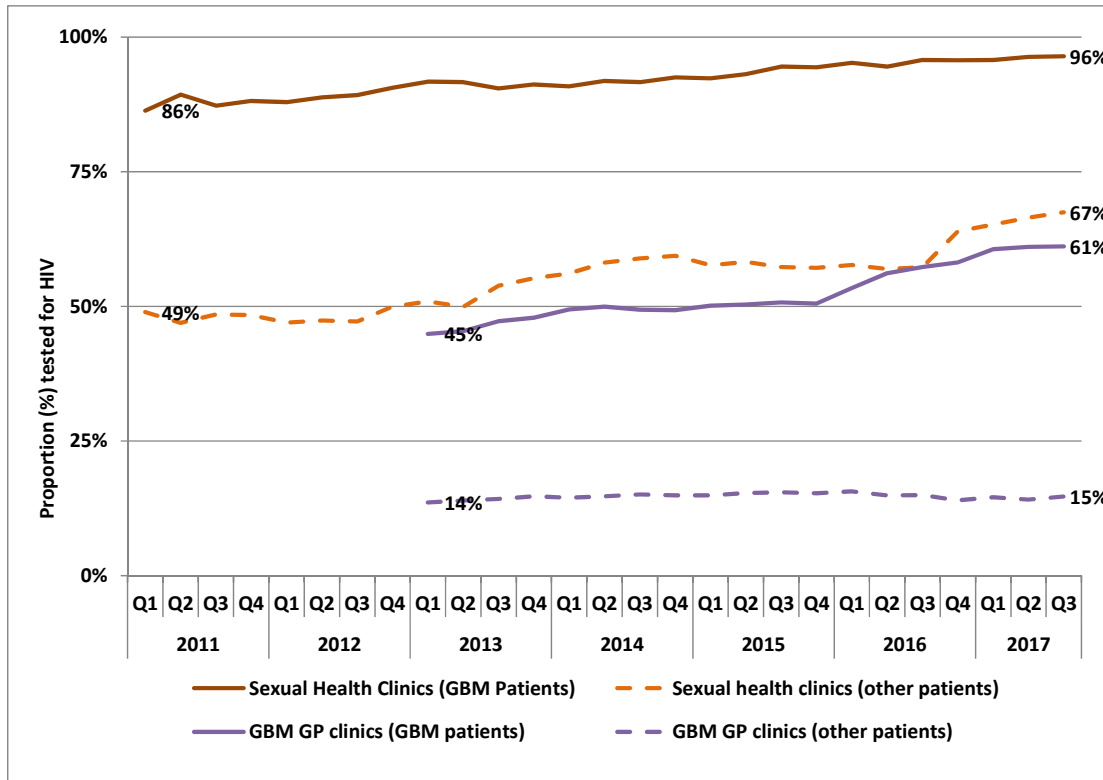
Comment

- Majority of the individuals who registered for the DBS were MSM (76%). More than half of the registered individuals were either from Asia/Africa or had partners from the region.

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 16: Proportion of patients⁵ attending PFSHCs and GBM GP clinics⁶ tested at least once for HIV at any clinic in the ACCESS network in the previous year, by quarter and service type, 1 January 2011 to 30 September 2017⁷



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

Comment

- HIV testing uptake among GBM attending PFSHCs remained high in July-September 2017 (96%)
- Testing uptake continued to increase among other patients attending at PFSHCs, rising from 49% in Q1 of 2011 to 67% in Q3 of 2017.
- Testing uptake increased among GBM attending GBM GP clinics from 45% in January-March 2013 to 61% in July-September 2017.

Testing uptake among Sydney Gay Community Periodic Survey respondents

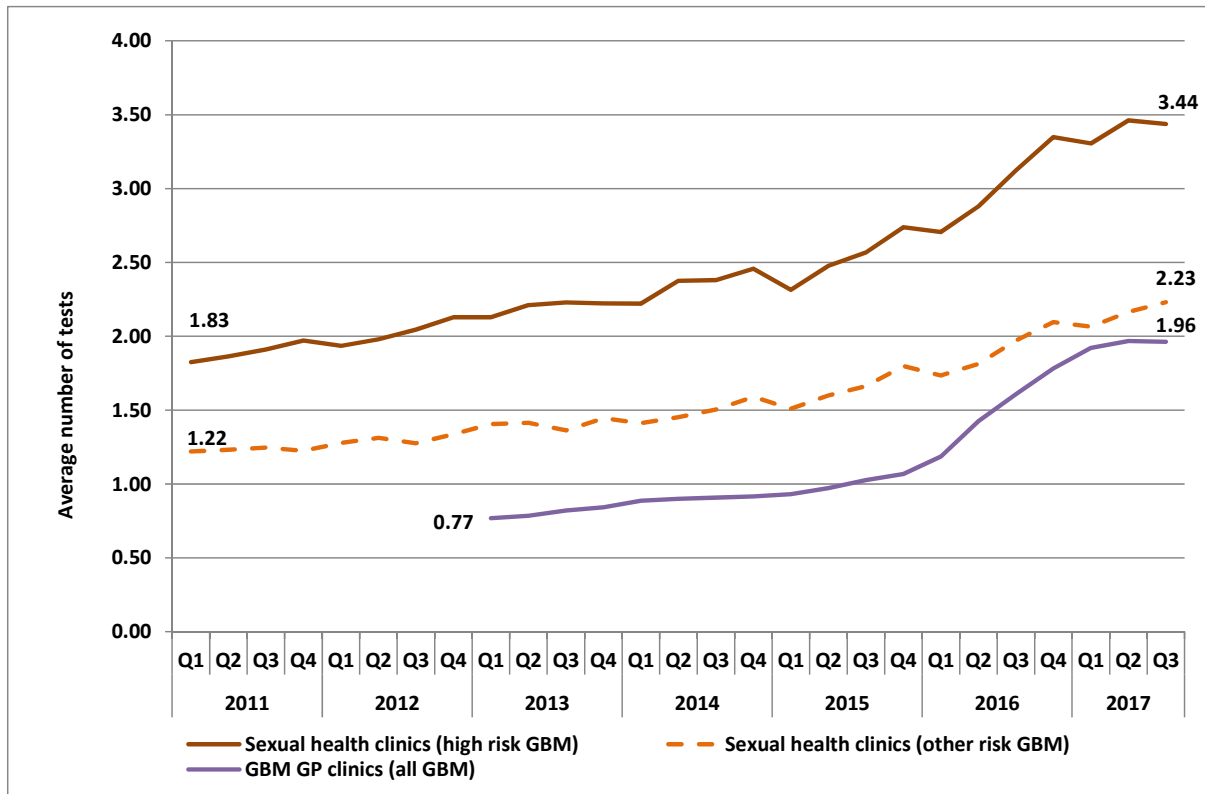
- Data from the SGCPs (conducted in February/March annually) on HIV testing patterns was reported in the January – March 2017 HIV Data Report.
- Briefly, the proportion of men who have ever tested for HIV has stabilised at 87% in 2017, with 78% of non-HIV-positive men reporting an HIV test in the previous 12 months and 31% of non-HIV-positive men reporting three or more HIV tests in the previous 12 months.

