

NSW HIV Strategy 2016 – 2020

Quarter 4 & Annual 2016

Data Report



Executive Summary

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 publically 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 data to 31 December 2016:

- In 2016 there were 317 NSW residents notified with newly diagnosed HIV infection, 9 per cent (%) fewer than the previous six year annual average (n=349). Among the 317 new diagnoses in 2016, 259 (82%) reported being men who have sex with men (MSM), 8% less than the average annual new diagnoses count for MSM in 2010-2015 (n=282).
- From October to December (quarter 4) 2016, 75 NSW residents were newly diagnosed, 11% fewer than the average for quarter 4 in 2010-2015 (n=84). Of 75 new diagnoses in quarter 4 2016, 76% (n=57) reported being MSM, 14% less than the average new diagnoses count in MSM in quarter 4 in 2010-2015 (n=66).
- Of 317 the people newly diagnosed in 2016, 3.2% (n=10) were reported to be Aboriginal or Torres Strait Islander people; this is a slightly higher proportion than previous years (2.2% of new diagnoses 2010-2015) and is being monitored closely.
- With respect to local health district (LHD) of residence at diagnosis in 2016, for the first time the new diagnoses count in Sydney LHD (n=93) exceeded that of South-Eastern Sydney (SES) LHD (n=83). A lesser proportion of new diagnoses in 2016 resided in SES LHD (26.2%) compared with 35.7% for the new diagnoses in 2010-2015. A greater proportion of new diagnoses in 2016 resided in Sydney LHD (29.7%) compared with 25.2% for the new diagnoses in 2010-2015.
- Of 57 MSM newly diagnosed in quarter 4 2016, 61% (n=35) had evidence of early stage infection, compared with 50% (av. n=33) of MSM newly diagnosed in quarter 4 of 2010-2015.
- Of 57 MSM newly diagnosed in quarter 4 2016, 18% (n=10) had evidence of advanced stage infection at diagnosis compared with 13% (av. n=8) of MSM newly diagnosed in quarter 4 of 2010-2015.
- Between 1 March and 31 December 2016, 4385 people at high risk of HIV infection were provided with PrEP for the prevention of HIV infection through EPIC-NSW.
- In 2016 there were 536,444 HIV serology tests performed in 15 laboratories in NSW, 7% more than in 2015 (n=499,966), 15% more than in 2014 (n=465,475), 20% more than in 2013 (n=447,297) and 28% more than in 2012 (n=419,968).
- From October to December 2016, 13,397 HIV tests were done in all PFSHCs in NSW; 17% greater than the same period in 2015 (n=11,405). Among MSM, there was a 15.1% increase in HIV tests compared with the same period in 2015.
- Data from public sexual health and HIV clinics and private practices indicate 92% - 98% of people living with HIV who attended these services were on antiretroviral therapy (ART).
- Of the 88 new diagnoses in April to June 2016, 64% (n=56) had commenced ART within six weeks, 82% (n=72) within three months and 88% (n=77) within six months of diagnosis. Of the 77 new diagnoses in April to June 2016 which had commenced ART within six months of diagnosis, 91% (n=70) had a post-ART viral load available at the time of follow up and of these, 96% (n=67) had achieved viral suppression (VL < 200 copies/mL) by the time of six months post diagnosis follow up.
- 2016 had the lowest age and sex standardised population rate of new diagnoses in NSW on record at 4.30 new diagnoses per 100,000 population, with 2010 having the next lowest rate of 4.39 per 100,000 population.
- The number of new diagnoses in 2016 should be considered in the context of: 1) a marked and continued increase in HIV testing (see Section 3), 2) increased uptake of antiretroviral therapy (ART) among people newly diagnosed (see Section 4), and 3) commencement of the population level HIV pre-exposure prophylaxis (PrEP) impact study (EPIC-NSW) in NSW in March 2016 (see section 2).

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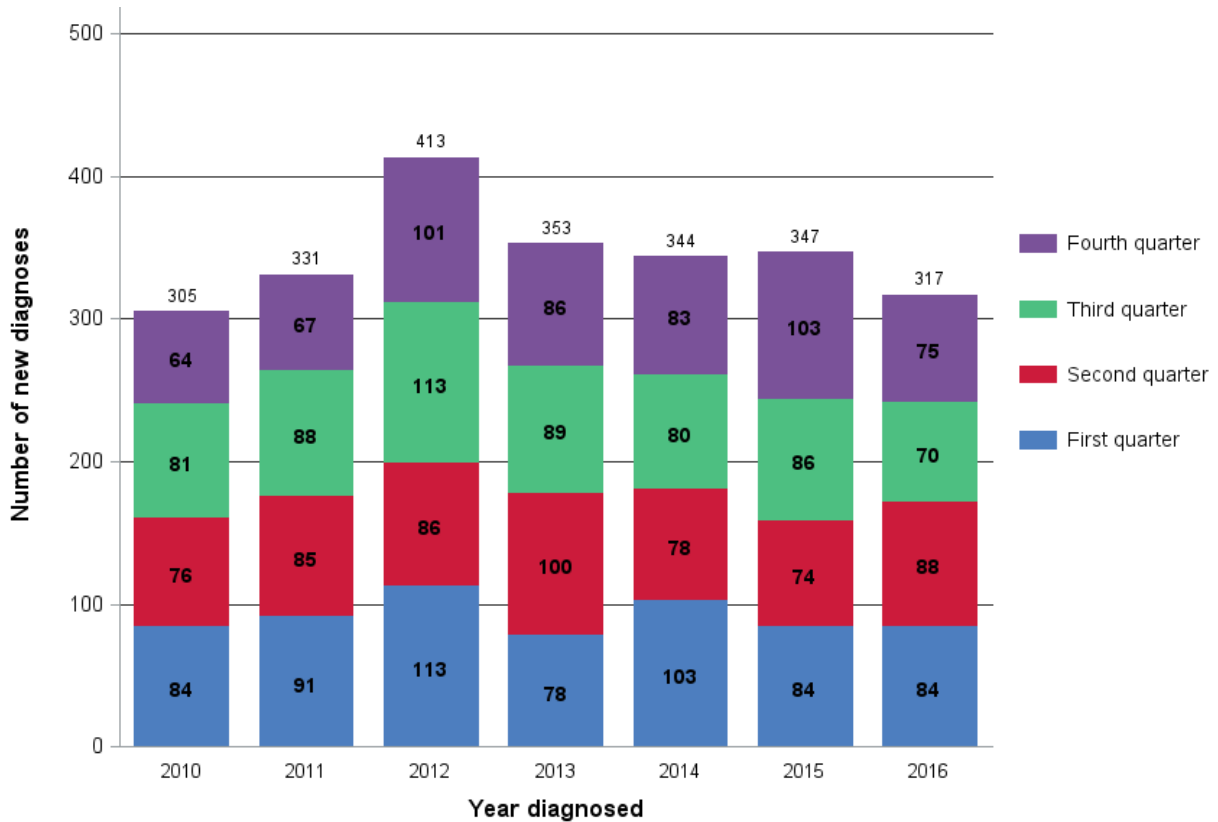
Glossary of Terms

ART	Antiretroviral therapy
CAIC	Condomless anal intercourse with casual partners
HIV	Human Immunodeficiency Virus
LHD	Local Health District
MSM	Men who have sex with men
NSP	Needle and syringe program
NSW	New South Wales
NSWPHS	New South Wales Population Health Survey
PWID	People who inject drugs
PFSHC	Publicly Funded Sexual Health Clinic
PrEP	Pre-exposure prophylaxis
SGCPS	Sydney Gay Community Periodic Survey

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 2010 to 31 December 2016



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

Comment

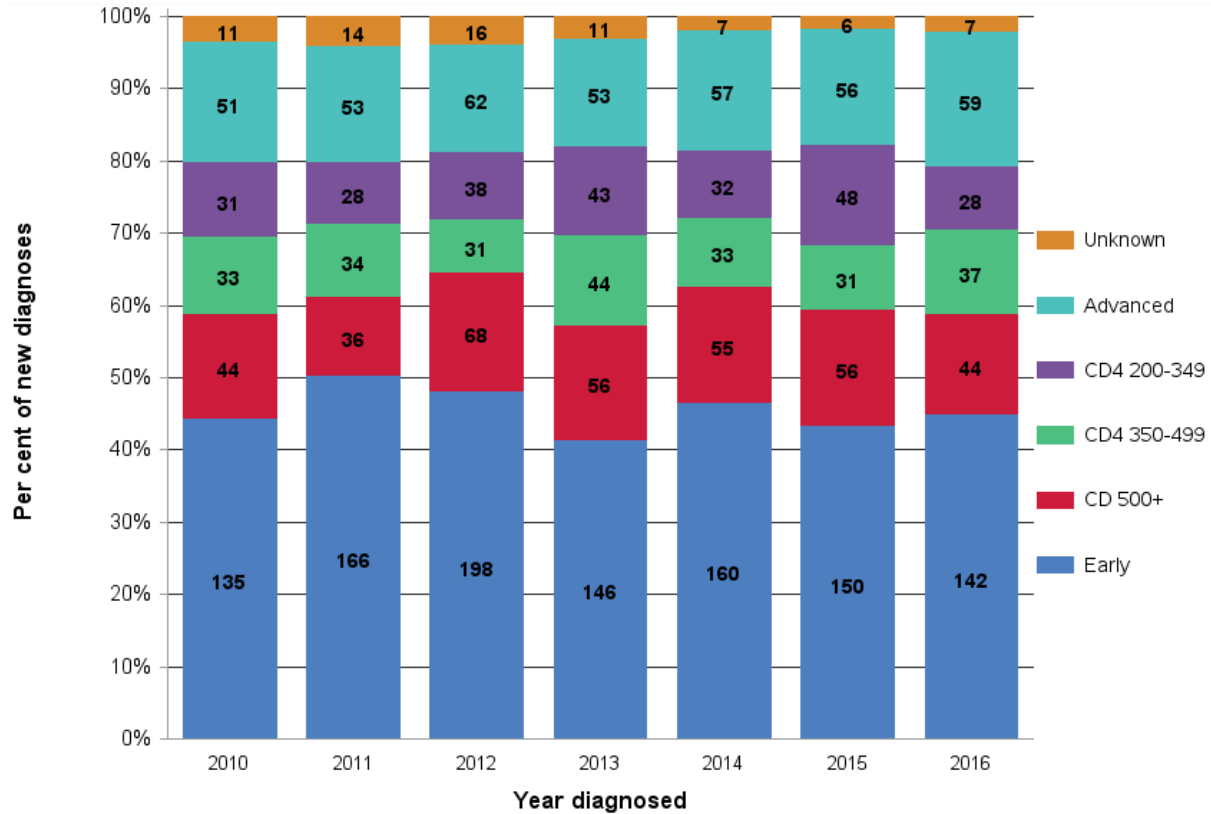
In 2016 there were 317 NSW residents notified with newly diagnosed HIV infection, which was 9 per cent (%) less than the previous six year annual average (n=349). Among the 317 new diagnoses in 2016, 259 (82%) reported being men who have sex with men (MSM), 8% less than the average annual new diagnoses count for MSM 2010-2015 (n=282). From October to December (quarter 4) 2016, 75 NSW residents were notified with newly diagnosed HIV infection, 11% less than the average for quarter 4 2010-2015 (n=84). Of 75 new diagnoses in quarter 4 2016, 76% (n=57) reported being MSM, 14% less than the average new diagnoses count in MSM in quarter 4 2010-2015 (n=66).

The number of new diagnoses in 2016 should be considered in the context of: 1) a marked and continued increase in HIV testing (see Section 3), 2) increased uptake of antiretroviral therapy (ART) among people newly diagnosed (see Section 4), and 3) commencement of the population level HIV pre-exposure prophylaxis (PrEP) impact study (EPIC-NSW) in NSW in March 2016 (see section 2).

1.2 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 2a (all new diagnoses) and 2b (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 3 (all new diagnoses) utilises CD4 count at diagnosis only.

Figure 2a: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 by stage of infection at diagnosis¹



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

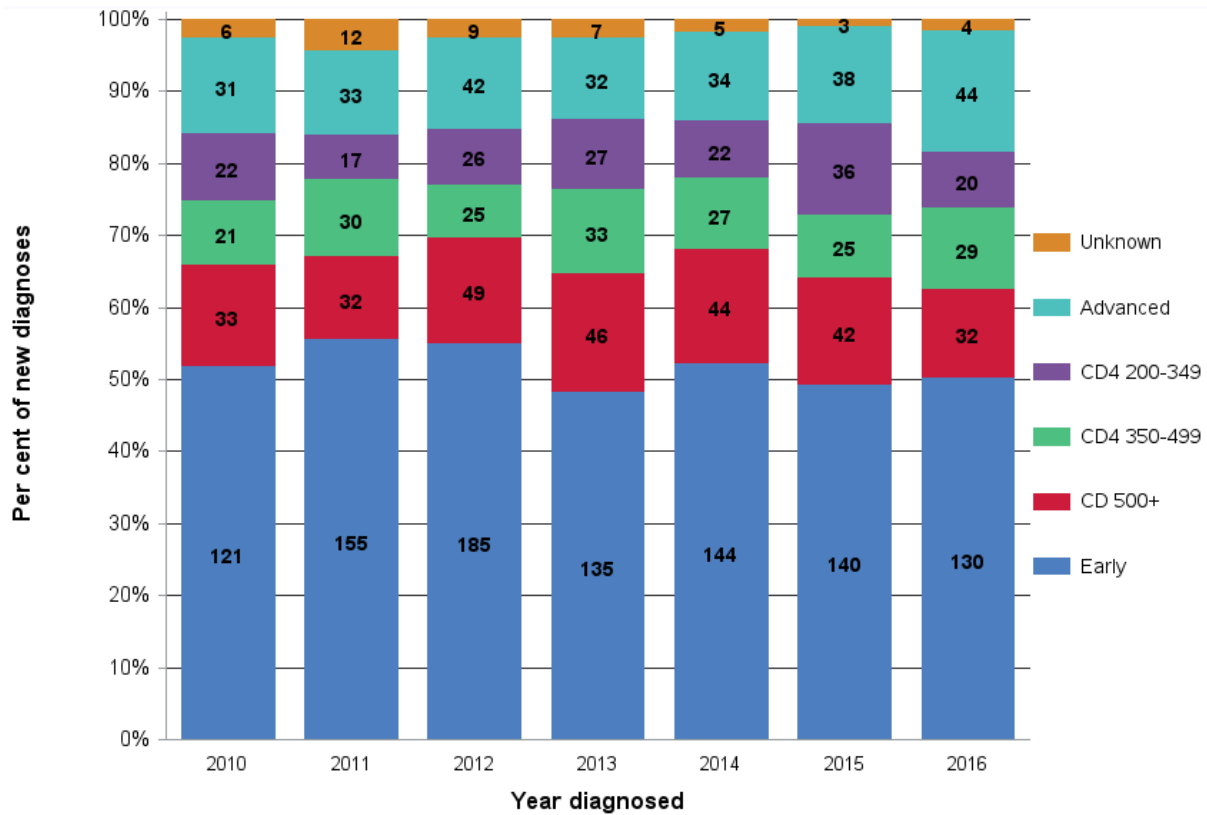
¹Stage of infection at diagnosis: Early = Evidence of HIV infection acquired within 12 months of diagnosis, which was defined as notification of a sero-conversion like illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or presentation with an AIDS defining 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 317 people newly diagnosed in 2016, 45% (n=142) had evidence of early stage infection at diagnosis compared with 46% (av. n=159) of new diagnoses 2010-2015, while 19% (n=59) had evidence of advanced stage infection, compared with 16% (av. n=55) of new diagnoses 2010-2015.

Of 75 people newly diagnosed in quarter 4 2016, 51% (n=38) had evidence of early stage infection at diagnosis compared with 44% (av. n=37) of new diagnoses in quarter 4 of 2010-2015, while 20% (n=15) had evidence of advanced stage infection, compared with 17% (av. n=14) of new diagnoses in quarter 4 of 2010-2015.

Figure 2b: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 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 7 February 2017

Comment

Of 259 MSM newly diagnosed in 2016, 50% (n=130) had evidence of early stage infection compared with 52% (av. n=147) of MSM newly diagnosed 2010-2015, while 17% (n=44) had evidence of advanced stage infection, compared with 12% (av. n=35) of MSM newly diagnosed 2010-2015.

Of 57 MSM newly diagnosed in quarter 4 2016, 61% (n=35) had evidence of early stage infection, compared with 50% (av. n=33) of MSM newly diagnosed in quarter 4 of 2010-2015; 18% (n=10) had evidence of advanced stage infection at diagnosis compared with 13% (av. n=8) of MSM newly diagnosed in quarter 4 of 2010-2015.

Figure 3: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 by CD4 count at diagnosis



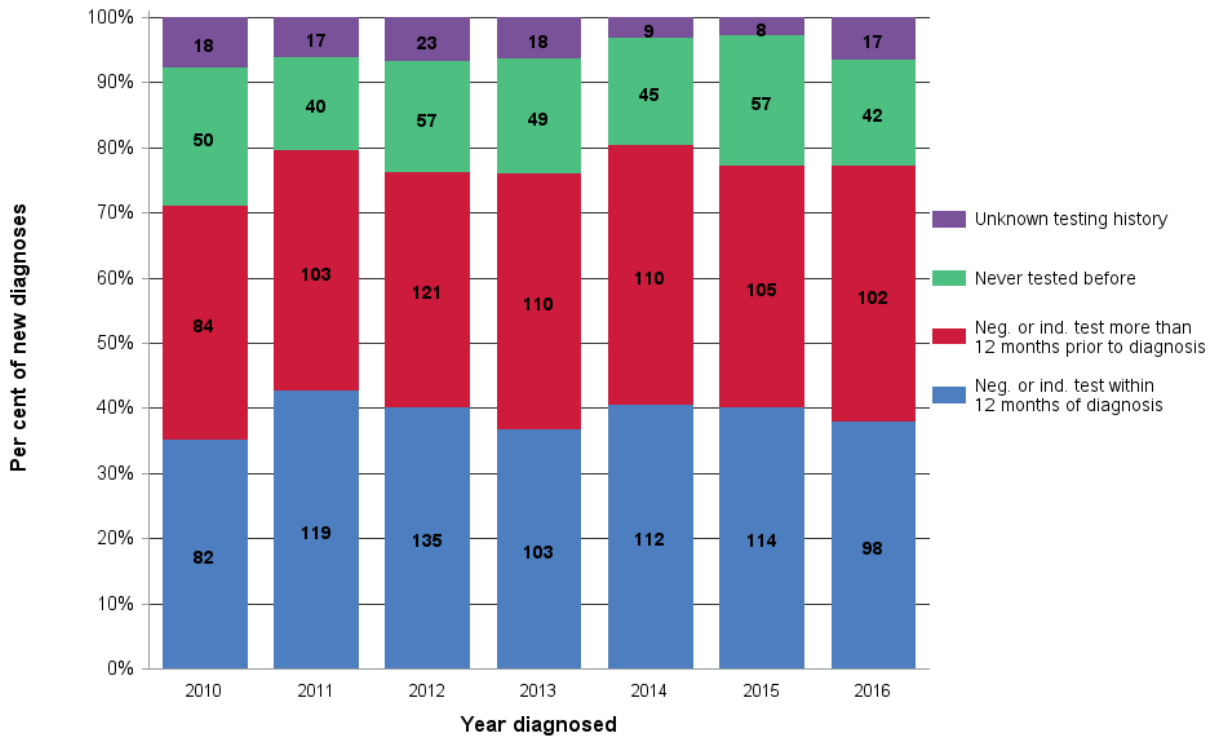
Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

Comment

Of 317 NSW residents notified with newly diagnosed HIV infection in 2016, 38% (n=120) had a CD4 count at diagnosis of 500 or over, 23% (n=72) of 350 to 499, 17% (n=55) of 200 to 349, 19% (n=59) of 0 to 199 and 3% (n=11) had an unknown CD4 count at diagnosis, a similar distribution to that in previous six years 2010-2015. Of the 317 new diagnoses in 2016, 36% (n=114) had a CD4 count at diagnosis of less than 350 cells/ μ L, indicative of late diagnosis, similar to 35% of new diagnoses 2010-2015.

Of 75 people newly diagnosed in quarter 4 2016, 43% (n=32) had a CD4 count (in cells/ μ L) at diagnosis of 500 or over, 16% (n=12) of 350 to 499, 19% (n=14) of 200 to 349, 19% (n=14) of 0 to 199 and 4% (n=3) had an unknown CD4 count at diagnosis. Among the new diagnoses in quarter 4 of 2010-2015, 38% had a CD4 count 500 or over and 21% of 350 to 499. Of the 75 new diagnoses in in quarter 4 2016, 37% (n=28) had a CD4 count at diagnosis of less than 350 cells/ μ L; same as for those diagnosed in quarter 4 in 2010-2015.

Figure 4: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 reporting to be MSM by HIV testing history



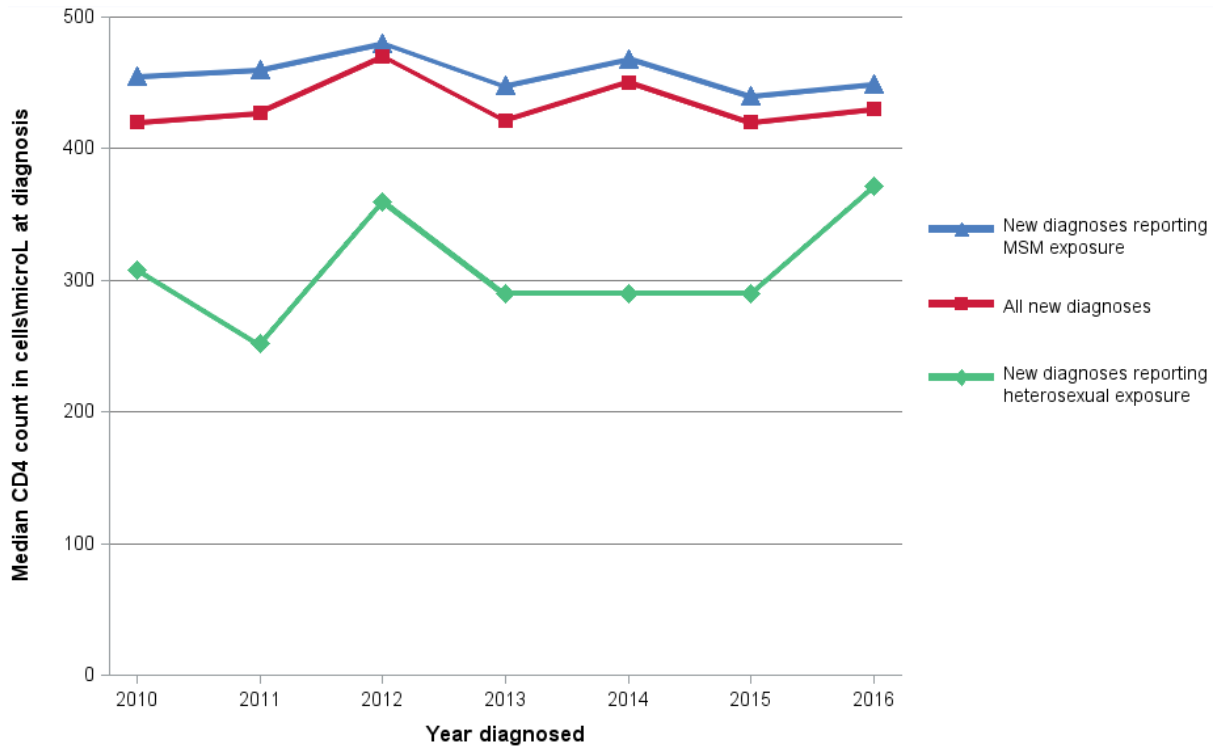
Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

Comment

Of 259 MSM newly diagnosed in 2016, 38% (n=98) were reported to have had a negative or indeterminate HIV test within 12 months of diagnosis, similar compared with 39% (av. n=111) of MSM newly diagnosed in 2010-2015. Of 259 MSM newly diagnosed in 2016, 16% (n=42) reported not ever having had an HIV test prior to diagnosis, compared with 18% (av. n=50) in 2010-2015.

Of 57 MSM newly diagnosed in quarter 4 2016, 46% (n=36) were reported to have had a negative or indeterminate HIV test within 12 months of diagnosis, an increase compared with 39% (av. n=26) of MSM newly diagnosed in quarter 4 in 2010-2015. Of the 57 MSM newly diagnosed in quarter 4 2016, 9% (n=5) reported not ever having had an HIV test prior to diagnosis, compared with 17% of MSM newly diagnosed in quarter 4 in 2010-2015. These changes in quarter 4 2016 may reflect an increased uptake and frequency of HIV testing among MSM at risk, the main target group of testing programs and campaigns.

Figure 5: Median CD4 count at diagnosis of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 for all, for those reporting to be MSM and for those reporting heterosexual acquisition of HIV¹

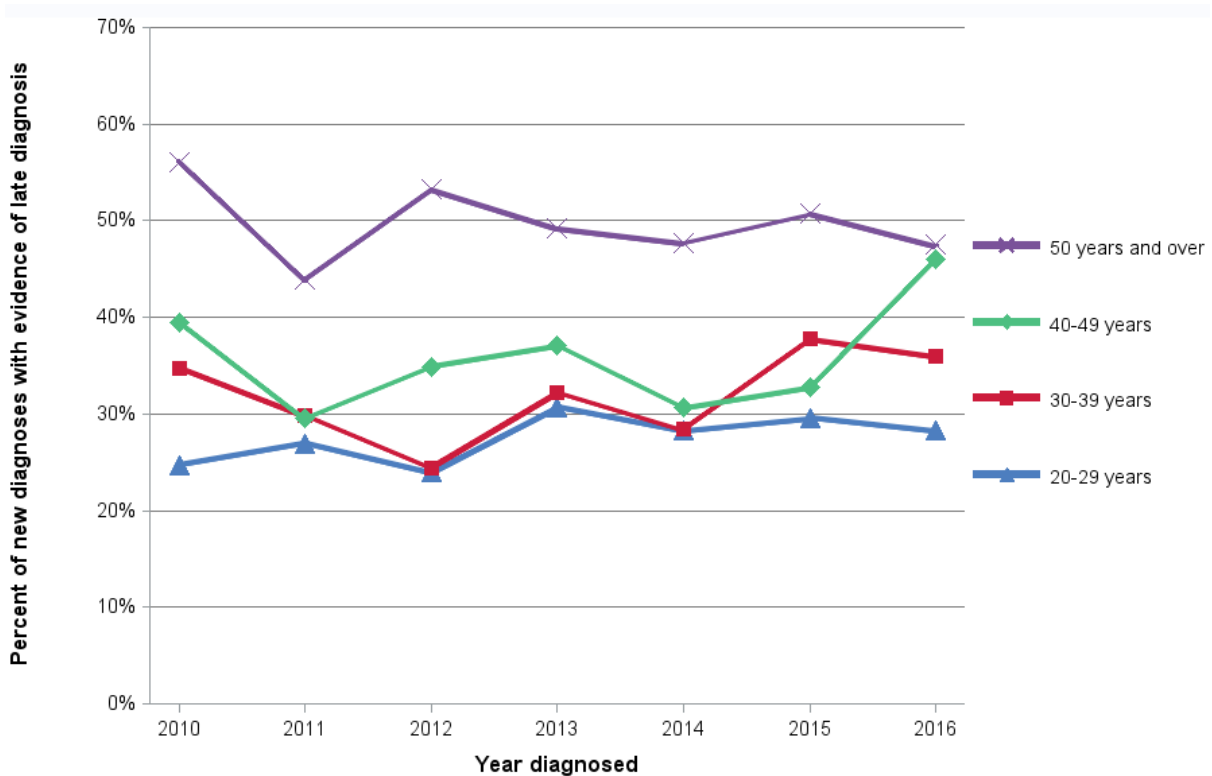


Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017
¹The median CD4 count at diagnosis for other HIV risk exposure groups such as being a person who injected drugs (PWID) are not reported separately due to very low number of cases.

Comment

In 2016 the median CD4 count at diagnosis for all 317 NSW residents notified with newly diagnosed HIV infection was 430. For the 259 people newly diagnosed in 2016 reporting to be MSM, their median CD4 count at diagnosis was 449 and, for the 47 reporting heterosexual exposure to HIV it was 372.

Figure 6: Within each age group at diagnosis of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 the per cent with evidence of late diagnosis¹



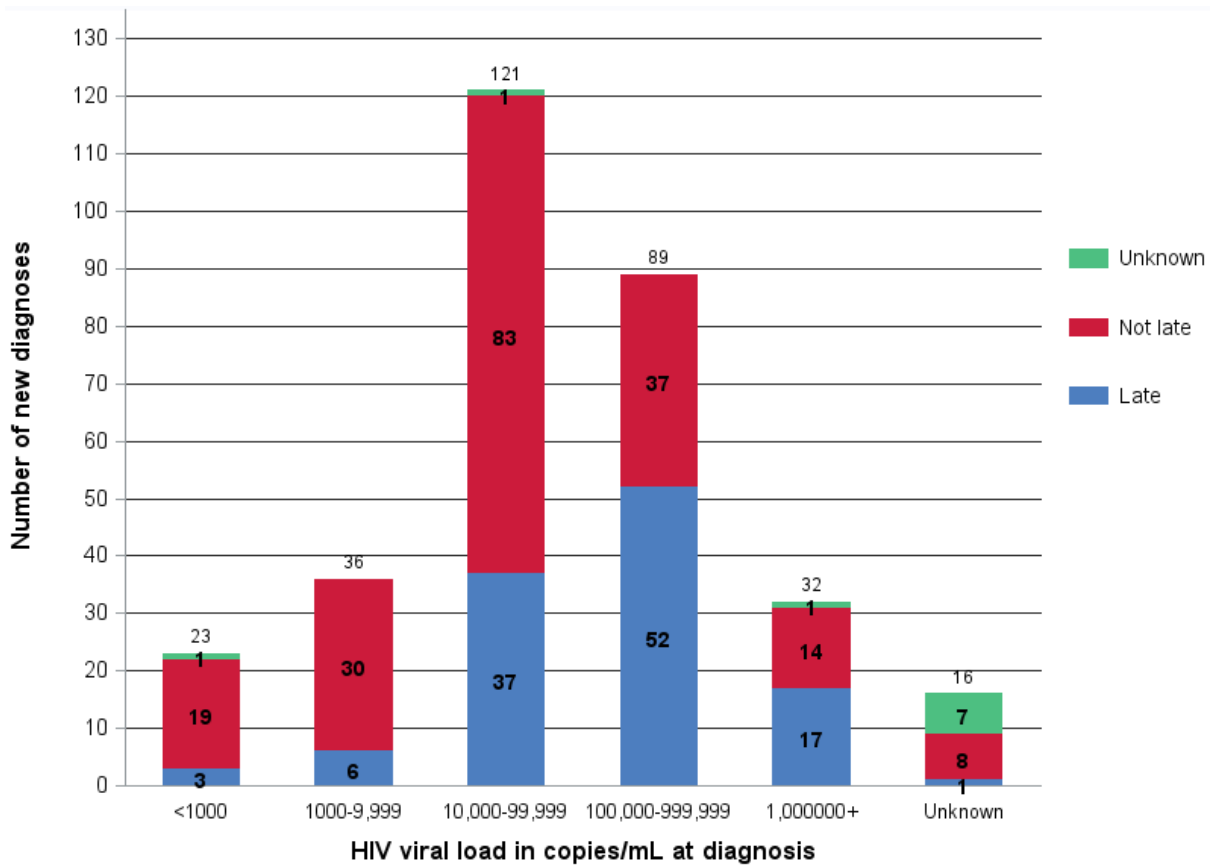
Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

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

Of 317 NSW residents newly diagnosed with HIV infection in 2016, 37% (n=116) had evidence of late diagnosis. Evidence of late diagnosis was more common as age at diagnosis increased. Of 40 people who were aged 50 years or over at diagnosis, 48% (n=19) had evidence of late diagnosis. Of 63 aged 40 to 49 years at diagnosis, 46% (n=29) had evidence of late diagnosis. Of 111 aged 30 to 39 years at diagnosis, 36% (n=40) had evidence of late diagnosis. Of 99 aged 20 to 29 years at diagnosis, 28% (n=28) had evidence of late diagnosis. None of the 4 people newly diagnosed aged less than 20 years of age had evidence of late diagnosis.

Figure 7: Number of NSW residents notified with newly diagnosed HIV infection in 2016 by HIV viral load at diagnosis and evidence of late diagnosis¹



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 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

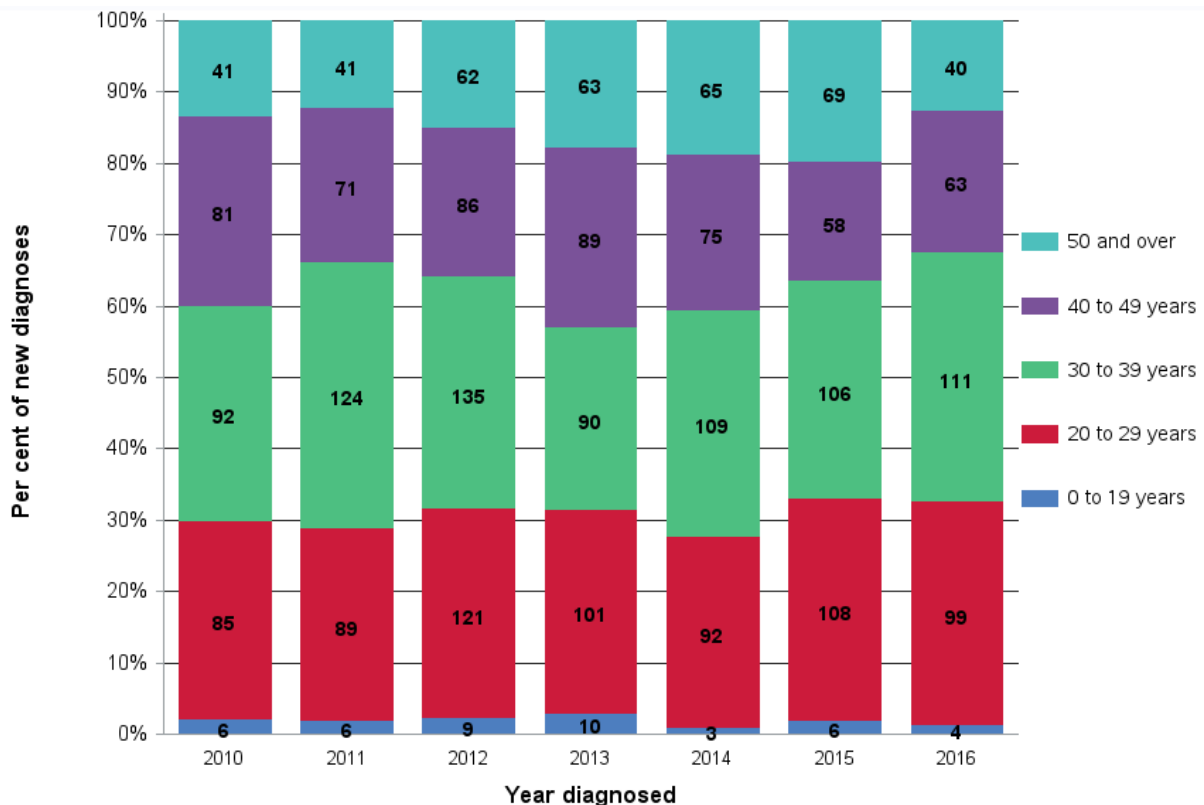
Of 317 NSW residents notified with newly diagnosed HIV infection in 2016, 9% (n=23) had an HIV viral load (HIV VL) at diagnosis of 0-9,999 copies/mL, 38% (n=121) of 10,000-99,999, 38% (n=121) of 100,000 or more and 5% (n=16) had an unknown HIV VL at diagnosis. Of the 317 people newly diagnosed in 2016, 37% (n=116) had evidence of late diagnosis and of those 59% (n=69) had a high HIV VL of 100,000 copies/mL or more.

For the HIV-infected individual, unchecked viral replication is associated with negative clinical outcomes and is a factor in disease progression and death, independent of CD4 count. Higher viral loads (for example 100,000 copies/mL or more) are associated with a higher risk of transmission of HIV and lower viral loads are associated with a lower risk of transmission of HIV.

1.3 Which groups are being notified?

Of 317 NSW residents notified with newly diagnosed HIV infection in 2016, 92% (n=291) were male, 7% (n=22) were female and 1% (n=4) were transgender (Appendix A). Of 317 the people newly diagnosed in 2016, 3.2% (n=10) were reported to be Aboriginal or Torres Strait Islander people; this is a slightly higher proportion than previous years (2.2% of new diagnoses 2010-2015) and is being monitored closely. With respect to local health district (LHD) of residence at diagnosis in 2016, for the first time the new diagnoses count in Sydney LHD (n=93) exceeded that of South-Eastern Sydney (SES) LHD (n=83). A lesser proportion of new diagnoses in 2016 resided in South-Eastern Sydney Local Health District (26.2%) compared with 35.7% for the new diagnoses in 2010-2015. A greater proportion of new diagnoses in 2016 resided in Sydney LHD (29.7%) compared with 25.2% for the new diagnoses in 2010-2015 (Appendix A).