⁵ Excludes patients known to be HIV positive

⁶ 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

⁷ 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 17: Average number of annual HIV tests at any clinic in the ACCESS network in GBM patients⁸ attending PFSHCs and GBM GP clinics⁹, by service type and quarter, 1 January 2011 to 30 September 2017



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

Risk categorisation is available only for sexual health clinics, defined as:

- **High risk:** >5 sexual partners in the three months prior to consultation AND/OR >20 sexual partners in the 12 months prior to consultation AND/OR a diagnosis for chlamydia, gonorrhoea, and/or infectious syphilis in the 24 months prior to consultation
- **Other risk:** Any person not otherwise meeting the criteria of 'high risk'

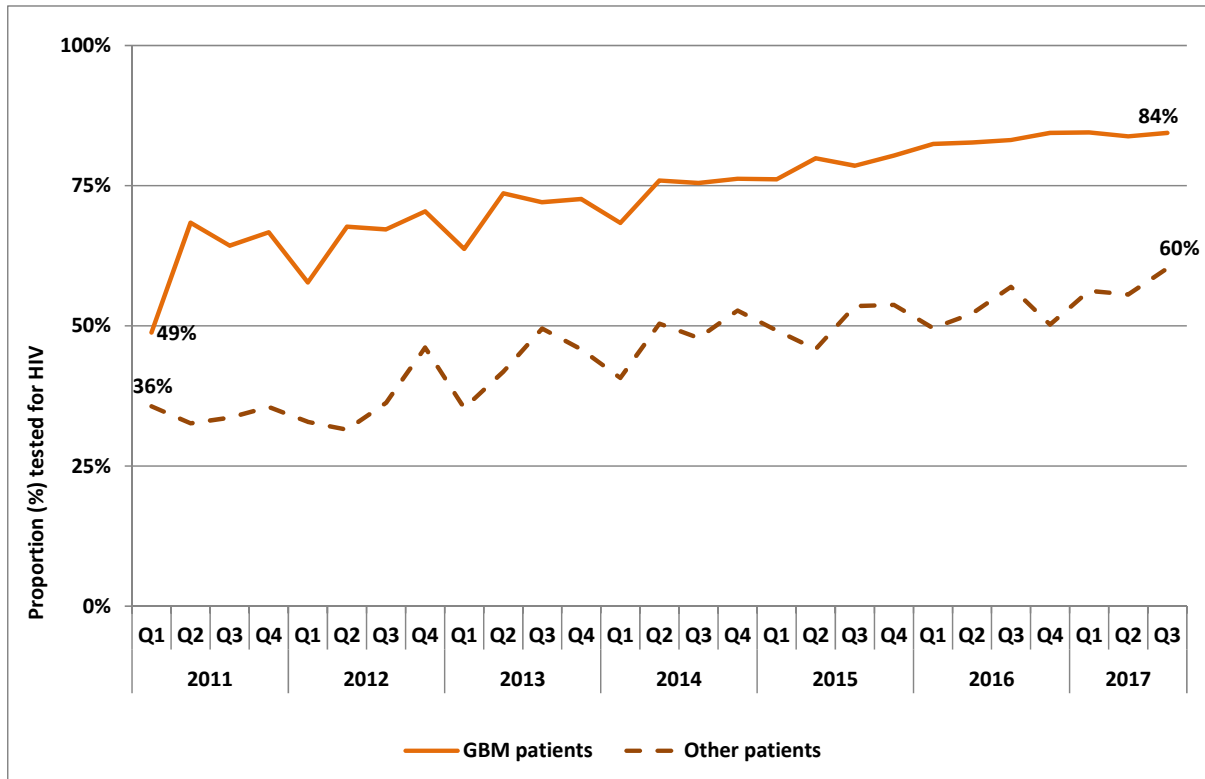
Comment

- Between January-March 2011 and June-September 2017, the average number of HIV tests per patient per year among high risk GBM attending PFSHC increased by 88% and increased by 83% among other risk men. This shows testing frequency has increased over time among GBM attending both PFSHCs and GBM GP
- In GBM GP clinics, the number of HIV tests per year among GBM increased by 156% from January-March 2013 to April-June 2017.

⁸ Excludes patients known to be HIV positive

⁹ 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

Figure 18: Proportion of patients¹⁰ attending PFSHCs and GBM GP clinics¹¹ who received an HIV test at any clinic in the ACCESS network within one month of an STI diagnosis¹², by GBM status and quarter, 1 January 2011 to 30 June 2017¹³



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

Comment

- The proportion of GBM who received an HIV test within one month of a STI diagnosis increased over time from 49% in early 2011 to 84% in Q2 of 2017.
- Testing in conjunction with STI diagnoses was less common overall among other patients but also increased from 36% to 60% during this period.

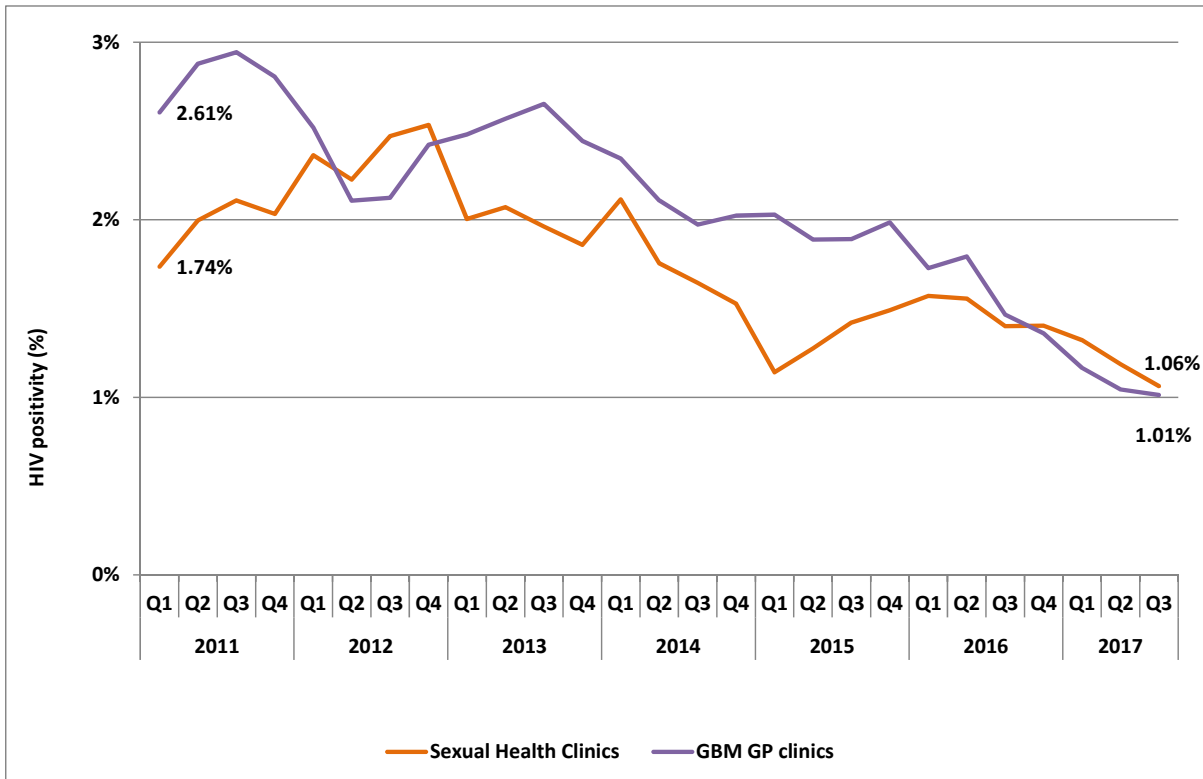
¹⁰ Excludes patients known to be HIV positive

¹¹ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

¹² Diagnosis for chlamydia, gonorrhoea and/or infectious syphilis

¹³ The period for HIV testing is one month before or after an STI diagnosis; due to this timeframe data from quarter 2 2017 have been excluded

Figure 19: Proportion of individual GBM patients¹⁴ attending sexual health and GBM GP clinics¹⁵ tested for HIV with a positive result (*HIV positivity*¹⁶) at any clinic in the ACCESS network, by service type and quarter, 1 January 2011 to 30 September 2017



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

Note: For this indicator, positivity refers to the proportion of unique clients tested for HIV who returned a positive result out of the total number of unique clients tested for HIV, rather than the proportion of positive HIV tests out of all HIV tests conducted.

Comment

- Over time, HIV positivity among GBM decreased from 2.61% to 1.01% in GBM GP clinics and from 1.74% to 1.06% in PFSHCs.
- With increased HIV testing overall, testing targeting priority populations and introduction of PrEP, it is anticipated that HIV positivity in PFSHCs and GBM GP clinics will decrease over time. This is an important indicator and should not deter services from continuing to increase testing in accordance with current guidelines.

¹⁴ Excludes patients known to be HIV positive

¹⁵ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

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?

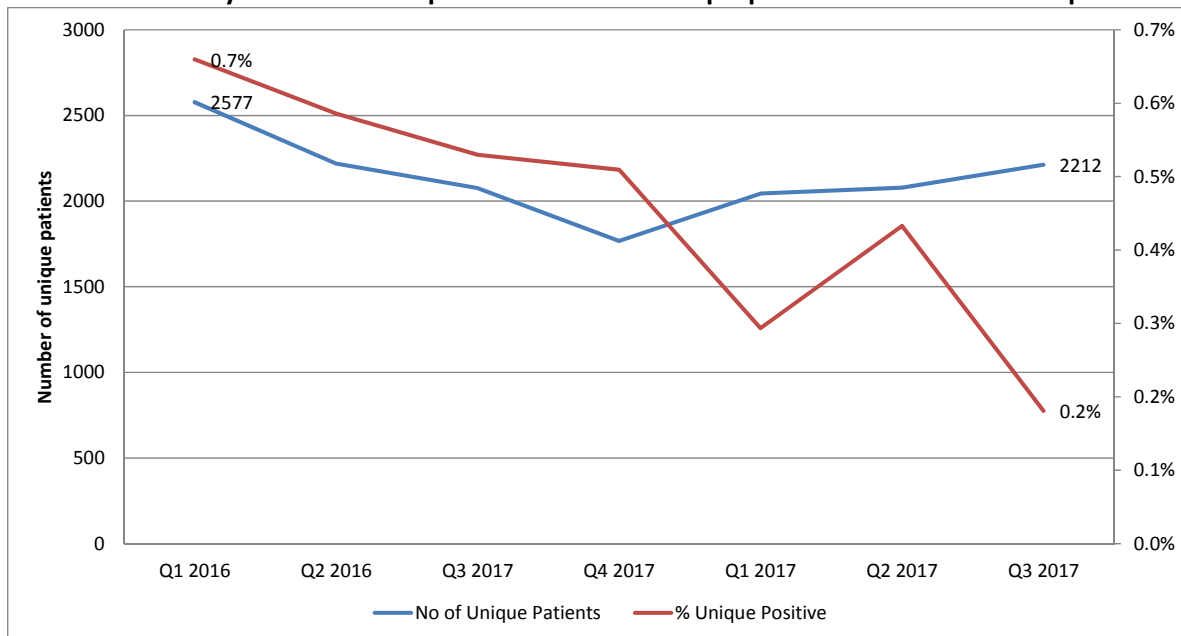
Table 5: Number of rapid HIV tests (RHT) in community based sites and proportion of clients with high risk behaviour and infrequent testing history from 1 July to 30 September 2017

Site	Number of RHT (unique)	Number of unique positive (%)	% never previously tested	% tested more than 12 months ago [#]	% with > 5 sexual partners in last 3 months*
aTEST Surry Hills (7 hours/week)	45 (45)	0 (0.0%)	0.0%	4.4%	53.7%
aTEST Oxford ST (40 hours/week)	1,945 (1,819)	3 (0.2%)	7.3%	12.6%	31.5%
aTEST Kings Cross	131 (-)	1 (.8%)	42.7%	20.6%	21.5%
aTEST Newtown (6 hours/week)	217 (-)	1 (0.4%)	49.3%	11.1%	25.9%

Data sources: NSW Health HIV Strategy Monitoring Database

Note: [#]Excludes 'never tested'; *Only patients who provided information on this characteristic have been included

Figure 20: The number of unique patients who had a rapid HIV test at a community based site between 1 January 2016 and 30 September 2017 and the proportion of tests that were positive



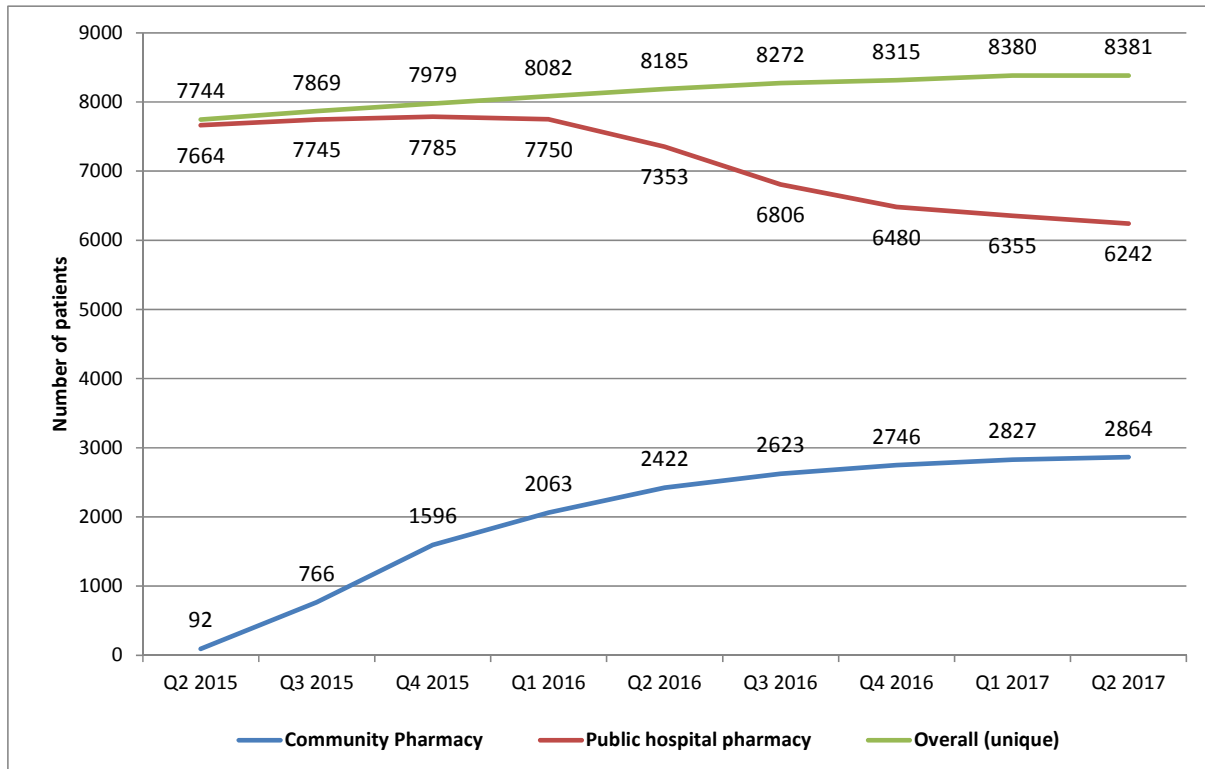
Comment

- NSW data suggests community-based testing sites are an effective testing model for engaging GBM, a high proportion of whom report high risk behaviours or infrequent testing for HIV.
- Rapid HIV testing has been effectively embedded into the mix of the testing options in NSW.

4. Increase HIV Treatment

4.1 How many people in NSW are on antiretroviral treatment?

Figure 21: 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 2014 to 30 June 2017.

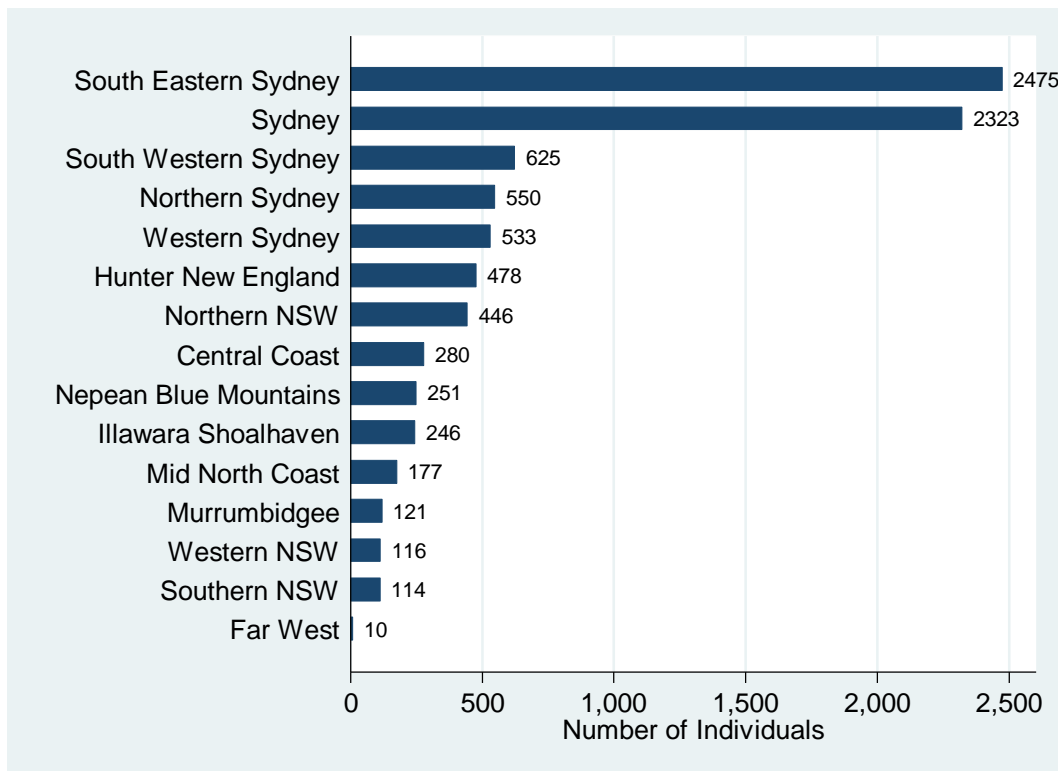


Data source: PBS Highly Specialised Drugs Programme data from 1 July 2014 to 30 June 2017 prepared for NSW Health. Note: The number of patients dispensed via community and public hospital pharmacies may add to a figure greater than the overall unique patients as some patients receive treatment from more 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.