Figure 8: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 by age at diagnosis



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

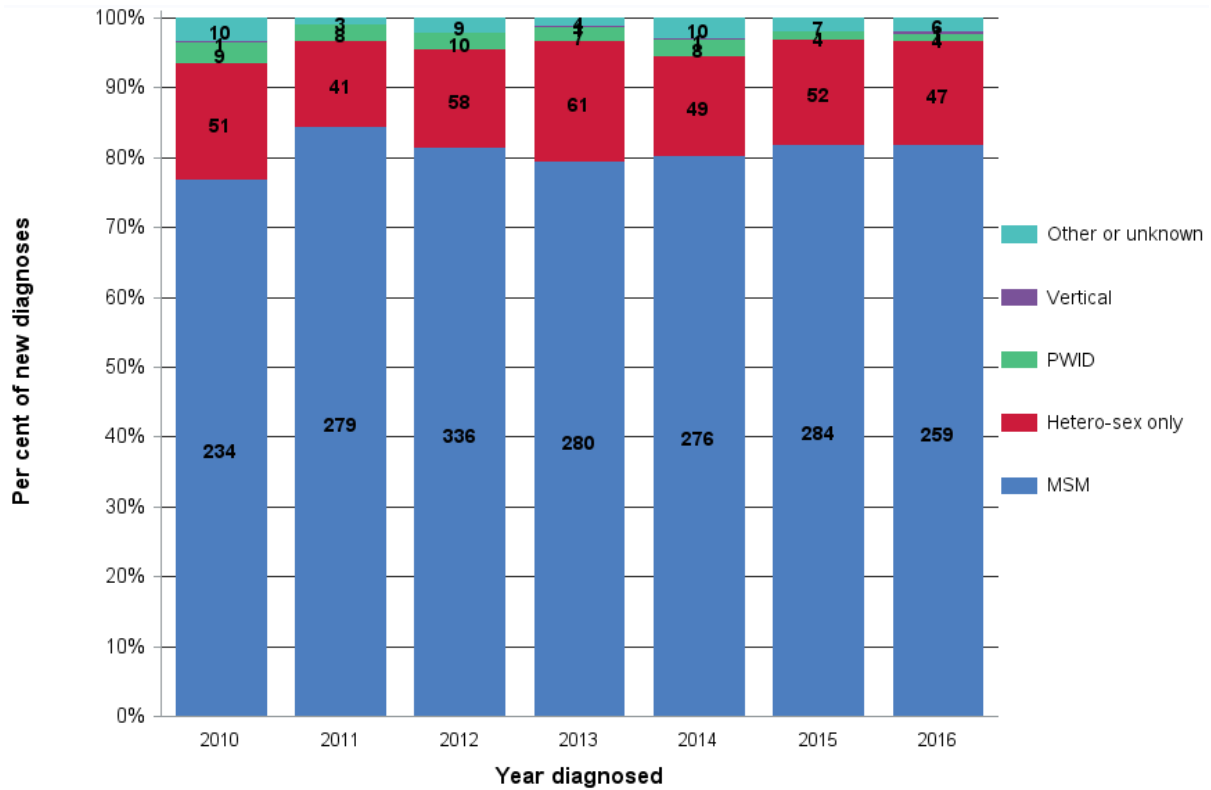
Comment

Of 317 NSW residents notified with newly diagnosed HIV infection in 2016, 1% (n=4) were less 0 to 19 years of age at diagnosis, 31% (n=99) were 20 to 29 years, 35% (n=111) were 30 to 39 years, 20% (n=63) were 40 to 49 years and 13% (n=40) were 50 years or over. This compares with 2% less than 20 years, 28% 20 to 29 years, 31% 30 to 39 years, 22% 40 to 49 years and 16% 50 years of age or over for the period 2010-2015.

Of the 57 people newly diagnosed in quarter 4 2016, 0% (n=0) were 0 to 19 years of age at diagnosis, 29% (n=22) were 20 to 29 years, 44% (n=33) were 30 to 39 years, 20% (n=15) were 40 to 49 years and 7% (n=5) were 50 years of age or over. This compares with 2% less than 20 years, 28% 20 to 29

years, 31% 30 to 39 years, 24% 40 to 49 years and 15% 50 years of age or over for those newly diagnosed in quarter 4 of 2010 to 2015.

Figure 9: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 by reported HIV risk exposure



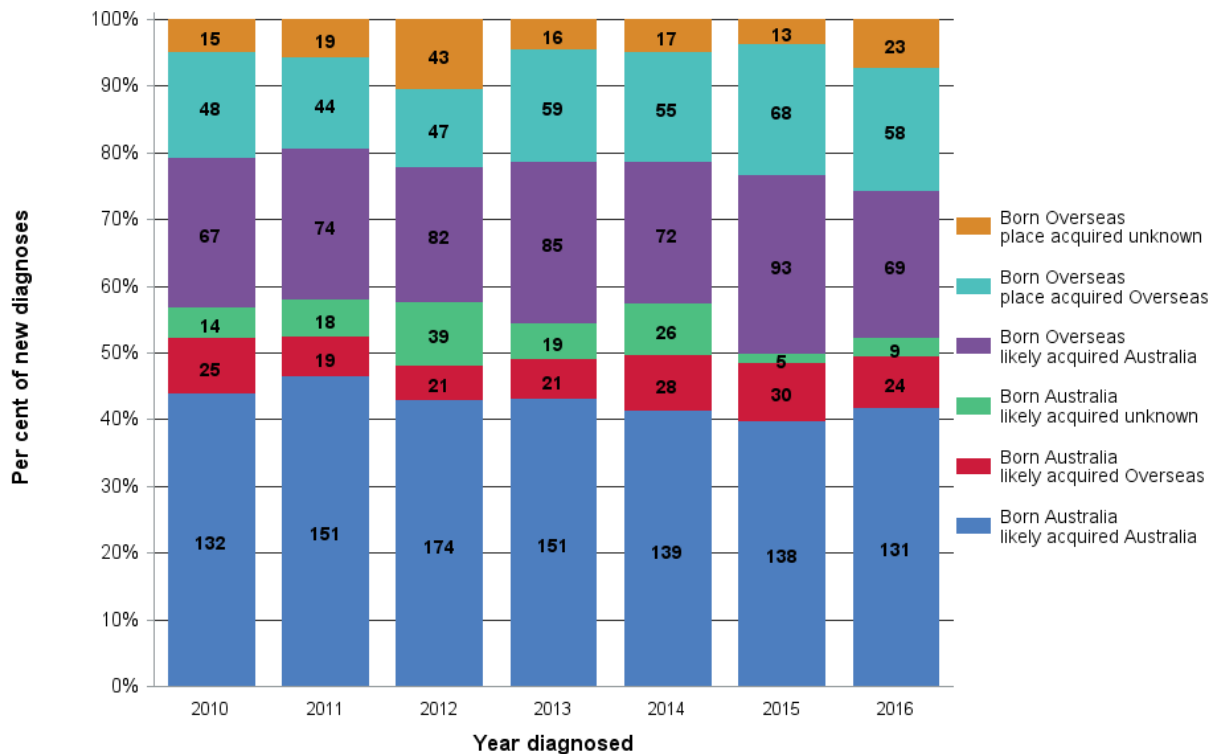
Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

Comment

Of 317 NSW residents notified with newly diagnosed HIV infection in 2016, HIV risk exposure was reported as male to male sex for 82% (n=259), heterosexual sex for 15% (n=47), injecting drug use (PWID) for 1% (n=4), another type or unknown exposure for 2% (n=6) and vertical transmission for <1% (n=1; which occurred outside of Australia). This was a similar breakdown of HIV risk exposures as was reported for people newly diagnosed in 2010-2015.

Of the 75 people newly diagnosed in quarter 4 2016, HIV risk exposure was reported as male to male sex for 76% (n=57), heterosexual sex for 17% (n=13), injecting drug use for 1% (n=1) and another type or unknown exposure for 5% (n=4). This compares with 79% reporting male to male sex, 16% heterosexual sex, 2% injecting drug use and 3% another type or unknown exposure for people newly diagnosed in quarter 4 2010-2015.

Figure 10: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 by place of birth and place most likely acquired HIV*



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017
* Excluded were 29 new diagnoses in 201–2016 with unknown country of birth and acquisition.

Comment

All new diagnoses

Of 317 NSW residents notified with newly diagnosed HIV infection in 2016, 52% (n=164) were born in Australia, compared with 55% of new diagnoses 2010-2015; 47% (n=150) were born overseas of those diagnosed in 2016, compared with 44% in 2010-2015. Of the 317 new diagnoses in 2016:

- 41% (n=131) were born in and likely acquired HIV in Australia, compared with 42% for 2010-2015;
- 8% (n=24) were born in Australia but likely acquired HIV overseas, compared with 7% for 2010-2015;
- 3% (n=9) were born in Australia with the place they likely acquired their infection unknown, compared with 6% for 2010-2015;
- 22% (n=69) were born overseas but likely acquired in Australia, compared with 23% for 2010-2015;
- 18% (n=58) were born overseas and likely acquired HIV overseas, compared with 15% for 2010-2015;
- 7% (n=23) were born overseas with the place they likely acquired their infection unknown, compared with 6% for 2010-2015, and;
- 1% (n=3) were of unknown place of birth and acquisition of HIV, same as for 2010-2015.

Of the 75 people newly diagnosed in quarter 4 2016, 53% (n=40) were born in Australia, compared with 57% of new diagnoses in quarter 4 2010-2015; 47% (n=35) were born overseas of those diagnosed in quarter 4 2016, compared with 41% in quarter 4 2010-2015. Of the 75 new diagnoses in quarter 4 2016:

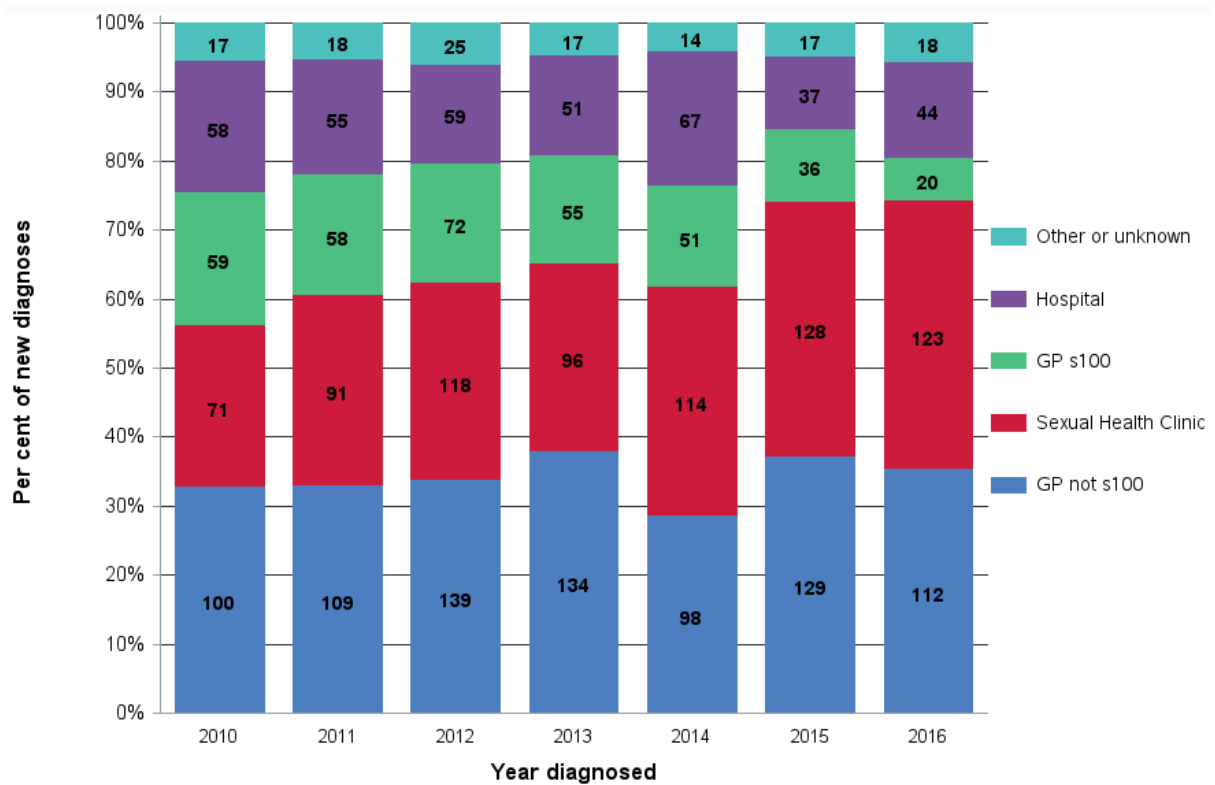
- 39% (n=29) were born in and likely acquired HIV in Australia, compared with 44% for quarter 4 2010-2015;
- 11% (n=8) were born in Australia but likely acquired HIV overseas, compared with 8% for quarter 4 2010-2015;
- 4% (n=3) were born in Australia with the place they likely acquired their infection unknown, compared with 5% for quarter 4 2010-2015;
- 21% (n=16) were born overseas but likely acquired in Australia, same as for quarter 4 2010-2015;
- 16% (n=12) were born overseas and likely acquired HIV overseas, same as for quarter 4 2010-2015;
- 9% (n=7) were born overseas with the place they likely acquired their infection unknown, compared with 5% for quarter 4 2010-2015, and;
- 0% (n=0) were of unknown place of birth and acquisition of HIV, compared with 2% for quarter 4 2010-2015.

New diagnoses in MSM

Of the 259 MSM newly diagnosed in 2016, 54% (n=140) were born in Australia, compared with 58% in 2010-2015; 45% (n=117) of those diagnosed in were born overseas, compared with 41% in 2010-2015.

Of 57 MSM newly diagnosed in quarter 4 2016, 56% (n=32) were born in Australia, compared with 61% in quarter 4 2010-2015; 44% (n=25) of those diagnosed in quarter 4 2015 were born overseas, compared with 37% in quarter 4 2010-2015.

Figure 11: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2010 to 31 December 2016 by type of diagnosing doctor



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

Comment

Of 317 NSW residents notified with newly diagnosed HIV infection in 2016:

- 39% (n=123) were diagnosed by sexual health clinics (SHC) (includes linked community testing sites), compared with 29% of the new diagnoses in 2010-2015;
- 35% (n=112) were diagnosed by medical general practitioners (GPs) not accredited to prescribe antiretroviral therapy (ART) (GP not-s100), compared with 34% of the new diagnoses in 2010-2015;
- 14% (n=44) were diagnosed by hospital located doctors, compared with 16% of the new diagnoses in 2010-2015;
- 6% (n=20) were diagnosed by GP s100 doctors (HIV specialised and accredited to prescribe ART), compared with 16% of the new diagnoses in 2010-2015, and;
- 6% (n=18) were diagnosed by other doctor types such as immigration services, compared with 5% of the new diagnoses in 2010-2015.

Figure 12: Number of NSW residents notified with newly diagnosed HIV infection in 2016 by type of diagnosing doctor and self-reported HIV risk exposure

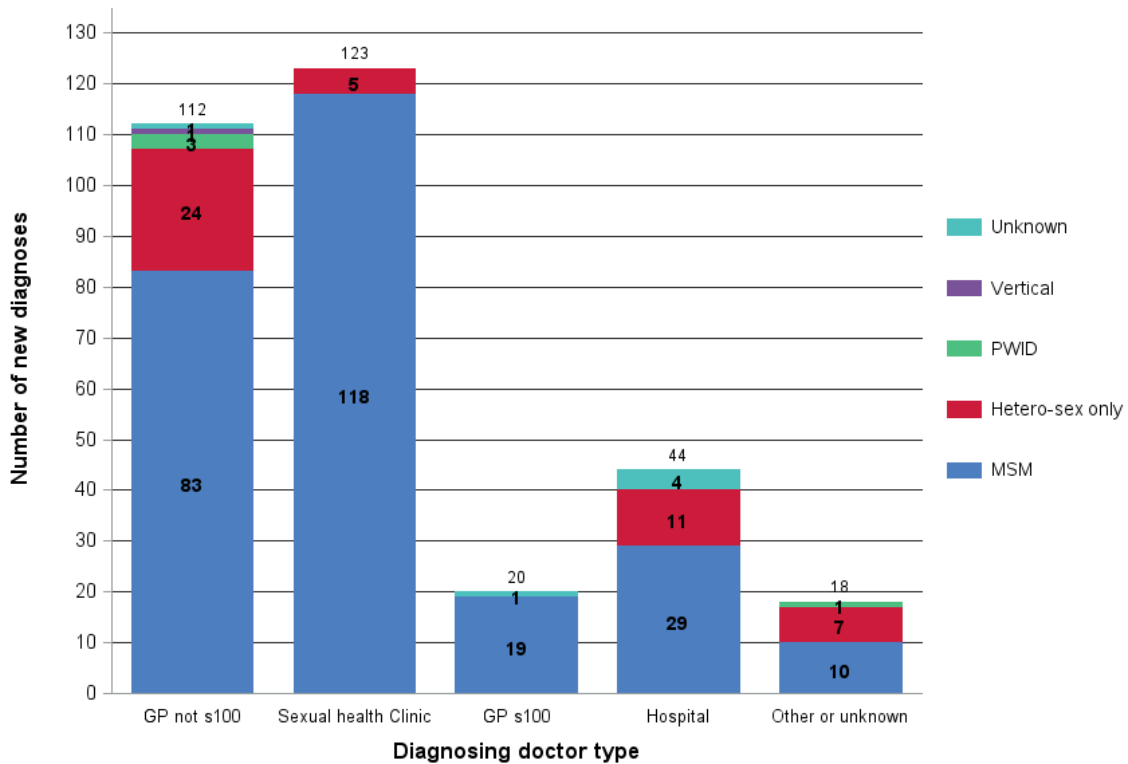
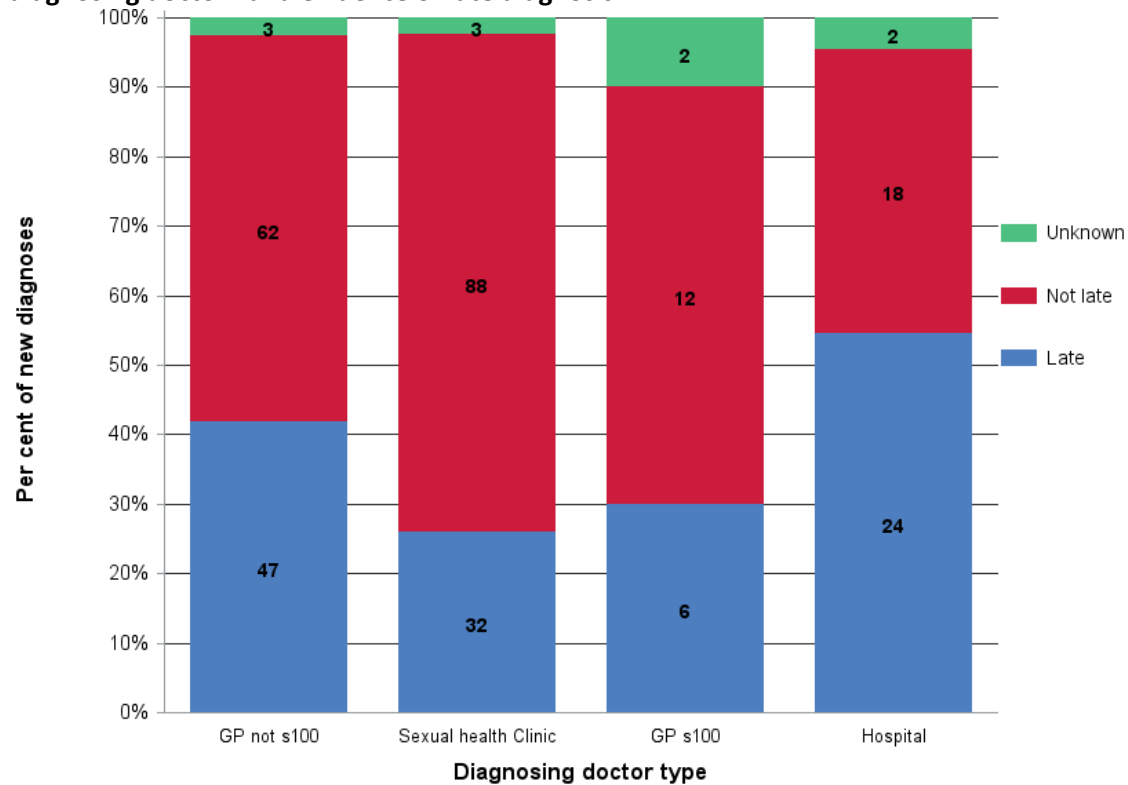