Comment

- Between 1 April 2016 and 31 June 2017, 8,381 NSW residents were dispensed ART for HIV.
- Since the introduction of community pharmacy dispensing on 1 July 2015, the proportion dispensed HIV ART through community pharmacies at least once in the last year has increased to 18%.
- Of the 8,381 residents dispensed ART, 91.0% were male. The majority (53.5%) were older than 50 years. 26.9% were in the age bracket of 40-49 years and 19.6 % aged 39 aged or younger.

Figure 22: The number of NSW residents who have been dispensed ART for HIV, by the LHD of patient residence, from 1 July 2016 to 30 June 2017.



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data.

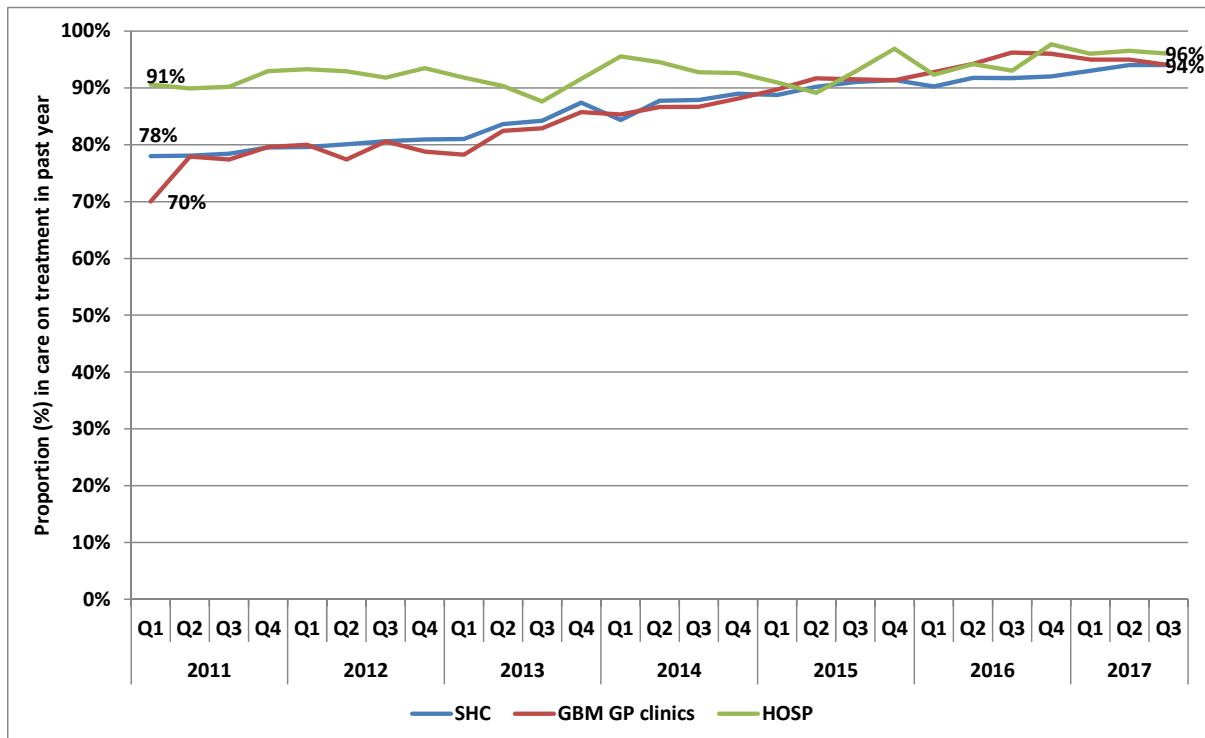
Note: The numbers displayed in the graph adds to a figure greater than the overall unique number of patients of 8,378 as some patients have resided in more than one LHD.

Comment

- 77.4% of the ART dispensed From July 2016 to June 2017 was to patients residing in five LHDs: South Eastern Sydney, Sydney, South Western Sydney, Northern Sydney and Western Sydney LHDs.

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

Figure 23: Proportion of HIV positive patients¹⁷ attending PFSHCs, public hospital outpatient clinics and GBM GP clinics¹⁸ 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 2011 to 30 September 2017



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

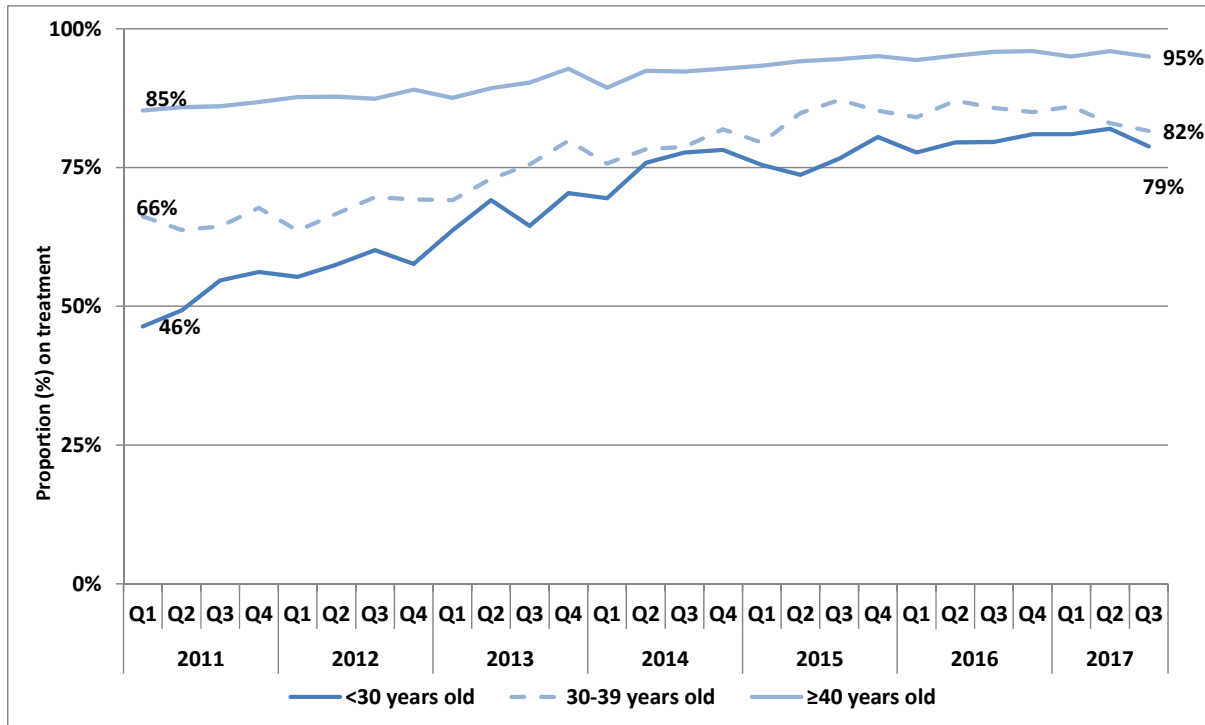
Comment

- HIV treatment uptake increased steadily over time across PFSHCs, GBM GP clinics and public hospitals. The largest increase was among patients attending GBM GP clinics, rising from 70% in early 2011 to 94% in July-September 2017.