Figure 13: NSW residents notified with newly diagnosed HIV infection in 2016 by type of diagnosing doctor* and evidence of late diagnosis



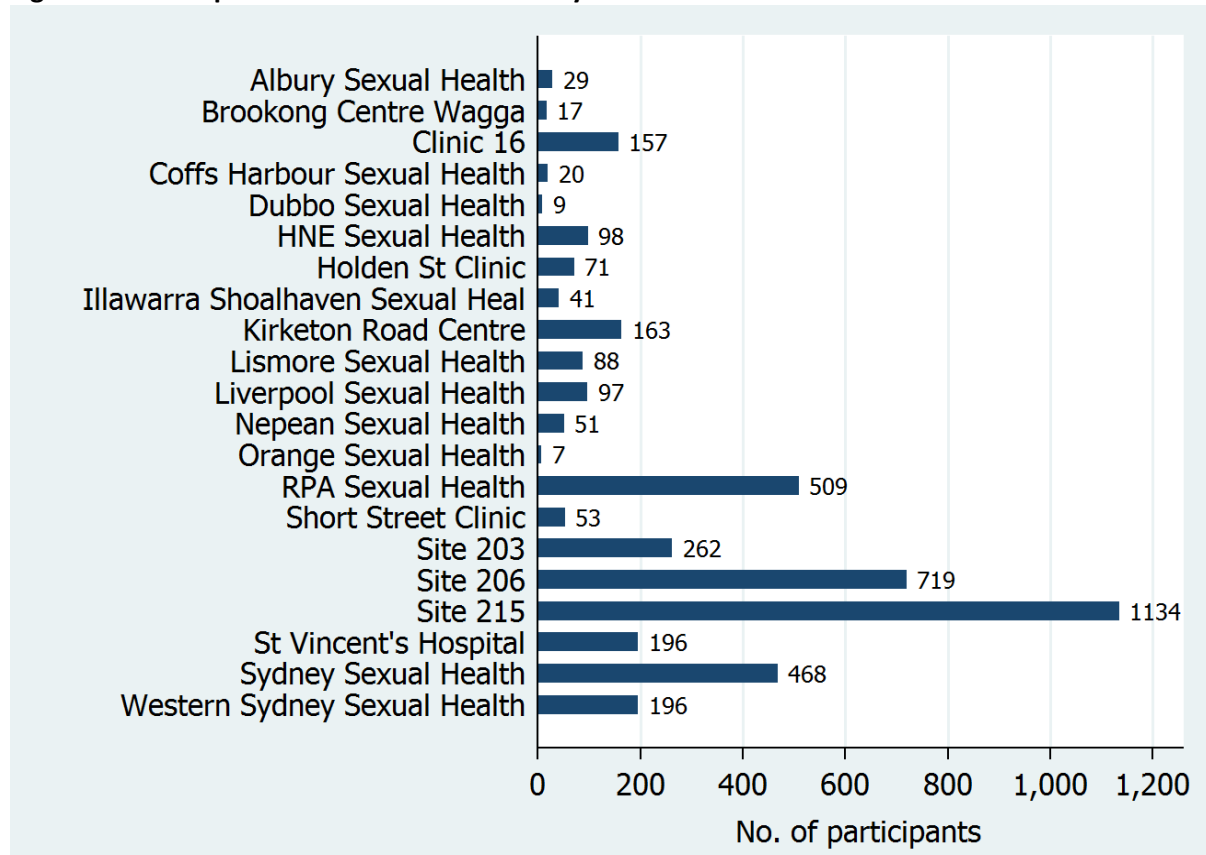
Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017.
*18 new diagnoses with other or unknown doctor type excluded.

2. Expand HIV Prevention

2.1 Who is accessing PrEP through EPIC-NSW?

Pre-exposure prophylaxis (PrEP) is the next critical tool for HIV prevention. *EPIC-NSW: Expanded PrEP Implementation in Communities in NSW* was launched on 1 March 2016 as a time-limited public health trial to provide PrEP to people at a high risk of HIV infection in NSW.

Figure 14: Participants enrolled in EPIC-NSW by clinic between 1 March and 31 December 2016



Note: Public clinics are named. Private practices are identified by their site code. As each clinic began enrolling participants at a different date, the activity of clinics should not be directly compared.

Comment

Between 1 March and 31 December 2016, 4385 participants were enrolled at twenty-one clinics: Albury Sexual Health (MLHD), Brookong Centre Wagga (MLHD), Clinic 16 (NSLHD), Coffs Harbour Sexual Health (MNCLHD), Dubbo Sexual Health (WNSW LHD), 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), 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) (Figure 14).

EPIC-NSW includes 243 participants previously enrolled in the PrELUDE PrEP demonstration study. The PrELUDE study is now closed.

Figure 15: Enrolment of participants in EPIC-NSW, by study week, from 1 March to 31 December 2016

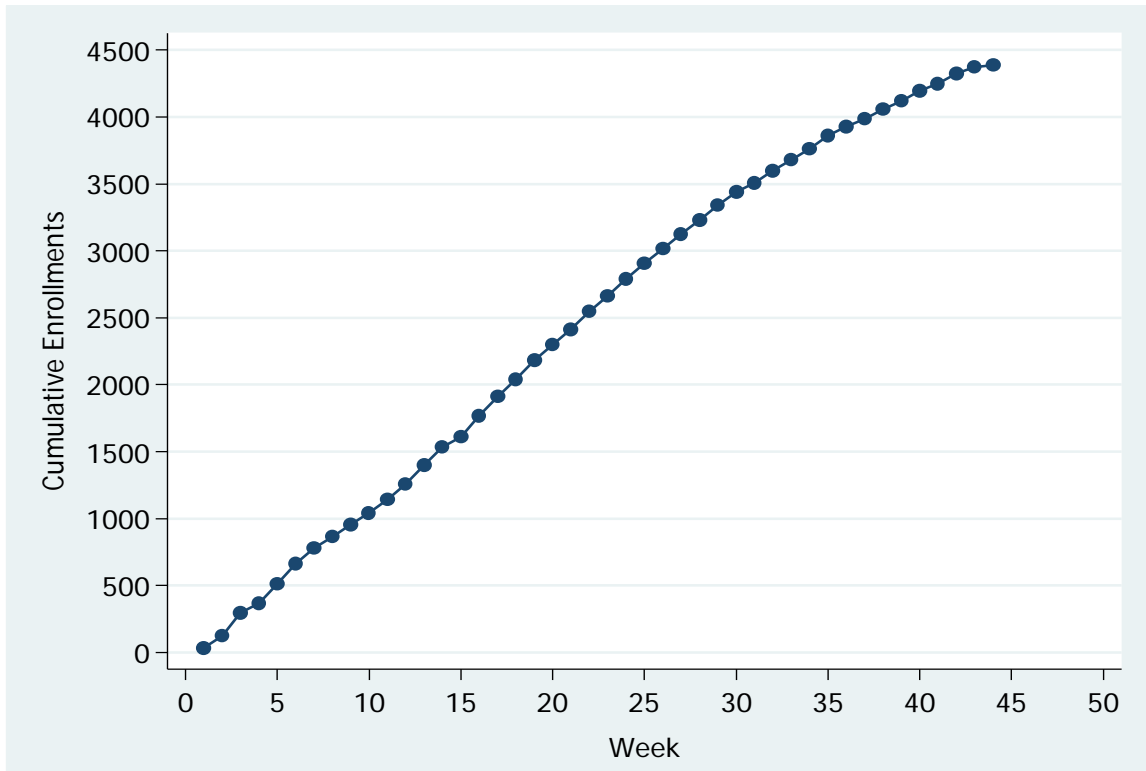


Table 1: Demographic data for EPIC-NSW participants enrolled between 1 March and 31 December 2016

Characteristic	No.	%
Sex*		
Male	4337	99.2
Female	4	0.1
Transgender, male-to-female	22	0.5
Transgender, female-to-male	7	0.2
Other	2	0.1
Sexual identity*		
Gay/Homosexual	4152	95.0
Bisexual	179	4.1
Heterosexual	14	0.3
Other	27	0.6
Age at enrolment (years)[#]		
Median (IQR)	36 (29 to 45)	-
Age		
< 20	25	0.7
20-29	894	25.8
30-39	1221	35.3
40-49	818	23.6
≥50	505	14.6

Table 1 (continued): Demographic data for EPIC-NSW participants enrolled between 1 March and 31 December 2016

Characteristic	No.	%
Aboriginal and/or Torres Strait Islander[§]		
Non-indigenous	3031	98.6
Aboriginal and/or Torres Strait Islander	44	1.4
Region of birth[§]		
Australia	1935	62.9
Other Oceania	113	3.7
Asia	358	11.6
Northern America	92	3.0
South America, Central America & the Caribbean	110	3.9
Europe	363	11.8
Middle East	31	1.0
Africa	73	2.8
Area of residence[§]		
Major cities	2904	94.4
Inner Regional	151	4.9
Outer Regional	15	0.5
Remote	5	0.2

Notes: Demographic data was not available for all participants. *available for 4372 enrolled participants; other includes queer, pansexual, gender fluid, gender neutral, sapio, transgender, unsure, not specified. #available for 3463 participants who consented to data linkage and for whom data was available, only participants aged 18 years and older are eligible for EPIC-NSW; [§]available for 3075 participants who completed the behavioural questionnaire.

Comment

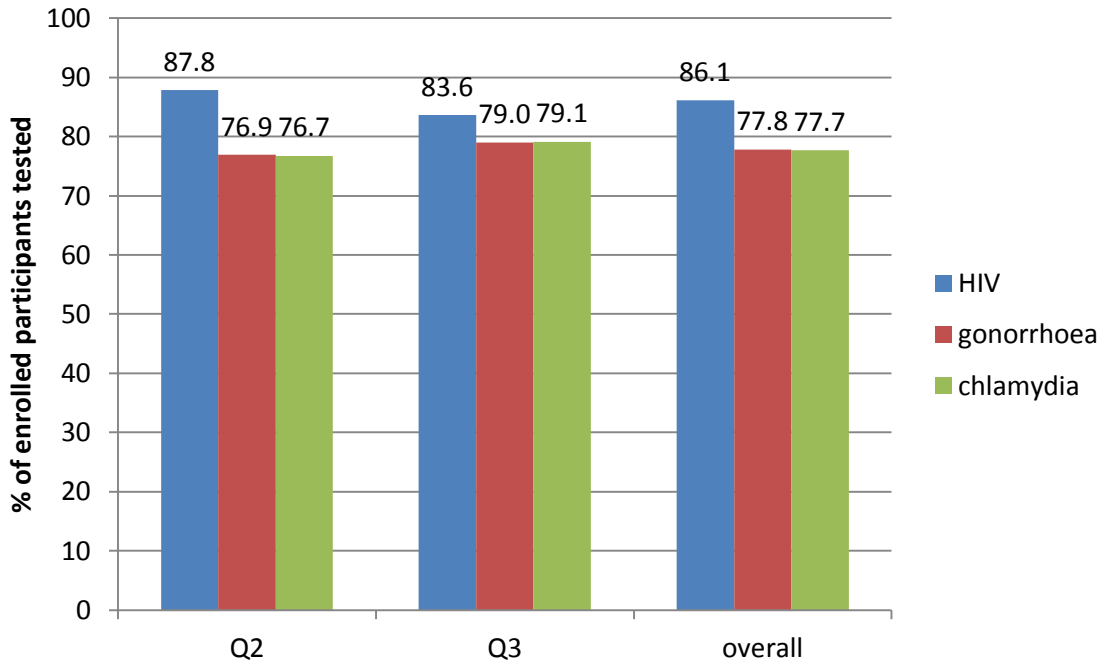
Of the participants enrolled in EPIC-NSW between 1 March and 31 December 2016 and for whom data was available, 99.2% were male and 95.0% were gay/homosexual. The majority of participants were aged 30-39 years (35.3%), with 25.8% aged 20-29 years, 23.6% aged 40-49 years, 14.6% aged 50+ years and 0.7% aged <20 years. Of the 3075 participants completing the behavioural questionnaire, 62.9% were born in Australia, with 11.6% born in Asia and 11.8% born in Europe. The majority of participants (94.4%) reside in a major city, with only 5% of participants residing in an inner regional and 0.7% residing in an outer regional or remote area. Of 3075 participants completing the behavioural questionnaire, 1.4% identified as Aboriginal or Torres Strait Islander.

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

HIV and sexually transmissible infection (STI) testing is recommended for all EPIC-NSW participants at baseline (enrolment), 1 month (HIV only) and every three months, in accordance with the NSW Health Guidelines on the Pre-Exposure Prophylaxis of HIV with Antiretroviral Medications (GL2016_011).

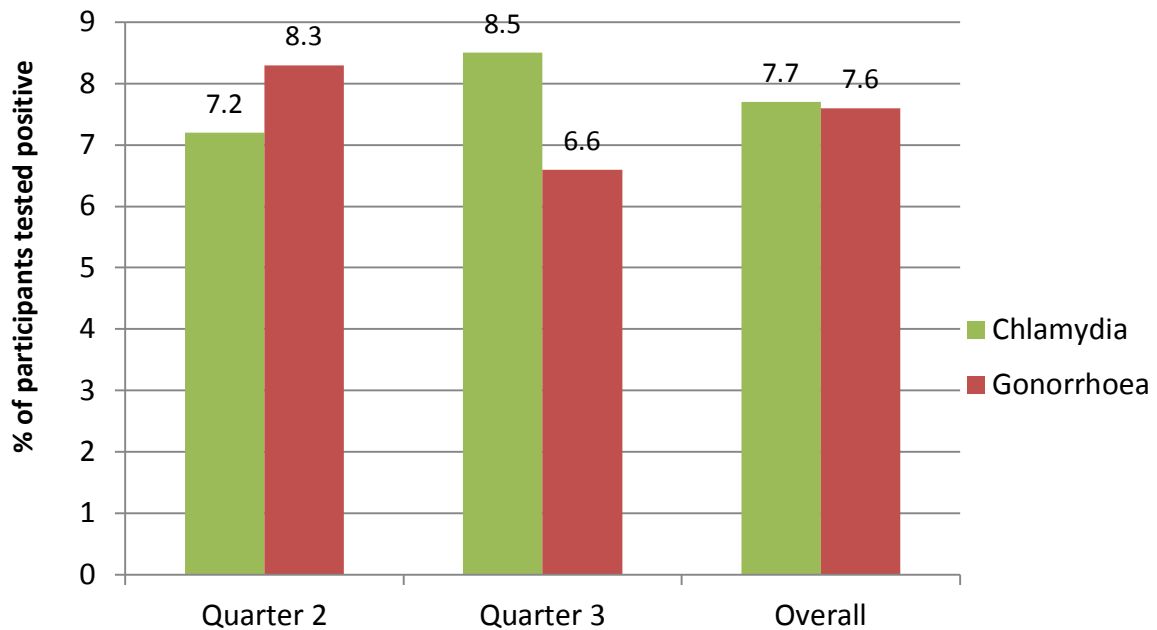
To the end of Quarter 3 (1 March 2016 to 30 September 2016), there were 3143 enrolled participants at 14 sites (as per the enrolment database): Albury Sexual Health, Brookong Centre Wagga, Clinic 16, HNE Sexual Health, Holden St Clinic, KRC, Nepean Sexual Health, RPA Sexual Health, Short Street Clinic, Site 203, Site 206, Site 215, Sydney Sexual Health, and Western Sydney Sexual Health. These 3143 enrolled participants represent 90% of the total 3494 enrolled participants at the 21 EPIC-NSW sites by the end of Quarter 3 (30 September 2016). Future reports will include additional sites.

Figure 16: Proportion of EPIC-NSW enrolled participants at 14 sites who received an HIV and/or STI test at baseline by quarter of enrolment.



Note: Quarter 2 was from 1 March 2016 to 30 June 2016 and Quarter 3 was from 1 July to 30 September 2016.

Figure 17: Proportion of EPIC-NSW participants tested for chlamydia /gonorrhoea at baseline at 14 sites who received a positive result, by quarter of enrolment, 1 March 2016 - 30 September 2016.