¹⁷ Excludes patients for whom HIV care was recorded as managed elsewhere

¹⁸ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

Figure 24: Proportion of HIV positive patients attending PFSHCs, public hospital outpatient clinics and GBM GP clinics¹⁹ 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 2011 to 30 September 2017



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

Comment

- Treatment uptake for HIV was consistently higher among older patients with 95% of patients 40 years or older who attended in July-September 2017 recorded as on treatment.
- Younger patients aged under 30 years, continued to demonstrate the greatest increase in treatment uptake, rising from 46% in early 2011 to 79% in June-September 2017.

¹⁹ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

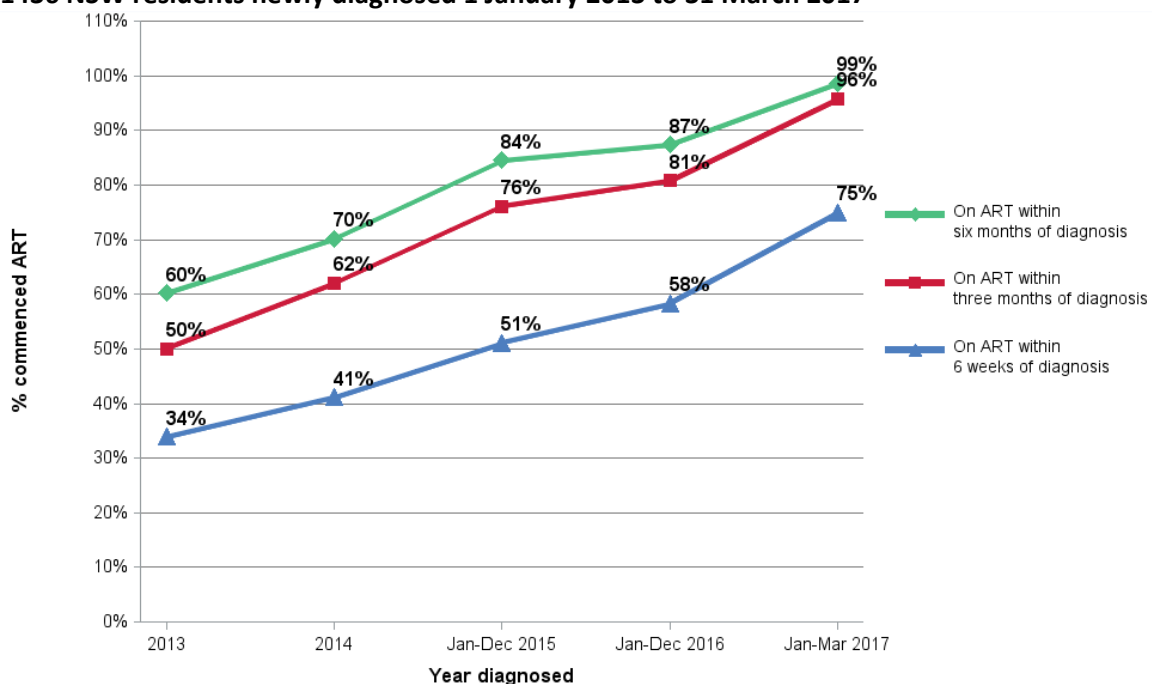
4.3 How quickly are people newly diagnosed with HIV commencing antiretroviral treatment and achieving undetectable viral load in NSW?

Since 2013, HIV surveillance in NSW was enhanced to:

- a) at the time of diagnosis, collect from doctors additional information on the patient’s HIV viral load, antiretroviral therapy (ART) commencement or deferral, and;
- b) at six months post diagnosis, follow up on the patient via their doctor to collect information on retention in care, ART commencement, pre-ART and latest HIV viral load and CD4 count.

In this quarter 3 2017 report, follow up data collected six months post diagnosis are reported on for 1436 NSW residents newly diagnosed with HIV infection from 1 January 2013 to 31 March 2017. Doctors returned 97% (n=1395) of six month post diagnosis follow up surveillance forms. Data on commencement of ART from six months post diagnosis follow up form (FUF) data and HIV notification form data was combined for analysis. All new diagnoses were included irrespective of their care outcome six months post diagnosis (that is, retained in care, died, migrated out of NSW, lost to follow up, other or unknown).

Figure 25: ART commencement within six weeks, and three and six months of diagnosis among 1436 NSW residents newly diagnosed 1 January 2013 to 31 March 2017



Data source: Notifiable Conditions Information Management System, HPNSW, extracted 10 November 2017.

* The denominator is all new diagnoses 2013-2016 irrespective of care outcome six months diagnosis. There is no exclusion of people who, for example, migrated out of NSW or who died within six months of diagnosis.

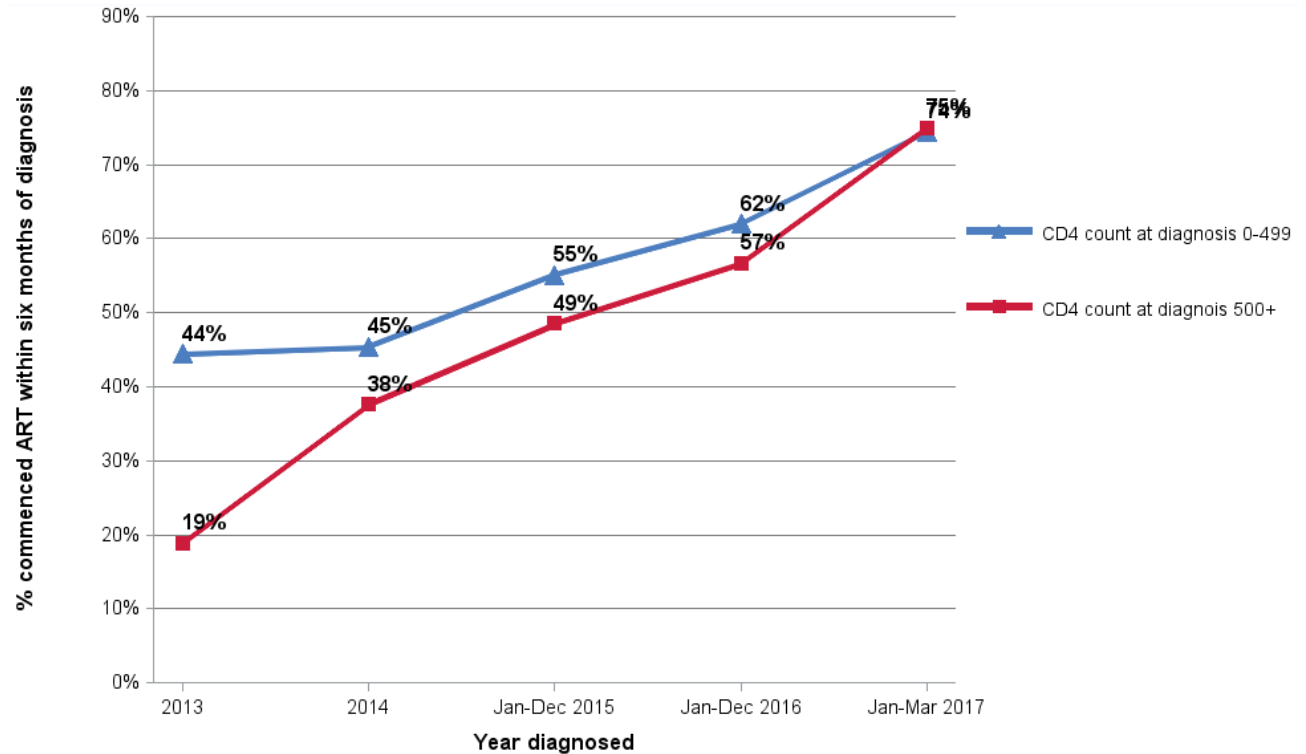
Comment

- 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.
- The most recently diagnosed cases followed up 6 months post diagnosis were the 72 NSW residents newly diagnosed in quarter 1 2017, and of these:
 - 75% (n=54) commenced ART within six weeks of diagnosis, 96% (n=69) within three months and 99% (n=71) within six months of diagnosis. Of 71 on ART within six month of diagnosis,

69 (97%) had a post-ART VL reported at six month follow up, and of these 66 (96%) already had a HIV VL less than 200 copies/mL.

- The median number of days to ART initiation among the 71 of 72 people newly diagnosed in quarter 1 2017 who initiated ART, was 28 days.

Figure 26: ART commencement within six weeks of diagnosis by CD4 count at diagnosis among 1436 NSW residents newly diagnosed 1 January 2013 to 31 March 2017

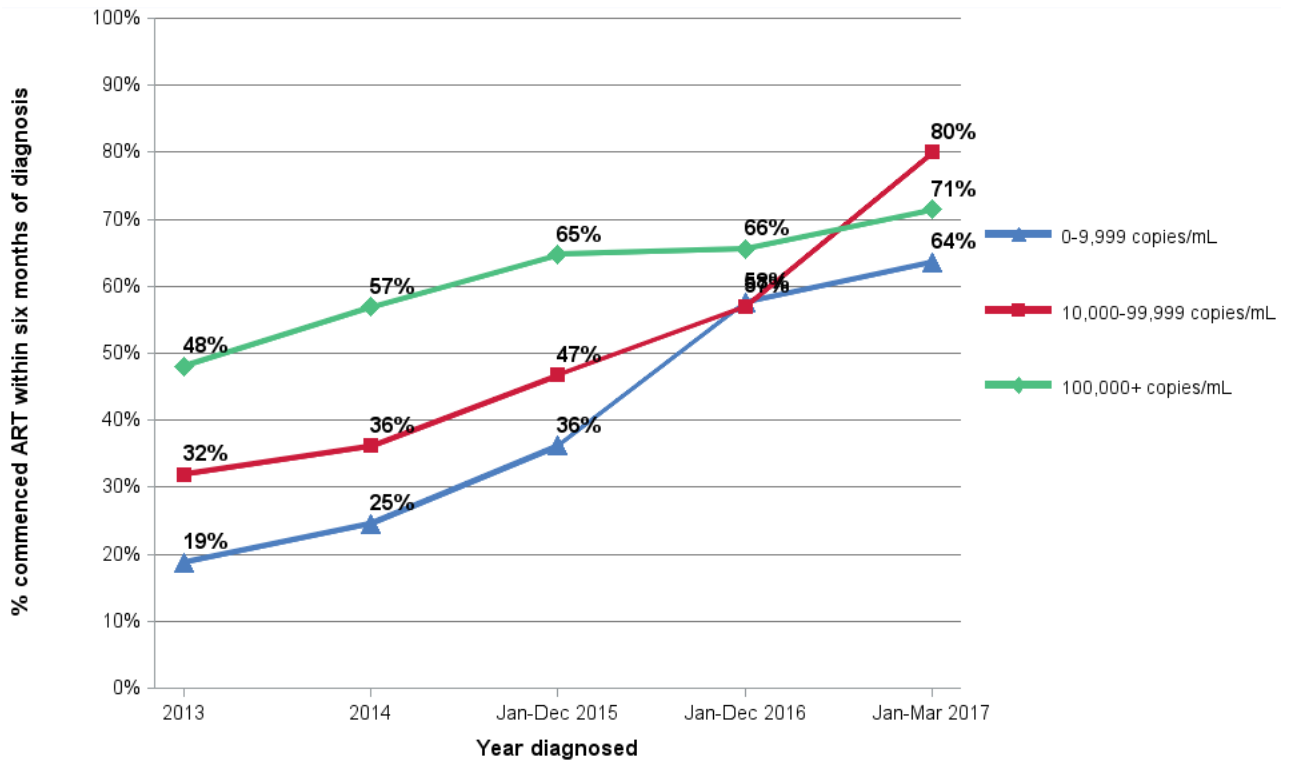


Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017
Note: excludes new diagnoses with missing CD4 at diagnosis, some of whom had commenced ART within 6 months.

Comment

- Of people with a CD4 count of 0-499 cells/ μ L at diagnosis, 44% of the 2013, 45% of the 2014, 55% of the 2015, 62% of the 2016 and 74% of the quarter 1 2017 new diagnoses cohorts had commenced ART within six weeks of diagnosis.
- Of people with a CD4 count of 500 or over at diagnosis, 19% of the 2013, 38% of the 2014, 49% of the 2015, 57% of the 2016 and 75% of the quarter 1 2017 new diagnoses cohorts had commenced ART within six weeks of diagnosis.

Figure 27: ART commencement within six weeks of diagnosis by HIV viral load at diagnosis among 1436 NSW residents newly diagnosed 1 January 2013 to 31 March 2017



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017
Note: excludes new diagnoses with missing HIVVL at diagnosis, some of whom had commenced ART within 6 months.

Comment

- Of people with an HIV VL of 0-9,999 copies/mL at diagnosis, 19% of the 2013, 25% of the 2014, 36% of the 2015, 58% of the 2016 and 64% of the quarter 1 2017 new diagnoses cohorts had commenced ART within six weeks of diagnosis.
- Of people with an HIV VL of 10,000-99,999 at diagnosis, 32% of the 2013, 36% of the 2014, 47% of the 2015, 58% of the 2016 and 80% of the quarter 1 2017 new diagnoses cohorts had commenced ART within six weeks of diagnosis.
- Of people with an HIV VL of 100,000 or over at diagnosis, 48% of the 2013, 57% of the 2014, 65% of the 2015, 66% of the 2016 and 71% of the quarter 1 2017 new diagnoses cohorts had commenced ART within six weeks of diagnosis.

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/Page/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

Appendix B: Characteristics of NSW residents notified with newly diagnosed HIV infection 1981 to 30 September 2017

	2009		2010		2011		2012		2013		2014		2015		2016		2017		Total	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total (ALL)	336	100	305	100	332	100	413	100	354	100	345	100	348	100	317	100	228	100	18182	100
Gender																				
Male	295	87.8	280	91.8	311	93.7	376	91.0	324	91.5	319	92.5	319	91.7	291	91.8	207	90.8	16717	91.9
Female	38	11.3	23	7.5	21	6.3	36	8.7	27	7.6	25	7.2	28	8.0	22	6.9	16	7.0	1168	6.4
Transgender	2	0.6	2	0.7	0	0.0	1	0.2	3	0.8	1	0.3	1	0.3	4	1.3	5	2.2	49	0.3
Unknown	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	248	1.4
Aboriginal person status																				
Aboriginal or Torres Strait Islander Person	9	2.7	7	2.3	5	1.5	13	3.1	8	2.3	7	2.0	7	2.0	10	2.8	7	3.1	196	1.1
Non-Aboriginal person	315	93.8	293	96.1	324	97.6	394	95.4	344	97.2	331	95.9	338	97.1	306	96.5	217	95.2	11064	60.9
Not stated	12	3.6	5	1.6	3	0.9	6	1.5	2	0.6	7	2.0	3	0.9	1	0.3	4	1.8	6922	38.1
Years of age at diagnosis																				
0-4	1	0.3	1	0.3	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	1	0.3	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	1	0.3	1	0.4	25	0.1
10-14	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	36	0.2
15-19	3	0.9	5	1.6	6	1.8	9	2.2	9	2.5	2	0.6	6	1.7	3	0.9	6	2.6	318	1.7
20-24	34	10.1	29	9.5	34	10.2	44	10.7	37	10.5	41	11.9	45	12.9	39	12.3	19	8.3	2202	12.1
25-29	58	17.3	56	18.4	55	16.6	77	18.6	64	18.1	51	14.8	63	18.1	60	18.9	40	17.5	3576	19.7
30-34	42	12.5	49	16.1	65	19.6	71	17.2	48	13.6	64	18.6	62	17.8	64	20.2	43	18.9	3617	19.9
35-39	59	17.6	43	14.1	59	17.8	64	15.5	42	11.9	45	13.0	45	12.9	48	15.1	23	10.1	3002	16.5
40-44	58	17.3	51	16.7	46	13.9	48	11.6	45	12.7	46	13.3	32	9.2	30	9.5	31	13.6	2213	12.2
45-49	30	8.9	30	9.8	26	7.8	38	9.2	45	12.7	30	8.7	26	7.5	32	10.1	18	7.9	1317	7.2
50-54	28	8.3	7	2.3	25	7.5	28	6.8	24	6.8	26	7.5	28	8.0	18	5.7	13	5.7	807	4.4
55-59	12	3.6	22	7.2	10	3.0	14	3.4	22	6.2	15	4.3	13	3.7	12	3.8	11	4.8	460	2.5
60-64	1	0.3	5	1.6	2	0.6	13	3.1	6	1.7	14	4.1	15	4.3	6	1.9	11	4.8	255	1.4
65-69	4	1.2	6	2.0	2	0.6	4	1.0	9	2.5	7	2.0	7	2.0	4	1.3	4	1.8	139	0.8
70 or over	5	1.5	1	0.3	2	0.6	3	0.7	2	0.6	3	0.9	6	1.7	0	0.0	8	3.5	88	0.5
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	88	0.5