Comment

HIV and chlamydia/gonorrhoea tests and results are reported to the end of Quarter 3, to allow time for the information to be entered into patient management systems, collated, cleaned, matched with enrolment data and analysed.

Of the 3143 enrolled participants at the 14 sites, baseline HIV test results were available at the time of reporting for 86% (n=2707) of participants and chlamydia and/or gonorrhoea tests for 78% (n=2444) (Figure 16).

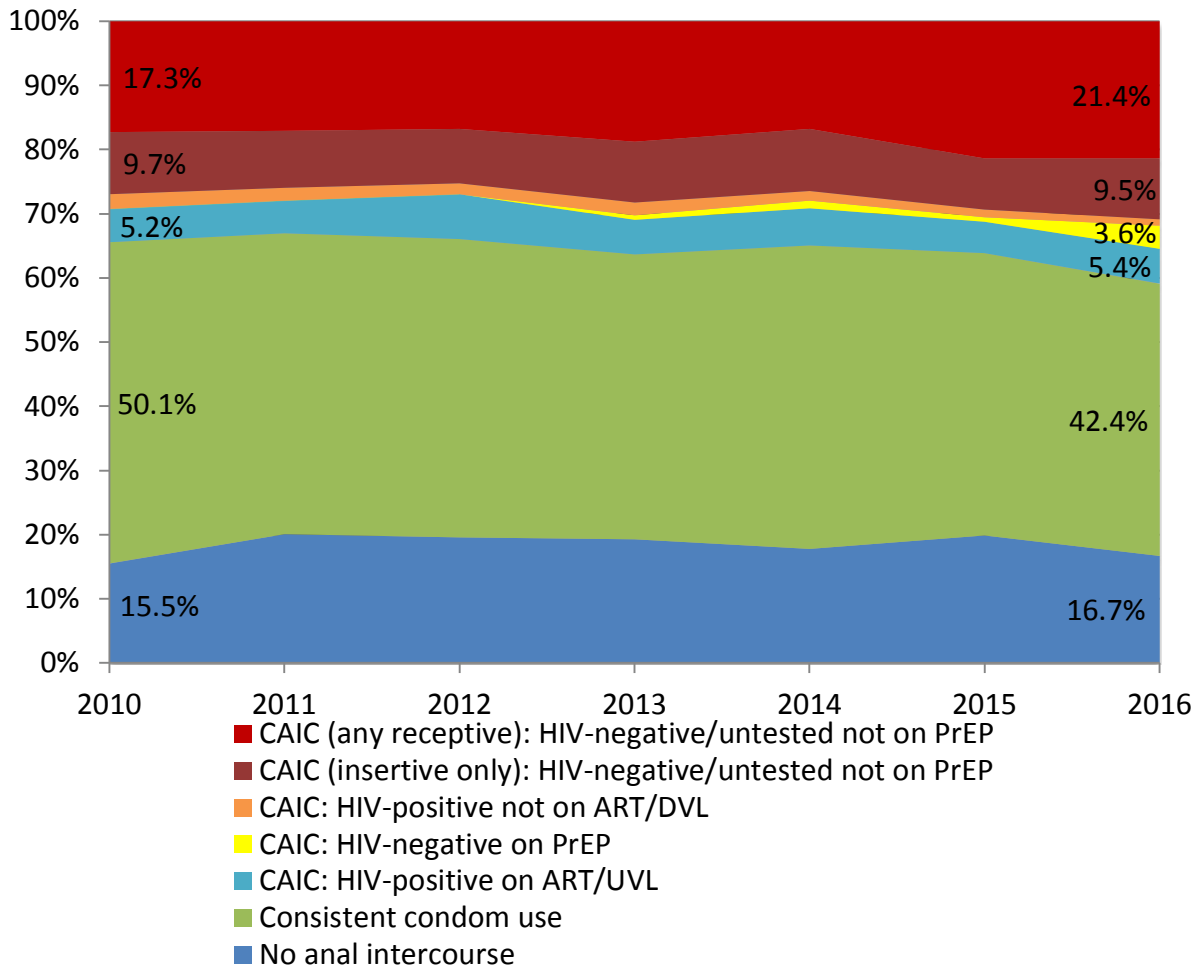
Of the EPIC-NSW participants tested for chlamydia /gonorrhoea at baseline between 1 March 2016 and 30 September 2016, 7.6% (186/2444) had a positive gonorrhoea test result and 7.7% (188/2442) a positive chlamydia test result (Figure 17). The proportion of individuals with a positive gonorrhoea or chlamydia test at baseline was similar between the two quarters. HIV infection at baseline is an exclusion criteria for enrolment.

To date, no participant enrolled in EPIC-NSW has tested positive for HIV during follow-up.

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. Given the introduction of pre-exposure prophylaxis (PrEP) in NSW and the focus on the preventative benefits of HIV treatment in the current Strategy, reporting of condomless anal intercourse with casual partners (CAIC) in the SGCPS has been modified, distinguishing between HIV-positive men who are virally suppressed or not and HIV-negative men who are protected by PrEP or not. These subcategories can be seen in Figure 18.

Figure 18: Anal intercourse, condom use and antiretroviral protection with casual male partners in the six months prior to survey, Sydney Gay Community Periodic Survey



Note: CAIC = condomless anal intercourse with casual male partners. Denominator varies from 1408 to 1996 gay men with casual partners per year.

Comment

Among gay men with casual male partners, the proportion avoiding anal intercourse has remained relatively stable since 2010, while the proportion reporting consistent condom use has declined slightly over time (reaching 42.4% in 2016). The proportion reporting any condomless anal intercourse with casual partners (CAIC) has increased over time, reaching 40.9% in 2016. The proportion of HIV-positive men not on treatment or with a detectable viral load who report CAIC has fallen since 2010 (to 1.0% of men with casual partners in 2016). During 2013-2015 there were very few HIV-negative men on PrEP in the SGCPS. At the beginning of 2016 (the survey is conducted in

February) we saw an increase in PrEP users reporting CAIC in the survey (to 3.6% of casual partners). The majority of men who report CAIC remain HIV-negative and untested men *not* using PrEP. Between 2015 and 2016 the group of HIV-negative men not using PrEP who reported receptive CAIC (the highest risk practice for HIV) remained unchanged at 21.4% of casual partners.

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 is provided in Appendix B.

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

In the year ending 31 December 2016, a total of 14,103,153 units of injecting equipment were distributed in NSW. This figure includes injecting equipment distributed by pharmacies participating in the Pharmacy NSP Fitpack® scheme and by the Public NSP. This represents an increase of 856,149 additional units (6%) compared with the previous 12 months (NSW Health NSP Minimum Data Set).

During the same period to 31 December 2016, the number of units of injecting equipment distributed by the Public NSP increased by 567,081 units (5%) compared to the previous 12 months. Between 2015 and 2016, the number of units of injecting equipment distributed by the Pharmacy NSP Fitpack® scheme increased by 289,068 units (19%). (NSW Health NSP Minimum Data Set)

As of 31 December 2016, under the public NSP there were a total of 29 primary and 308 secondary outlets, 261 automatic dispensing machines (ADMs) and internal dispensing chutes (IDCs) located across NSW. The breakdown by outlet type by LHD is identified above (Figure 33).

In addition, there were 522 Pharmacies participating in the Pharmacy NSW Fitpack Scheme, making a total of 1,120 NSP outlets located across NSW as at 30 June 2016. This represents an increase of 15 outlets (1%) compared with same period in 2015 (NSW NSP Data Collection).

2.6 What proportion of people reuse other people’s needles and syringes (receptive syringe sharing) in NSW?

Among respondents in the 2016 NSW NSP Enhanced Data Collection (NNEDC), reports of receptive syringe sharing (RSS) in the previous month increased from 16% in 2015 to 20% in 2016 ($p=0.003$)¹. In the four years between 2013 and 2016, RSS remained stable, with 22% of respondents reporting RSS in 2013 (4 year trend, $p = 0.333$).

The Australian NSP Survey (ANSPS) indicates that the proportion of NSW respondents who reported receptive sharing of needles and syringes in the previous month was 13% in 2013; 16% in 2014; and 14% in 2015².

¹ Geddes, L, Iversen J, and Maher L. NSW Needle and Syringe Program Enhanced Data Collection Report 2016, The Kirby Institute, UNSW Australia, Sydney 2016.

² Memedovic S, Iversen J, Geddes L, and Maher L. Australian Needle and Syringe Program Survey National Data Report 2011-2015: Prevalence of HIV, HCV and Injecting and sexual behaviour among NSP attendees. Sydney: Kirby Institute, UNSW Australia; 2016. ISSN: 1448-5915

3. Increase HIV testing frequency

Table 2: HIV testing data sources

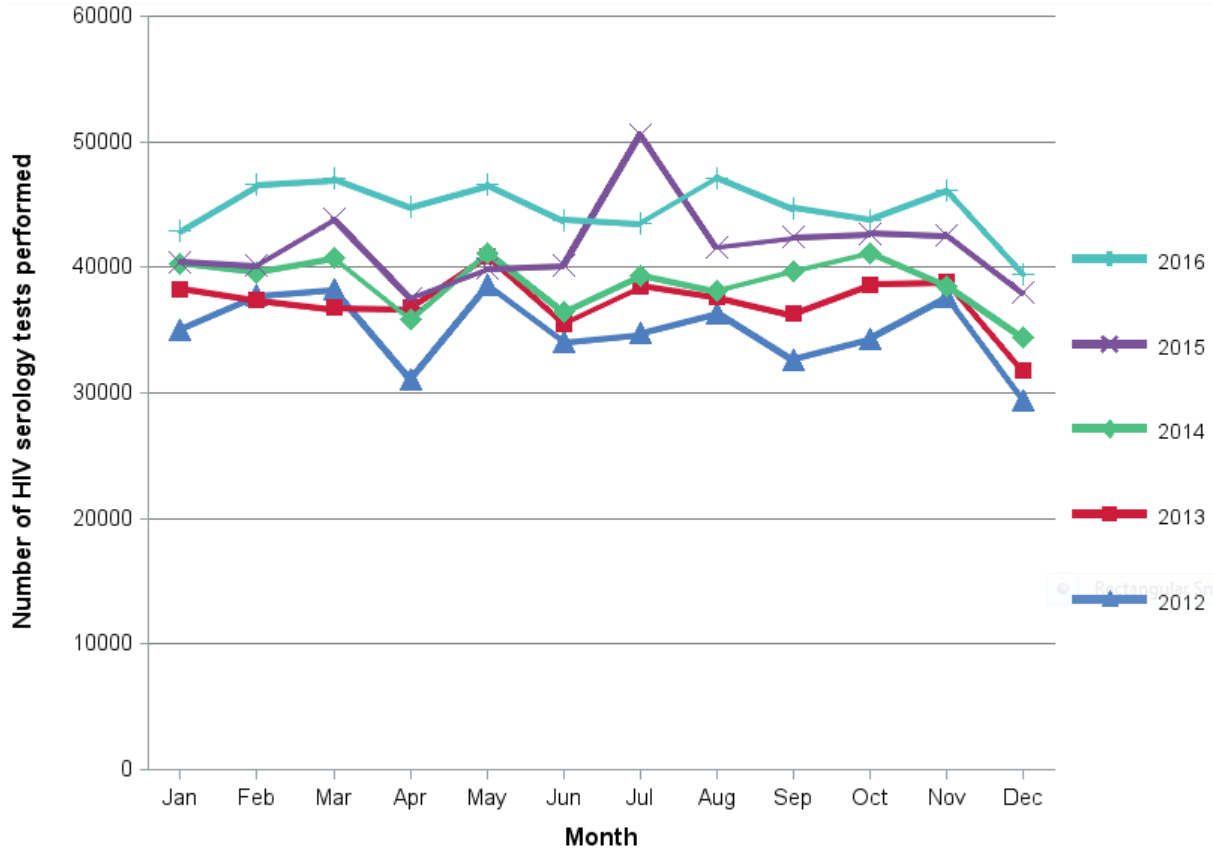
Name	Custodian	Availability	Coverage
NSW Health denominator data project	Health Protection NSW, NSW Health	Quarterly - ongoing	Number of tests in NSW
NSW Health HIV Strategy Monitoring Database	NSW Ministry of Health, NSW Health	Quarterly - ongoing	Congregated testing data for public sexual health clinics by priority populations
ACCESS Study	The Kirby Institute	Quarterly	Testing data for unique individuals attending public sexual health clinics by priority populations, and for select GP practices with high and medium case load of GBM in Sydney
Sydney Gay Community Periodic Survey	Centre for Social Research in Health	Annually (collected in February and reported in quarter 3)	Data on sexual, drug use and testing practices related to the transmission of HIV and other STIs among gay men in Sydney (self-reported)

3.1 Is HIV testing increasing in NSW?

3.1.1 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 19: Number of HIV serology tests performed in 15 NSW laboratories, 2012- 2016



Data source: NSW Health denominator data project, extracted 7 February 2017.

Comment

In 2016 there were 536,444 HIV serology tests performed in 15 laboratories in NSW, 7% more than in 2015 (n=499,966), 15% more than in 2014 (n=465,475), 20% more than in 2013 (n=447,297) and 28% more than in 2012 (n=419,968).

In quarter 4 2016 there were 129,415 HIV serology tests performed in 15 laboratories in NSW, 5% more than in quarter 4 2015 (n=123,295), 13% more than in quarter 4 2014 (n=114,100), 18% more than in quarter 4 2013 (n=109,279) and 28% more than quarter 4 2012 (n=101,434).

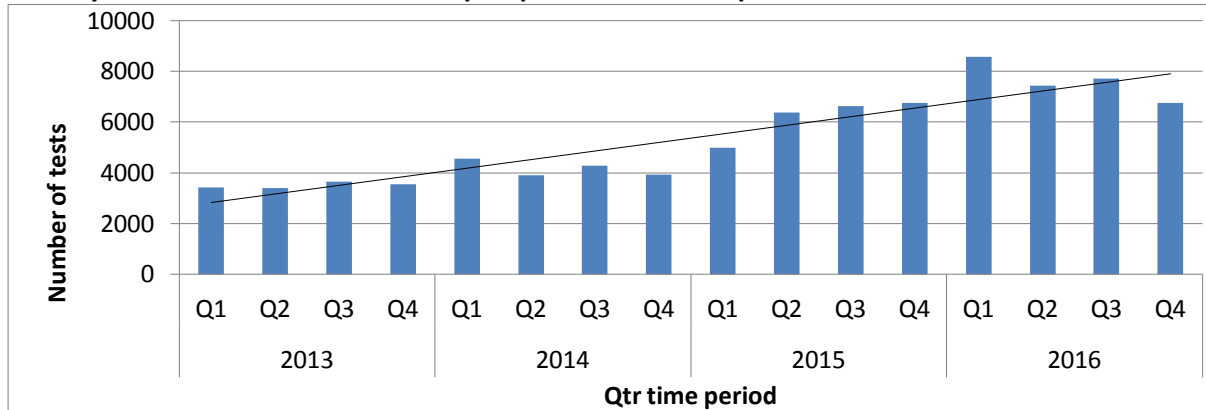
From March to December 2016, 4382 people at high risk of acquiring HIV were tested (and found HIV negative) prior to their enrolment in EPIC-NSW, a population level PrEP impact study. Study participants have ongoing HIV testing every three months. The spike in HIV serology test count in July 2015 coincided with an HIV testing awareness initiative (“NSW HIV Testing Week”) and also a public health intervention, when a letter was sent to select dental patients in early July recommending testing for HIV and hepatitis B and C.

3.1.2 Local Health Districts

HIV testing data in Publicly Funded Sexual Health Clinics (PFSHCs) has been available for all LHDs since July 2013; however the type of data is not uniform due to different data management systems.

Figure 20 displays the number of HIV tests done in PFSHC between 1 January 2013 and 31 December 2016 in South Eastern Sydney LHD. Both rapid HIV testing and HIV serology are included.

Figure 20: Number of HIV serology tests performed in South Eastern Sydney Local Health District Publicly Funded Sexual Health Clinics per quarter 2013 to September 2016



Data source: South Eastern Sydney Local Health District

Comment

From January to December 2016, 30,499 HIV tests were done in South Eastern Sydney LHD (Figures 20), this represents an increase of 23% compared with the same period in 2015 (n=24,739), 77% compared with the same period in 2014 (n=16,645) and 110% compared with the same period in 2013 (n=14,005).

A comparison in the number of HIV tests done between 1 January and 31 December 2016 for metropolitan PFSHCs is displayed in Figure 21 and for regional and rural PFSHCs in Figure 22. Both rapid HIV testing and HIV serology are included.