Reported HIV risk exposure	2009		2010		2011		2012		2013		2014		2015		2016		2017		Total	%
Men who have sex with men (MSM)	221	65.8	226	74.1	269	81.0	322	78.0	265	74.9	257	74.5	264	75.9	235	74.1	152	66.7	11493	63.2
MSM and person who injects drugs (PWID)	17	5.1	8	2.6	11	3.3	14	3.4	16	4.5	19	5.5	21	6.0	25	7.9	14	6.1	560	3.1
Hetero-sex only	75	22.3	51	16.7	41	12.3	58	14.0	61	17.2	50	14.5	52	14.9	48	15.1	51	22.4	1704	9.4
PWID	12	3.6	9	3.0	8	2.4	10	2.4	7	2.0	8	2.3	4	1.1	4	1.3	5	2.2	570	3.1
Blood disorder, blood or tissue recipient	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	277	1.5
Vertical transmission	2	0.6	1	0.3	0	0.0	0	0.0	1	0.3	1	0.3	0	0.0	1	0.3	2	0.9	53	0.3
Other	2	0.6	1	0.3	1	0.3	2	0.5	1	0.3	4	1.2	3	0.9	1	0.3	0	0.0	49	0.3
Unknown	6	1.8	9	3.0	2	0.6	7	1.7	3	0.8	6	1.7	3	0.9	3	0.9	4	1.8	3476	19.1
LHD of residence																				
South Eastern Sydney	106	31.5	109	35.7	124	37.3	150	36.3	126	35.6	112	32.5	128	36.8	83	26.2	70	30.7	5667	31.2
Sydney	92	27.4	76	24.9	88	26.5	113	27.4	87	24.6	82	23.8	84	24.1	95	30.0	45	19.7	3073	16.9
Northern Sydney	39	11.6	19	6.2	24	7.2	23	5.6	25	7.1	18	5.2	24	6.9	19	6.0	23	10.1	1021	5.6
Western Sydney	21	6.3	20	6.6	31	9.3	25	6.1	27	7.6	27	7.8	20	5.7	24	7.6	23	10.1	770	4.2
South Western Sydney	21	6.3	25	8.2	18	5.4	31	7.5	33	9.3	32	9.3	33	9.5	32	10.1	21	9.2	747	4.1
Illawarra Shoalhaven	5	1.5	8	2.6	5	1.5	9	2.2	7	2.0	6	1.7	7	2.0	8	2.5	9	3.9	240	1.3
Central Coast	5	1.5	5	1.6	4	1.2	10	2.4	5	1.4	8	2.3	5	1.4	11	3.5	8	3.5	215	1.2
Northern NSW	5	1.5	8	2.6	11	3.3	5	1.2	5	1.4	7	2.0	8	2.3	5	1.6	8	3.5	213	1.2
Nepean Blue Mountains	3	0.9	3	1.0	4	1.2	5	1.2	3	0.8	6	1.7	6	1.7	2	0.6	5	2.2	267	1.5
Hunter New England	17	5.1	17	5.6	11	3.3	15	3.6	18	5.1	28	8.1	19	5.5	15	4.7	3	1.3	513	2.8
Southern NSW	6	1.8	1	0.3	2	0.6	8	1.9	4	1.1	4	1.2	2	0.6	6	1.9	3	1.3	69	0.4
Murrumbidgee-Albury	2	0.6	7	2.3	2	0.6	5	1.2	3	0.8	3	0.9	4	1.1	9	2.8	3	1.3	101	0.6
Western NSW	3	0.9	4	1.3	3	0.9	7	1.7	5	1.4	2	0.6	2	0.6	5	1.6	3	1.3	128	0.7
Mid North Coast	6	1.8	3	1.0	4	1.2	3	0.7	6	1.7	7	2.0	6	1.7	2	0.6	1	0.4	149	0.8
Far West	2	0.6	0	0.0	0	0.0	2	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8	0.0
Unknown or other	3	0.9	0	0.0	1	0.3	2	0.5	0	0.0	3	0.9	0	0.0	1	0.3	3	1.3	5001	27.5
Total (ALL)	336	100 %	305	100 %	332	100 %	413	100 %	354	100 %	345	100 %	348	100 %	317	100 %	228	100 %	18182	100 %

Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 10 November 2017.

Appendix C: Ending HIV Seven Statements Evaluation, ACON 2013-2016

The table below shows the figures over the eight separate surveys.

Percentage of respondents who strongly agree or agree with the statements below.									
Answer Options	FEB 2013 (n=233)	MAY 2013 (n=517)	NOV 2013 (n=553)	APRIL 2014 (n=530)	DEC 2014 (n=549)	APR 2015 (n=602)	MAR 2016 (n=515)	SEP 2016 (n=520)	+/-
Everything has changed, we can now dramatically reduce HIV transmission	48%	59%	59%	67%	61%	71%	77%	86%	+38
Now more than ever, gay men need to know their HIV status	81%	85%	86%	90%	89%	91%	92%	92%	+11
Sexually active gay men should take an HIV test at least twice a year	88%	87%	92%	93%	89%	92%	93%	96%	+8
HIV treatments now offer increased health benefits and fewer side effects	65%	66%	67%	73%	69%	75%	77%	78%	+13
HIV treatments significantly reduce the risk of passing on HIV	33%	42%	50%	64%	59%	69%	73%	83%	+50
Early HIV treatment is better for your health and can help protect your sex partners	74%	80%	89%	91%	92%	93%	93%	95%	+21
Condoms continue to be the most effective way of preventing HIV transmission	95%	92%	92%	91%	91%	85%	94%	94%	-1

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.

Appendix D: Immediate Start to Treatment Survey, PositiveLifeNSW

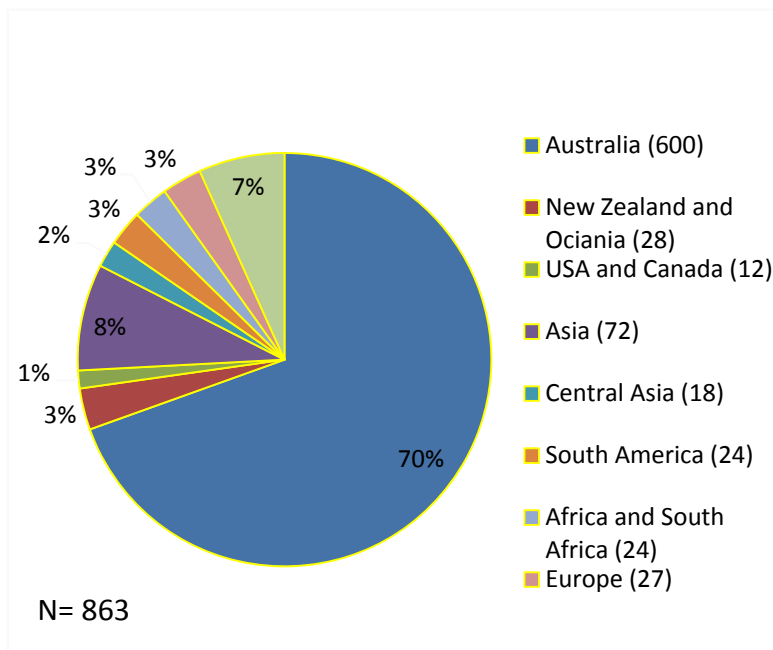
Immediate Start to Treatment Survey

Introduction - Significant advances in the evidence to support the prescribing of antiretroviral therapy (ART) at the time of an HIV diagnosis has come from the Strategic Timing of Antiretroviral Therapy (START) study (Lodi et al., 2015) and from clinical programs like the RAPID Program at San Francisco General Hospital (Pilcher et al., 2017). The World Health Organisation (WHO) has also published 'Guidelines for Managing Advanced HIV Disease and Rapid Initiation of Antiretroviral Therapy' (World Health Organisation, 2017). The WHO initiated an online survey through Survey Monkey in March 2017, 'Advanced HIV Disease & Same day start of ART-make your voice heard!' (<https://www.surveymonkey.com/r/CNJTB5>) to explore the international feelings about these recommendations for starting ARV on the day of an HIV diagnosis as outlined in these guidelines for people living with HIV. With similar interest Positive Life NSW undertook a survey of the Australian community both HIV positive and negative, with a specific focus on NSW as these are the constituents represented by the organisation. The aim was to explore the 'communities' attitudes and views to the recommendations of immediate start of ARVs on the day of diagnosis.