Figure 21: Number of HIV tests performed in Sydney metropolitan Local Health District Publicly Funded Sexual Health Clinics January to December 2016

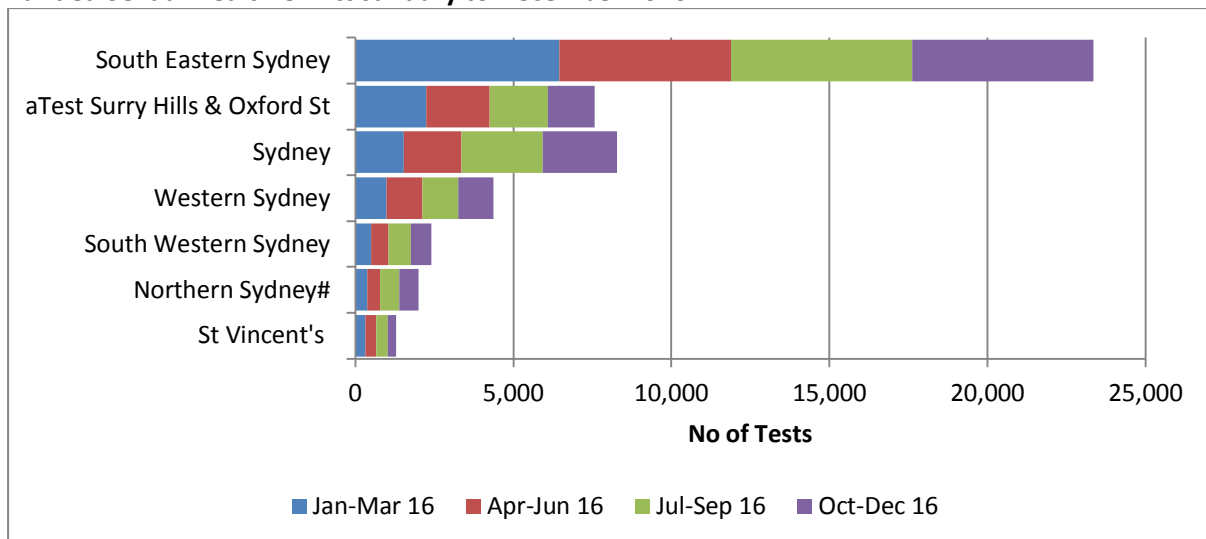
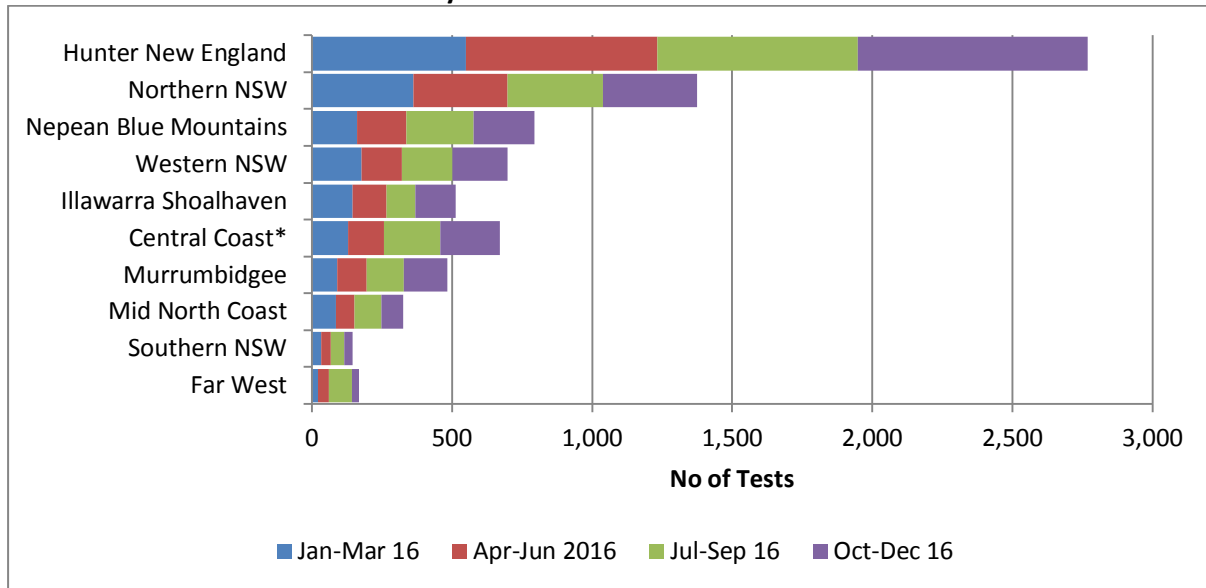


figure for January to September 2016 is an underestimate as actual activity data is not available for this period.

Data source: NSW Health HIV Strategy Monitoring Database

Figure 22: Number of HIV tests performed in regional and rural Local Health District Publicly Funded Sexual Health Clinics January to December 2016



*figure for January to September 2016 is an underestimate as actual activity data is not available for this period.
Data source: NSW Health HIV Strategy Monitoring Database

Comment

From October to December 2016, 13,397 HIV tests were done in all PFSHCs in NSW; 17% greater than the same period in 2015 (n=11,405). From October to December 2016, testing increased particularly in some local health districts; HIV testing in Murrumbidgee LHD increased by 95% (n=156) compared with the same period in 2015 (n=80), HIV testing in Sydney LHD increased by 60% (n=1,990) compared with the same period in 2015 (n=1,247), and Western Sydney LHD increased by 60% (n=1,125) compared to the same period in 2015 (n=703).

From January to December 2016, 55,761 HIV tests were done in all PFSHCs in NSW; 24% greater than the same period in 2015 (n=45,138).

3.2 Where is HIV testing being done and testing patterns?

Apart from PFSHCs, HIV testing takes place in a range of other clinical and community settings. A large proportion of testing occurs in the private sector, especially in general practice.

To reduce the pool of undiagnosed HIV infection, testing should be targeted to high risk populations.

3.2.1 Survey data

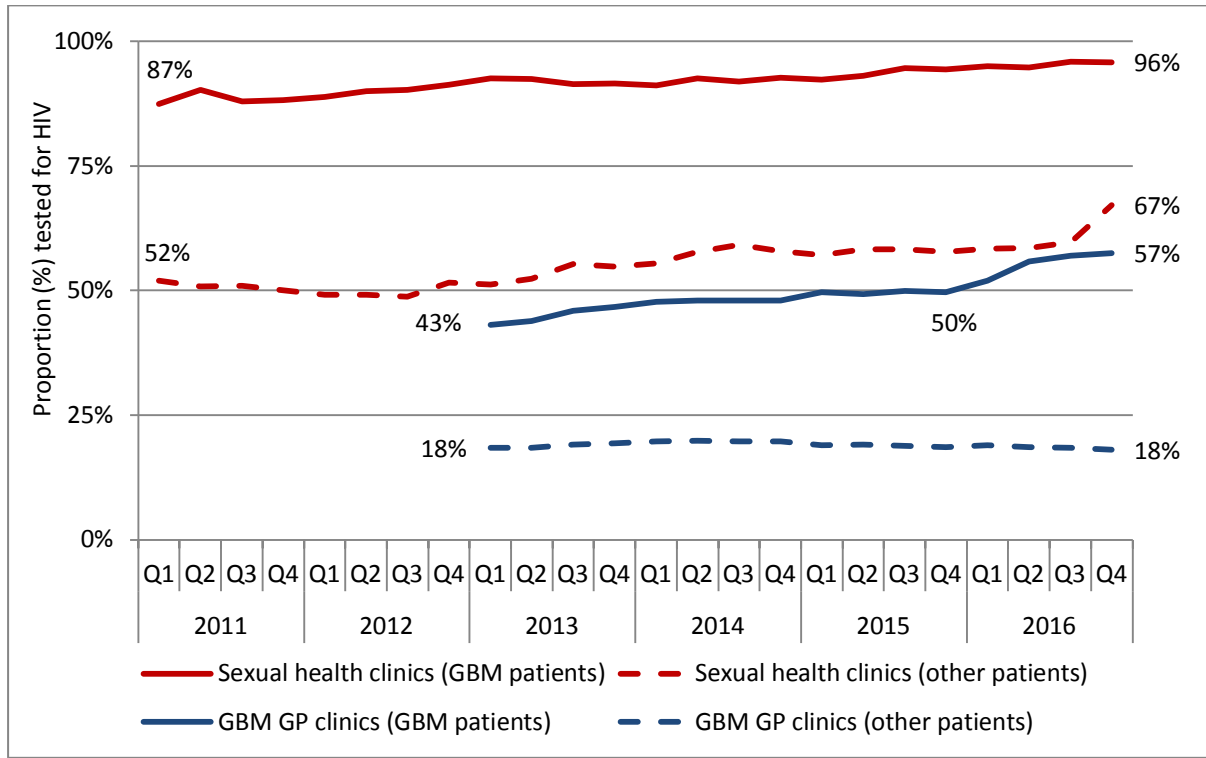
HIV testing in MSM is measured regularly through the SGCPs (conducted annually in February). Data from the 2016 SGCPs publication is reported in the quarter 2 2016 NSW HIV data report.

3.2.2 General practice with high caseload of gay and bisexual men (GBM GP clinics) and PFSHCs

Data from the ACCESS project data base (managed by the Kirby Institute) has been added to the monitoring and evaluation framework for the NSW HIV Strategy to strengthen NSW's systems for monitoring progress and reporting outcomes against the NSW HIV Strategy 2016-2020.

Figure 23 displays HIV testing uptake in both PFSHCs and GBM GP clinics from the ACCESS database.

Figure 23: 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 2011 to 31 December 2016⁵



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

Comment

Uptake of HIV testing increased considerably among GBM and other patients attending PFSHCs in NSW with nearly all patients attending in 2016 receiving a test. HIV testing uptake remained stable in patients other than GBM attending general practice clinics. Over time HIV testing uptake has increased significantly among GBM patients attending general practice clinics. Notably, after increasing by 7% between Q1 2013 and Q4 2015, it increased by an additional 7% in 2016 alone. This dramatic change likely reflects strategies to encourage HIV testing coupled with the introduction of PrEP at these services.

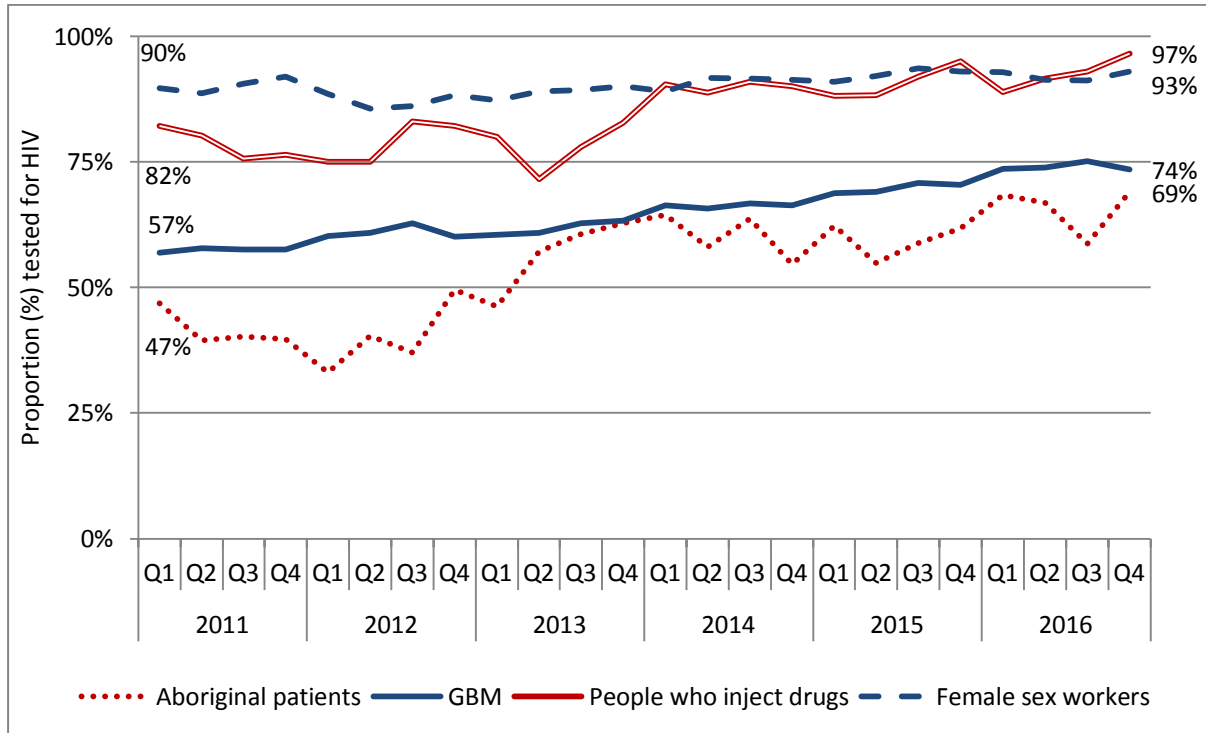
³ Excludes patients known to be HIV positive

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 24 and Table 3 summarises the available data from PFSHCs on HIV testing in priority population groups.

Figure 24: Proportion of patients⁶ attending PFSHCs and GBM GP clinics⁷ tested at least once for HIV at any clinic in the ACCESS network in the previous year, by quarter and priority population⁸, 1 January 2011 to 31 December 2016⁹



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

Comment

In 2016, HIV testing uptake was over 90% among female sex workers and patients who reported injecting drug use. Testing uptake was lower among Aboriginal people but has increased over time.

⁶ Excludes patients known to be HIV positive

⁷ 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

⁸ Priority populations other than GBM exclude GBM-identified patients; priority populations are not mutually exclusive; it was only possible to identify female sex workers and people who inject drugs if they attended a PFSHCs at least once

⁹ 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

Table 3: HIV testing in priority populations, Publicly Funded Sexual Health Clinics, NSW

Priority Population	% of HIV tests in all PFSHCs, Q4 2016*	Number of HIV tests in all PFSHCs, Q4 2016*	% increase in HIV tests compared with Q4 2015 in all PFSHCs [#]
GBM	65.9%	8,822	15.1%
Sex workers [^]	11.4%	1,526	20.7%
People who inject drugs (PWID) [^]	7.8%	1,039	61.8%
Aboriginal people	2.6%	348	20.4%

*Excludes LHDs/clinics without testing data by priority population in Q4 2016 (The Albion Centre, Illawarra Shoalhaven LHD, St Vincent's Health Network [GBM data])

[#]Excludes LHDs/clinics without testing data by priority population in Q4 2015 (St Vincent's Health Network [GBM data])

[^]Includes people who ever were sex workers or who ever injected drugs.

Data source: NSW Health HIV Strategy Monitoring Database¹⁰

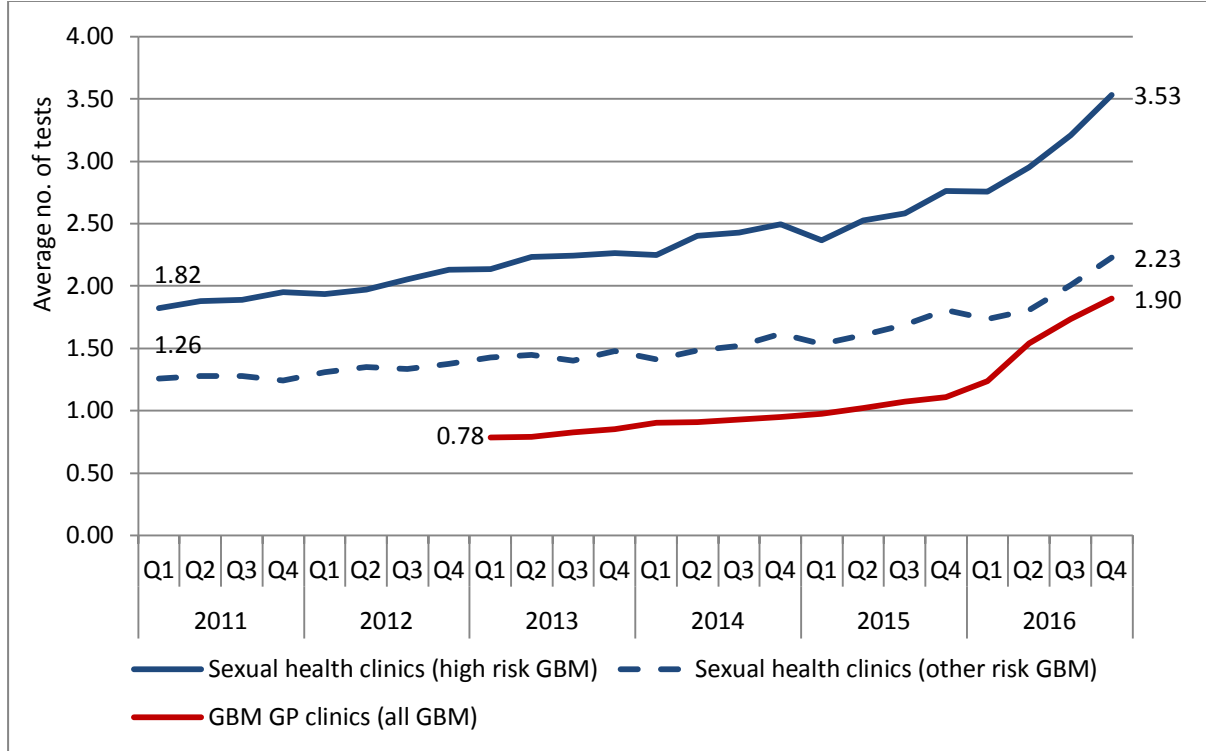
Comment

In summary, data from PFSHCs indicates that testing remains high and well-targeted towards priority populations. Achieving further increases in testing frequency, particularly in high risk GBM, is important to identify and link HIV infected individuals to care; and to reduce the number of people living with HIV in NSW who are undiagnosed.

¹⁰ Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

3.3 Testing patterns for HIV?

Figure 25: Average number of annual HIV tests at any clinic in the ACCESS network in GBM patients¹¹ attending PFSHCs and GBM GP clinics¹², by service type and quarter, 1 January 2011 to 31 December 2016



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’

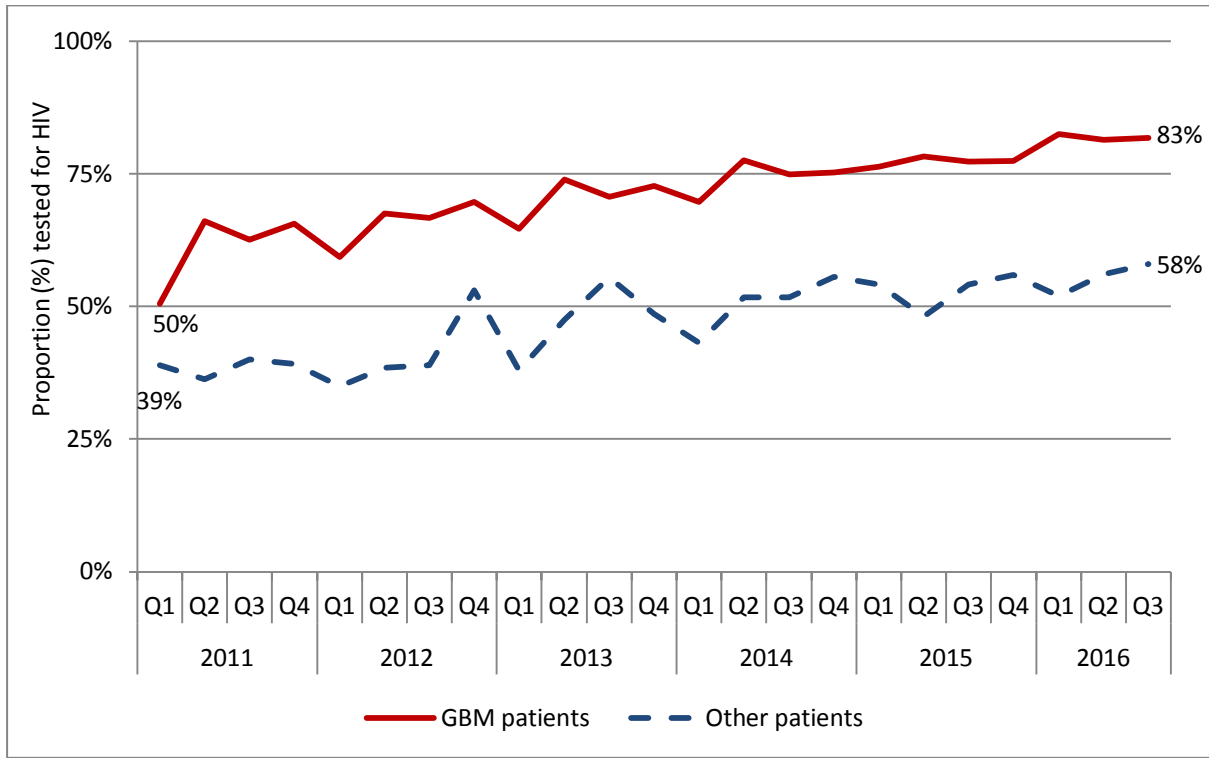
Comment

Testing frequency increased dramatically over time among GBM attending both PFSHCs and GBM GP clinics in NSW. From the start of 2011 to the end of 2016 the average number of annual tests per high risk GBM attending a PFSHC increased 94% while increasing 77% among men of other risk profiles. In GBM GP clinics, annual testing numbers increased 144% in the four-year period from 2013 to 2016 with the majority of this increase taking place during 2016.

¹¹ Excludes patients known to be HIV positive

¹² 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 26: Proportion of patients¹³ attending PFSHCs and GBM GP clinics¹⁴ who received an HIV test at any clinic in the ACCESS network within one month of an STI diagnosis¹⁵, by GBM status and quarter, 1 January 2011 to 30 September 2016¹⁶



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 50% in early 2011 to 83% in Q3 of 2016. While STI diagnoses were less common among patients other than GBM (505 diagnoses in Q3 of 2016 compared with 1,005 among GBM) the proportion who received an HIV test within one month increased over time but was still markedly lower than for GBM.

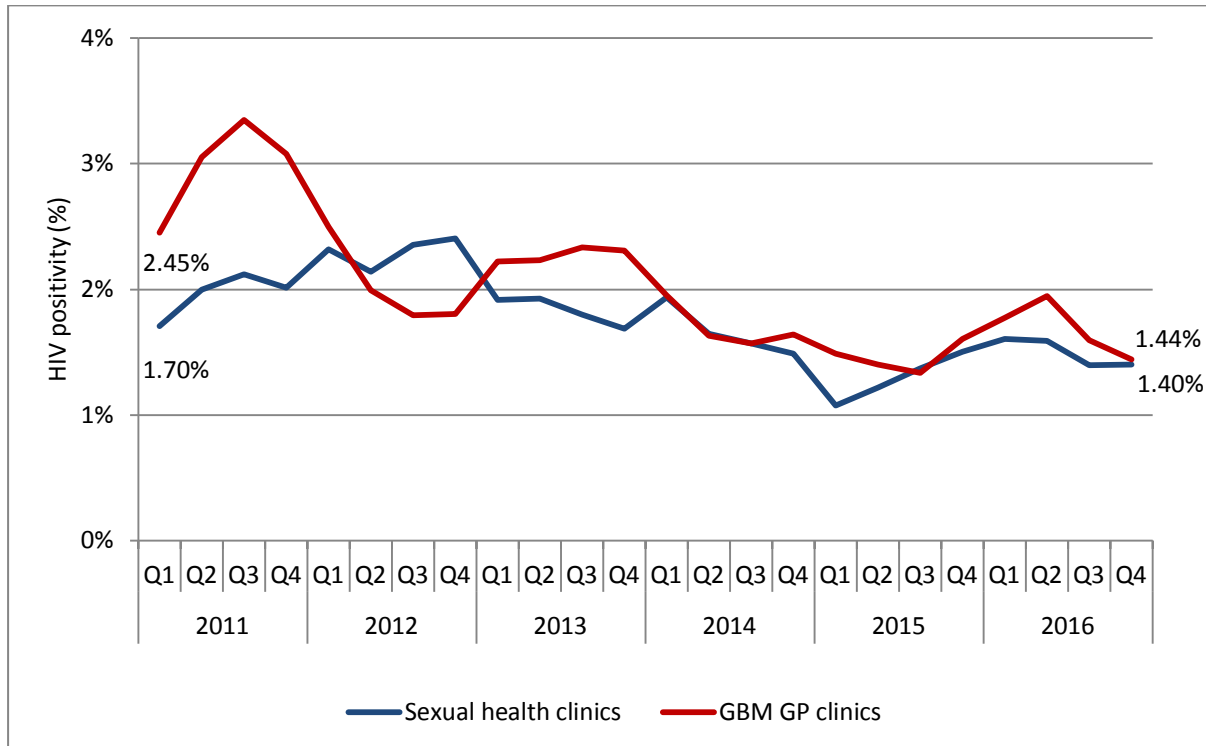
¹³ Excludes patients known to be HIV positive

¹⁴ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

¹⁵ Diagnosis for chlamydia, gonorrhoea and/or infectious syphilis

¹⁶ The period for HIV testing is one month before or after an STI diagnosis; due to this timeframe data from quarter 4 2016 have been excluded

Figure 27: Proportion of individual GBM patients¹⁷ attending sexual health and GBM GP clinics¹⁸ tested for HIV with a positive result (*HIV positivity*¹⁹) at any clinic in the ACCESS network, by service type and quarter, 1 January 2011 to 31 December 2016



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 in ACCESS services in NSW has decreased from 2.45% to 1.44% in GBM GP clinics and from 1.70% to 1.40% in PFSHCs. With increased HIV testing overall and testing targeting priority populations, 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.

¹⁷ Excludes patients known to be HIV positive

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

¹⁹ 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)

3.4 How is testing being made more accessible?

3.4.1 Rapid testing

Rapid HIV testing has been embedded into the mix of the testing options in NSW, with a focus on community based testing services. Table 4 displays the number of rapid HIV tests done and the proportion of clients with high risk behaviours and infrequent testing history in community-based testing sites in NSW.

Table 4: Number of rapid HIV tests in community based sites and proportion of clients with high risk behaviour and infrequent testing history from January to December 2016

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 Surry Hills (7 hours/week)</i>	901 (885)	0.6%	14.9%	13.0%	28.9%
<i>aTEST Oxford ST (40 hours/week)</i>	6,533 (5,213)	0.6%	10.8%	12.6%	30.4%
<i>aTEST Kings Cross (3 hours/week)</i>	471 (-)	0.8%	8.9% [^]	22.3%	37.0%
<i>aTEST Newtown (6 hours/week)</i>	750 (-)	0.5%	-	13.7%	21.9%

Data sources: NSW Health HIV Strategy Monitoring Database²⁰

Note: [#]Does not include 'never tested'; ^{*}Only patients who provided information on this characteristic have been included (denominator: 811, 5,876, 292 and 617 unique patients respectively); [^]Full year data not available, calculated from Q3 and Q4 data (July-December 2016).

Comment

NSW data suggests community testing sites are an effective testing model for engaging GBM, a high proportion of whom reported high risk behaviours, or infrequent testing for HIV.

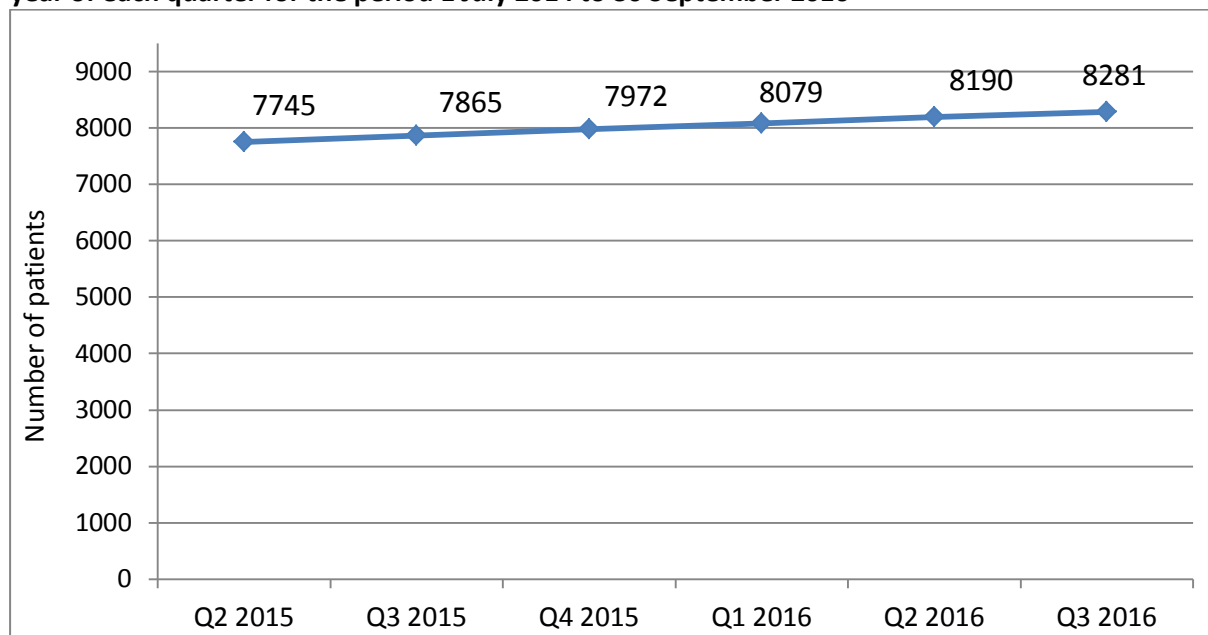
²⁰ Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

4. Increase HIV Treatment

4.1 How many people in NSW are on antiretroviral treatment?

NSW has received from the Commonwealth Government complete Pharmaceutical Benefits Scheme (PBS) records on antiretroviral therapy (ART) dispensed to people with HIV residing in NSW for the period July 2014 to September 2016. The data captures all HIV treatment dispensing through the PBS whether occurring through a public hospital, private hospital or community pharmacy. It does not include non-PBS dispensing or dispensing where people access ART through other sources including where ART is purchased from overseas, received through clinical trials or dispensed as pre-exposure prophylaxis (PrEP) or post-exposure prophylaxis (PEP).

Figure 28: The number of NSW residents (unique patients) dispensed ART for HIV in the previous year of each quarter for the period 1 July 2014 to 30 September 2016



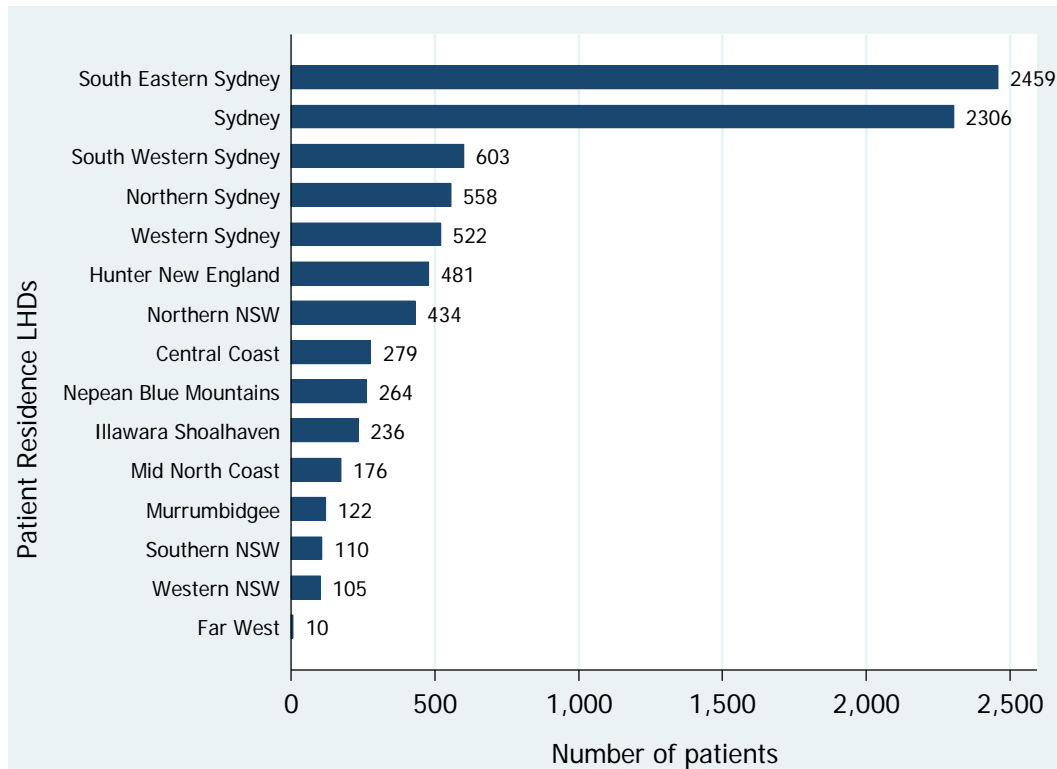
Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data from July 2014 to September 2016 prepared for NSW Health

Comment

Between 1 October 2015 and 30 September 2016, a total of 8,281 NSW residents were dispensed ART for HIV at least once within the previous 12 months. This number has increased over time.

Of the 8,281 residents dispensed ART, 91.2% were male. The majority were older with 51.5% aged 50 years or older, 27.8% were aged 40-49 years, and about 20% aged 39 years or younger.

Figure 29: The number of NSW residents dispensed ART for HIV, by the LHD of patient residence, from 1 October 2015 to 30 September 2016²¹



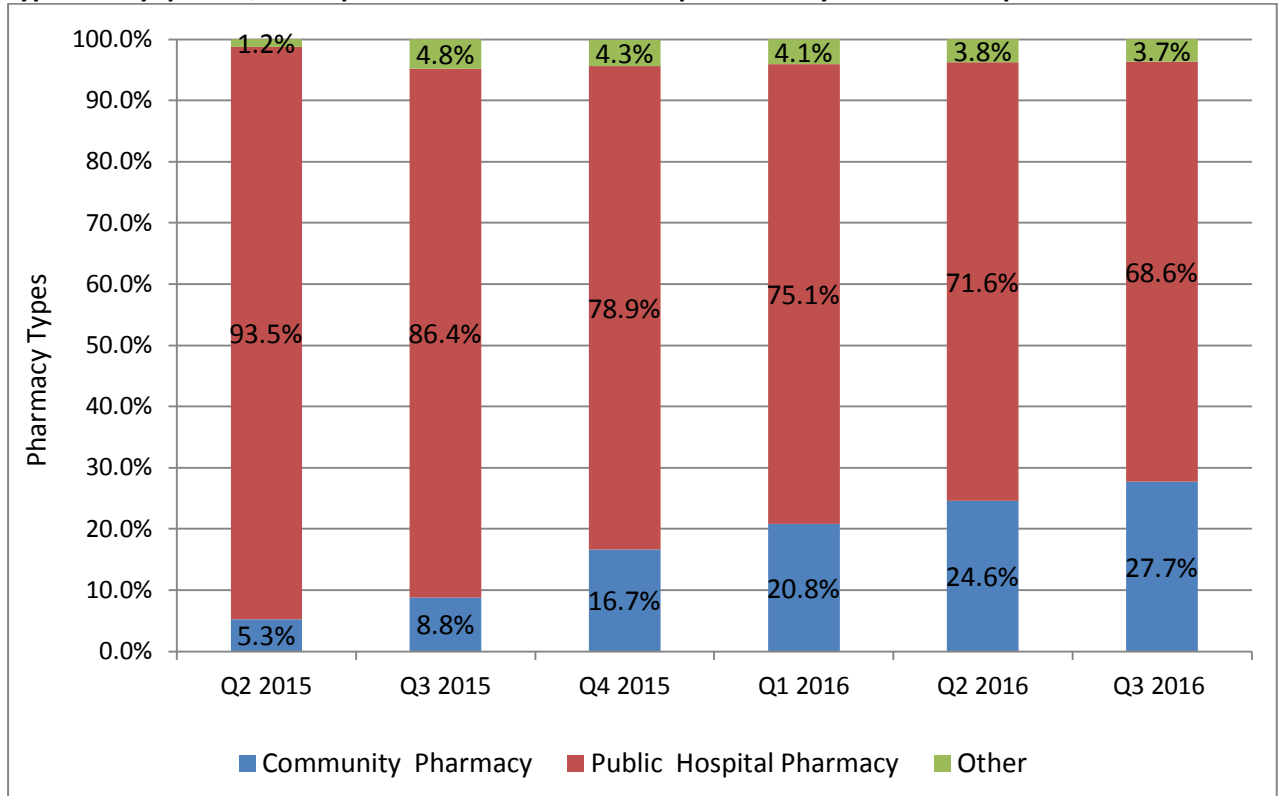
Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data from October 2015 to September 2016 prepared for NSW Health

Comment

About three-quarters (74.4%) of the ART dispensed in the 12 months ending 30 September 2016 was to patients residing in the following five LHDs: South Eastern Sydney, Sydney, South Western Sydney, Northern Sydney and Western Sydney LHDs.

²¹ The sum of the numbers displayed in the graph is higher than the total of 8,281 patients as some patients resided in more than one LHD.

Figure 30: The proportion of NSW residents who have been dispensed ART for HIV, by pharmacy type and by quarter, in the previous 12 months for the period 1 July 2014 to 30 September 2016



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data from July 2014 to September 2016 prepared for NSW Health

Comment

Between 1 October 2015 and 30 September 2016, the majority of ART dispensing to NSW residents occurred through public hospital pharmacies (68.6%), while dispensing through community pharmacies accounted for 27.7%. A small proportion of residents were dispensed HIV ART through other sources, including private hospital pharmacies.

Since the introduction of community pharmacy dispensing on 1 July 2015, the proportion of HIV ART dispensing through community pharmacies has increased (Figure 30)²².

²²The Australian Government funds ART for HIV under the Highly Specialised Drugs Program. These medicines are listed under one or more of the following program codes: public hospital supply item (HB; can be dispensed by public hospital pharmacies only), private hospital supply item (HS; can be dispensed by an approved private hospital pharmacy or by a community pharmacy) or community access supply item (CA; can be dispensed through community, private or public hospital pharmacies).

4.2 What are the current antiretroviral treatment prescribing patterns?

Data on the treatment status of clients who received HIV care in NSW public sexual health and HIV services in the year ending 31 December 2016 is summarised at Table 5²³.