Method - PLNSW approached the WHO for permission, by email 22nd March 2017, to adapt this survey and adjusting it to reflect the local demographic and jurisdictional differences. PLNSW went live with the modified survey, 16th June to 18th July 2017 using the Survey Monkey platform. The survey consisted of 18 questions starting with HIV status then covering participant demographics for age, sex, gender, ethnicity, country of birth, language spoken at home, source of income, current place of residence in NSW in Sydney Metro, Sydney outer metro, Regional or rural NSW or Not NSW. Question regarding immediate start to ARV asked respondents if they would support immediate commencement of ART if it was recommended, what their concerns would be if this was a recommendation, what would influence their decision, and what problems would they envisage. Questions were formatted as one answer, multiple choice or Likert scale with the opportunity to provide qualitative feedback back at 2 points within the questionnaire after 'If starting HIV treatment on the same day as you were diagnosed was available, would you support the practice and at the end of the survey asking 'Please let us know if you have any other thoughts or comments on "same-day" start of HIV treatments'. Responses were analysed using Survey Monkey basic analytics and excel.

Results - A total of 863 responses were recorded from within NSW and Australia combined. Australian born represented 600 (70%) with the remaining respondents making up slightly over a quarter of respondents who were born overseas from Asia and Central Asia n=90 (10%) and other 173 (20%). The return of responses, 60% from HIV positive, 35% HIV negative, 3% unknown and 2% preferring not to say is representative of the population usually collected within surveys conducted by Positive Life NSW. The response rate of 2.39% for Aboriginal and Torres Strait Islanders or both was low but better than the usual average of 1.2-4% within Positive Life NSW surveys.

Survey Findings



Country of Birth

Respondents by country of origin (note this is a national break down)

Income Source	Percentage	Count
Employed	78.37%	250
Unemployment benefit	4.70%	15
Student benefit	4.39%	14
Disability or Aged Pension	10.25%	33
Supported by partner, spouse or friend	2.17%	7
Total		319

Employment and Source of Income

Majority of the respondents (78.37%) were employed. This was followed by respondents (10.25%) were on disability and aged pension.

Table 2. Where do you live?

Sydney Metro	58.31%	200
Sydney Outer Metro	14.29%	49
Regional or Rural NSW	27.41%	94
	Total	343

Where do you live?

The majority of respondents were from Sydney Metropolitan area and Sydney Outer Metro.

Table 3 What is your HIV Status? (NSW)

HIV positive	59.94%	205
HIV negative	34.51%	117
HIV unknown	3.24%	11
Prefer not to say	1.77%	6
	Total	339

What is your HIV Status?

Participants were asked to identify their HIV status as 'positive', 'negative', 'unknown' or 'prefer not to say'. The majority of the respondents (59.94%) indicated they were HIV positive. About a third (34.51%) was either HIV negative (3.24%) or preferred not to say (1.77%).

Table 4 What is your current gender identity? (NSW)

Male	93.24%	317
Female	5.00%	17
Non-Binary	1.18%	4
Different Identity	0.59%	2
	Total	340

What is your current gender identity?

Participants were asked how they identified their gender. The majority (93.24%) identified as male (93.24%), 5% as female, a small proportion as non-binary (1.18%) and (0.59%) as 'different identity'.

Table 5 How do you identify? (NSW)

Gay male or homosexual	77.15%	260
Lesbian or homosexual	0.30%	1
Bisexual	10.39%	35
Heterosexual or straight	6.53%	22
Queer	4.12%	13
Prefer not to say	1.78%	6
	Total	337

The majority identified their sexuality as gay male or homosexual (77.15%). This was followed by bisexual (10.39%), heterosexual or straight (6.3%). 4.12% identified as queer and only few preferred not to say anything.

Table 6. Are you Aboriginal or Torres Strait Islander? (NSW)

Aboriginal	1.76%	6
Torres Strait Islander	0.29%	1
Both	0.88%	3
Neither	93.88%	319
Prefer not to say	3.24%	11
	Total	340

Are you Aboriginal or Torres Strait Islander?

There was an underrepresentation of Aboriginal, Torres Strait Islander. However, in comparison to previous surveys conducted by Positive Life NSW this group was better represented within this survey at 2.93% of participants.

Table 7. What is your age? (NSW)

18-24	8.77%	30
25-34	18.13%	62
35-44	23.68%	81
45-54	27.19%	93
55-64	19.01%	65
65-74	2.05%	7
75+	1.17%	4
	Total	342

What is your age?

Half of the respondents (more than 50%) were in the age bracket of 35-44 yrs and 45-54 yrs. 55-64 years (19.01%), 18-24 years (8.77%), 65-74 years (2.05%) and 75+ (1.17%) comprised the rest.

Table 8. If starting HIV treatment on the same day you were diagnosed was available, would you support the practice? (NSW)

Yes	75.15%	245
No	11.66%	38
Unsure	4.91%	16
Other	8.28%	27
	Total	326

If starting HIV treatment on the same day you were diagnosed was available, would you support the practice?

On the question of supporting commencement of treatment on the same day of diagnosis, majority of respondents (75.15%) indicated 'Yes'. 11.66% said 'No' and 4.19% were 'unsure'. Those who indicated other (8.28%) were offered a free field text response box for further comments.

Table 9. If it was standard practice to start treatment on the same day you are diagnosed with HIV, what do you think would be the benefit/s? (Choose more than one answer if you wish)

Starting as early as possible is beneficial for health	79.19%	255
For pregnant women, starting treatment early will protect the unborn baby	39.44%	127
Starting treatment as early as possible will protect sexual partners	65.84%	212
Starting treatment as early as possible will provide a sense of control over HIV	67.70%	218
Other	14.60%	47
	Total	322

If it was standard practice to start treatment on the same day you are diagnosed with HIV, what do you think would be the benefits? (Choose more than one answer if you wish)

Respondents were asked to prioritise the benefits for beginning treatment on the day of diagnosis. ‘Starting treatment as early as possible’ was beneficial was identified by the majority (79.19%). Giving a sense of control over HIV was prioritised next (67.70%) followed by protecting sexual partners (65.84%), protecting the unborn baby for pregnant women (39.44%), and other reasons (14.60%).

Table 10. If it was standard practice to begin treatment on the same day of diagnosis, which of the following statements would influence decision to start (please rank 1-9)? (NSW and non-NSW combined n=621)

Being prescribed the HIV treatments that work best for you (F)	1
Having time to ask questions and talk about treatment before you start (C)	2
Being able to make your own decision when to start treatment (A)	3
Having support from your doctor so you can take treatment daily (D)	4
Feeling free of pressure and coercion to start treatment (B)	5
Being diagnosed with another health condition that needs to be dealt with, before you start HIV treatment (G)	6
Having support from other people so you can stay on treatment (E)	7
Wanting to make sure your mental health and/or substance use is managed before you start HIV treatment (I)	8
Having other life concerns (housing, employment, relationships) that need to be dealt with before you start HIV treatment (H)	9

Table 10. Respondents were asked to rank which statements, listed A to H, that would influence their decision to start treatment on the day of an HIV diagnosis number 1 to 9. Being prescribed the HIV treatments that work best for you was ranked the highest followed by having time to ask questions, and being able to make your own decision to start were scored 1 to 3 respectively. Having support from your doctor was ranked 4th, then feeling free of pressure and coercion 5th and being diagnosed with another health condition ranked 6th. Having the support to stay on treatment ranked 7th and wanting to make sure mental health or substance use issues were managed before starting ranked 8th. Needing other concerns to be addressed including housing, employment and relationships, ranked 9th. Note these figures were generated from the national combined responses of the survey due to the complexity of the way the question was structured within the survey. Selection bias was not seen as can be seen by the distribution of the questions.