Table 5: Clients who received HIV care in NSW public sexual health and HIV services from 1 January 2016 and 31 December 2016

Number (%) of patients for whom treatment information was available	5735*
Number (%) on ART	5077 (93%)

Data sources: NSW Health HIV Strategy Monitoring Database²⁴

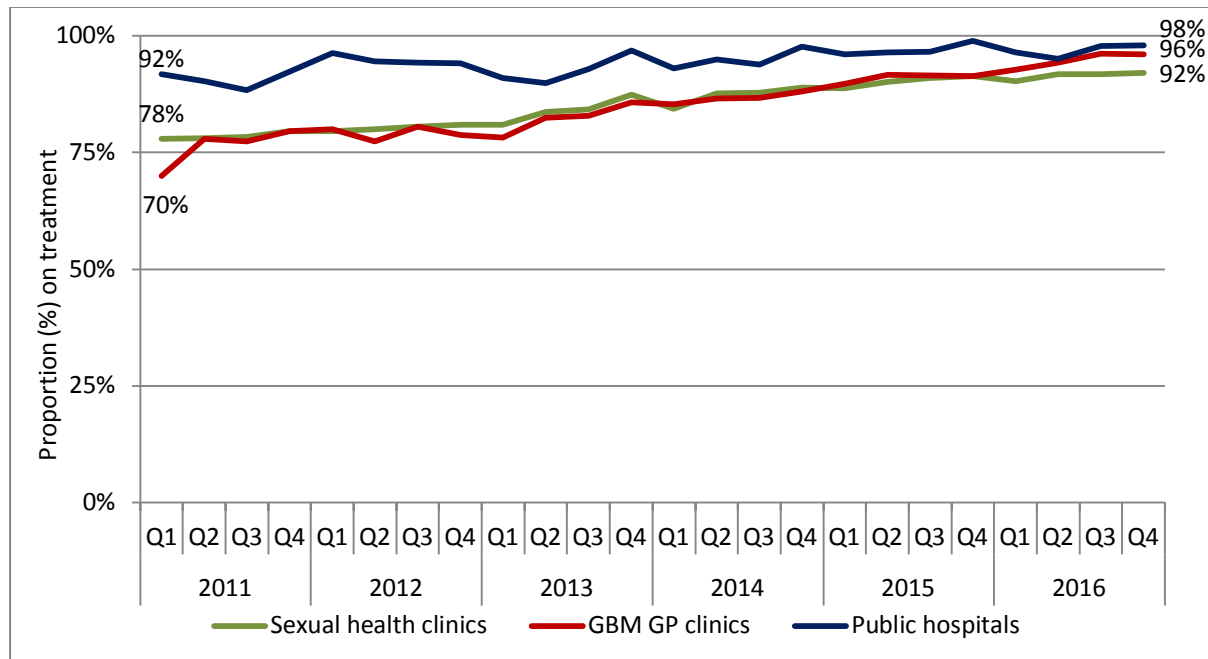
*No data submitted by the Prince of Wales Hospital and Illawarra LHD

Comment

In the year ending 31 December 2016, treatment information was available for 5,735 clients with HIV who received care in public HIV and sexual health clinics in NSW. The available data indicates that treatment coverage in PFSHCs is high at 93%.

Figures 31-33 display data from the ACCESS program database on the proportion of HIV positive patients attending PFSHCs and GBM GP clinics who received HIV treatment, by age group and 'undetectable' viral load.

Figure 31: Proportion of HIV positive patients²⁵ attending PFSHCs, public hospital outpatient clinics and GBM GP clinics²⁶ 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 31 December 2016



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

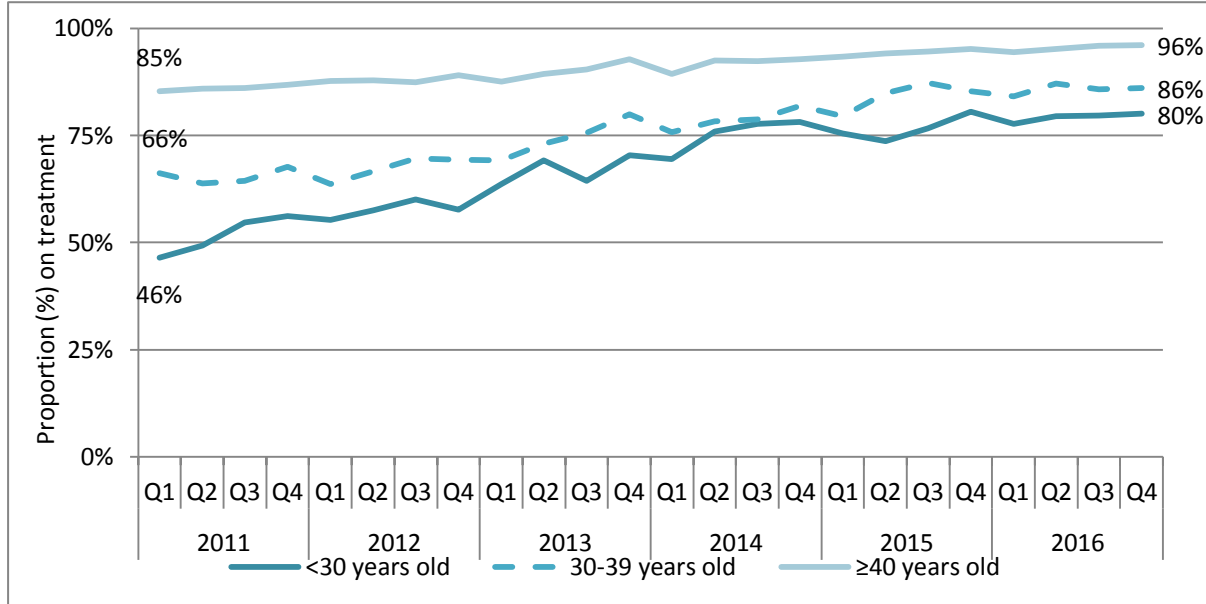
²³ Data is representative of all clients who has received HIV care in NSW public HIV and sexual health services in the last 12 months where treatment information is available.

²⁴ Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

²⁵ Excludes patients for whom HIV care was recorded as managed elsewhere

²⁶ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

Figure 32: Proportion of HIV positive patients attending PFSHCs, public hospital outpatient clinics and GBM GP clinics²⁷ 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 31 December 2016



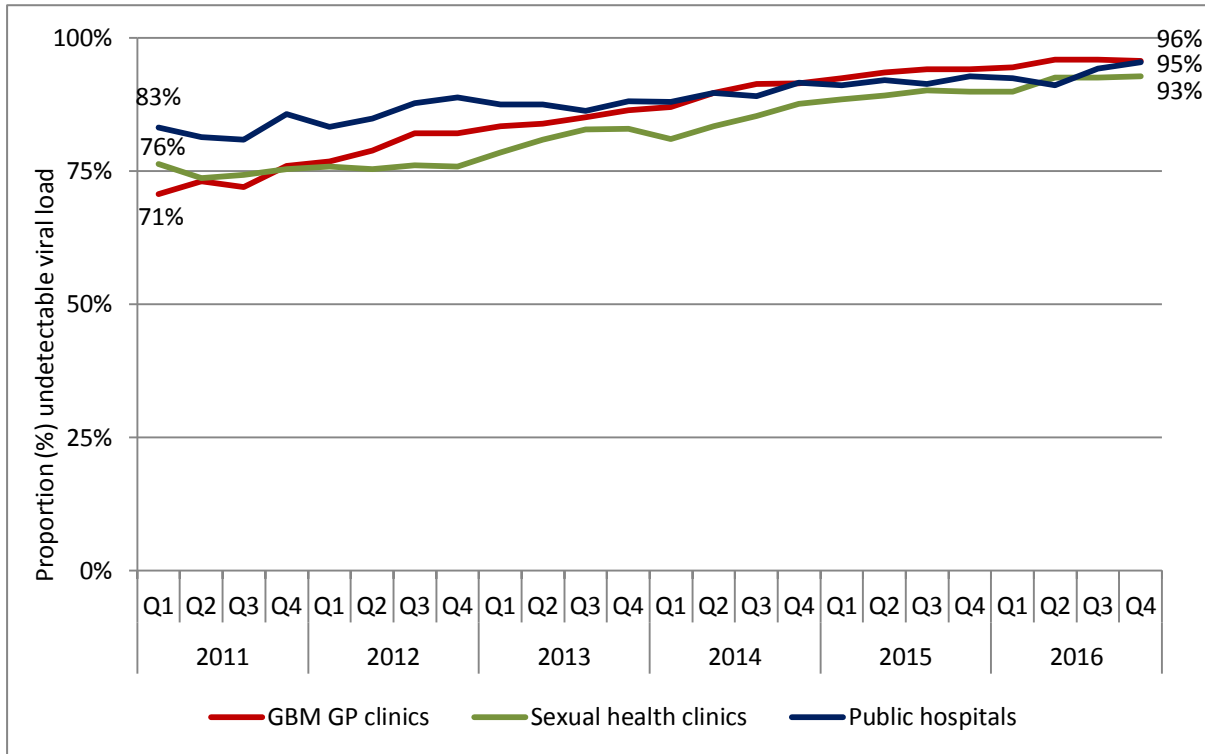
Data source: ACCESS Database, The Kirby Institute and the Burnet Institute

Comment

Treatment uptake for HIV was highest among older patients aged ≥40 years (96%) in Q4 2016. Although 80% of younger patients (aged <30 years) were on treatment in Q4 2016, this group demonstrated the greatest increase in treatment uptake overall, rising from 46% of patients in early 2011.

²⁷ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

Figure 33: Proportion of HIV positive patients on treatment at PFSHCs, public hospital outpatient clinics and GBM GP clinics²⁸ with an ‘undetectable’²⁹ viral load at their most recent test in the previous 12 month period at any clinic in the ACCESS network³⁰, by service type and quarter, 1 January 2011 to 31 December 2016



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

Comment

Over time, the proportion of HIV positive patients on treatment with undetectable viral loads has increased significantly across service type. The greatest increase was in patients attending GBM GP clinics, rising from 71% in Q1 2011 to 96% in Q4 2016.

²⁸ GBM clinics defined as general practice clinics serving at least 50 GBM patients annually

²⁹ ‘Undetectable’ defined as <200 RNA copies/mm³ of blood

³⁰ Excludes patients for whom viral load test information was not available

4.2.2 Retention in care, ART commencement and HIV viral load suppression among NSW residents newly diagnosed with HIV from January 2013 to June 2016, measured at six months after diagnosis

Since 2013, HIV surveillance in NSW was enhanced to:

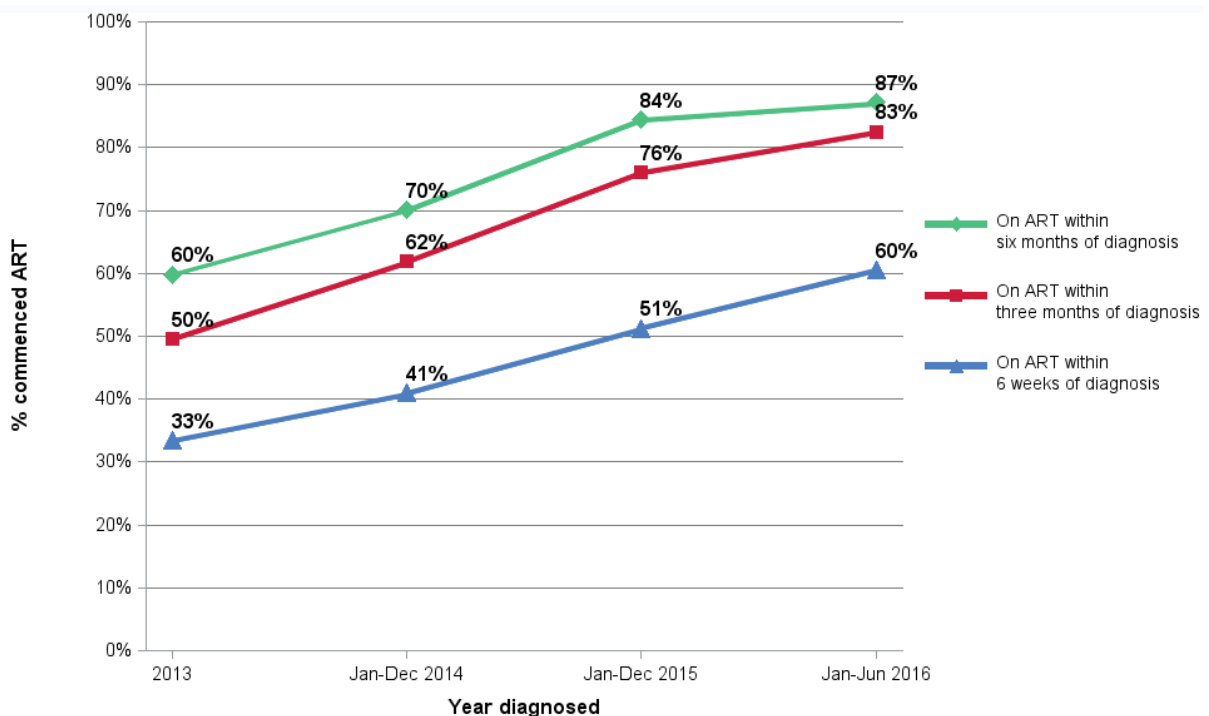
- a) at the time of diagnosis, collect from doctors additional information on the patient’s HIV viral load, antiretroviral therapy (ART) commencement or deferral, and;
- b) at six months post diagnosis, follow up on the patient via their doctor to collect information on retention in care, ART commencement,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

In this quarter 4 2016 report, six months post diagnosis follow up data is available up to and reported on 1216 NSW residents newly diagnosed with HIV infection from 1 January 2013 to 30 June 2016. Six month post diagnosis follow up data were available for 97% (n=1181) of the people newly diagnosed in January 2013-June 2016; this comprised follow up data on 98% (347 of 353) of the new diagnoses in 2013, 97% (334 of 344) of the new diagnoses in 2014, 98% (339 of 347) of the new diagnoses in 2015 and 93% (161 of 172) of new diagnoses in January to June 2016. Of the 35 new diagnoses 1 January 2013 to 30 June 2016 with no follow up form available, 32 (91%) were not eligible for follow up (as 17 had left NSW, 14 had died and 1 was lost to follow near the time of diagnosis) and 3 (9%) were eligible but no form was returned.

ART uptake at six weeks, three months and by six months post diagnosis among NSW residents newly diagnosed with HIV from January 2013 to June 2016

Data on commencement of ART by six months post diagnosis 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 irrespective of care outcome reported at the six months post diagnosis follow up (i.e., retained in care, moved out of NSW, lost to follow up, died, unknown).

Figure 34 and Table 6: ART commencement status at six weeks, three and six months post diagnosis, among 1215 NSW residents newly diagnosed from January 2013 to June 2016



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

Table 6: ART commencement status reported at six months post diagnosis follow up on 1216 NSW residents newly diagnosed from 1 January 2013 to 30 June 2016

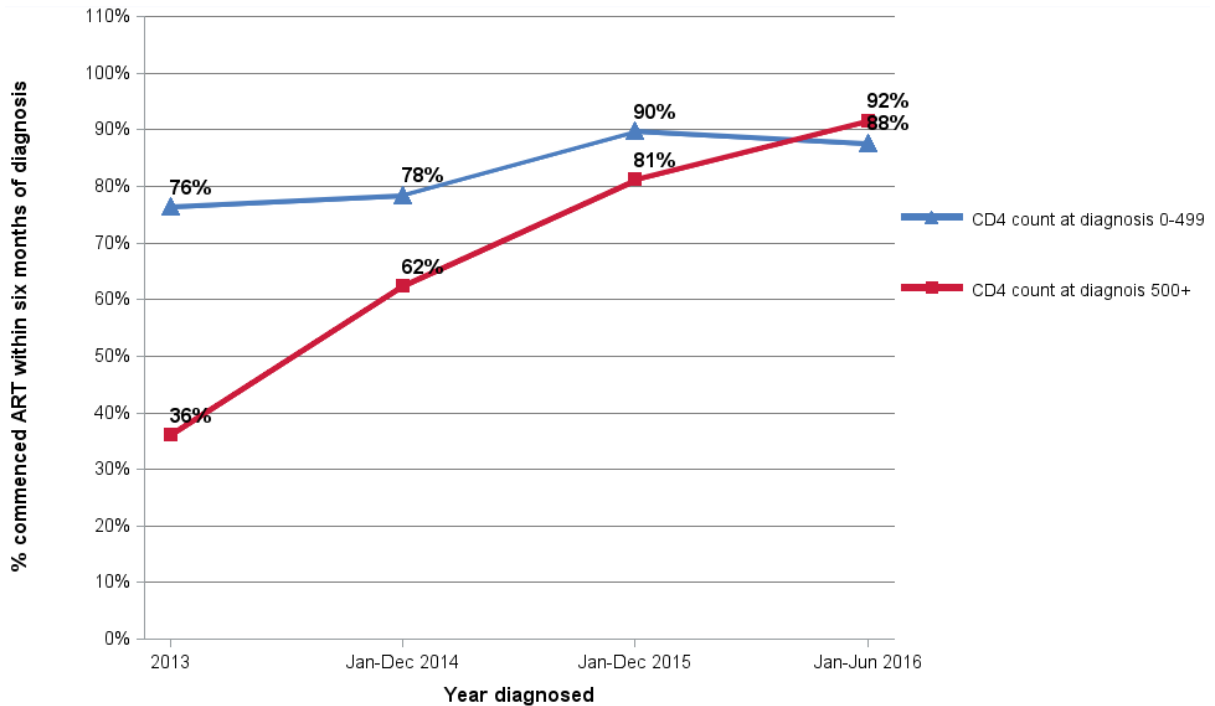
ART status six months post diagnosis	2013	%	2014	%	2015	%	Jan-Jun 2016	%	Total	%
On ART within a 6 weeks of diagnosis	118	33	141	41	178	51	104	60	541	44
On ART more than 6 weeks but within 3 months of diagnosis	57	16	72	21	86	25	38	22	253	21
On ART more than 3 months but within 6 months of diagnosis	36	10	28	8	29	8	8	5	101	8
No ART by six months post diagnosis	103	29	80	23	38	11	6	3	227	19
ART status six months post diagnosis unknown	39	11	23	7	16	5	16	9	94	8
Total	353	100	344	100	347	100	172	100	1216	100

Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

Comment

The latest available six months follow up data are for those newly diagnosed in quarter 2 2016. Of the 88 new diagnoses in April to June 2016, 64% (n=56) had commenced ART within six weeks, 82% (n=72) within three months and 88% (n=77) within six months of diagnosis. Of the 77 new diagnoses in April to June 2016 which had commenced ART within six months of diagnosis, 91% (n=70) had a post-ART viral load available at the time of follow up and of these, 96% (n=67) had achieved viral suppression (VL < 200 copies/mL) by the time of six months post diagnosis follow up. This is 76% of all 88 new diagnoses April to June 2016 virologically suppressed by the time of six months post diagnosis follow up.

Figure 35: CD4 count at diagnosis of NSW residents notified with newly diagnosed HIV infection in 2013, 2014, 2015 and January to June 2016 and per cent which had commenced ART within six months of diagnosis



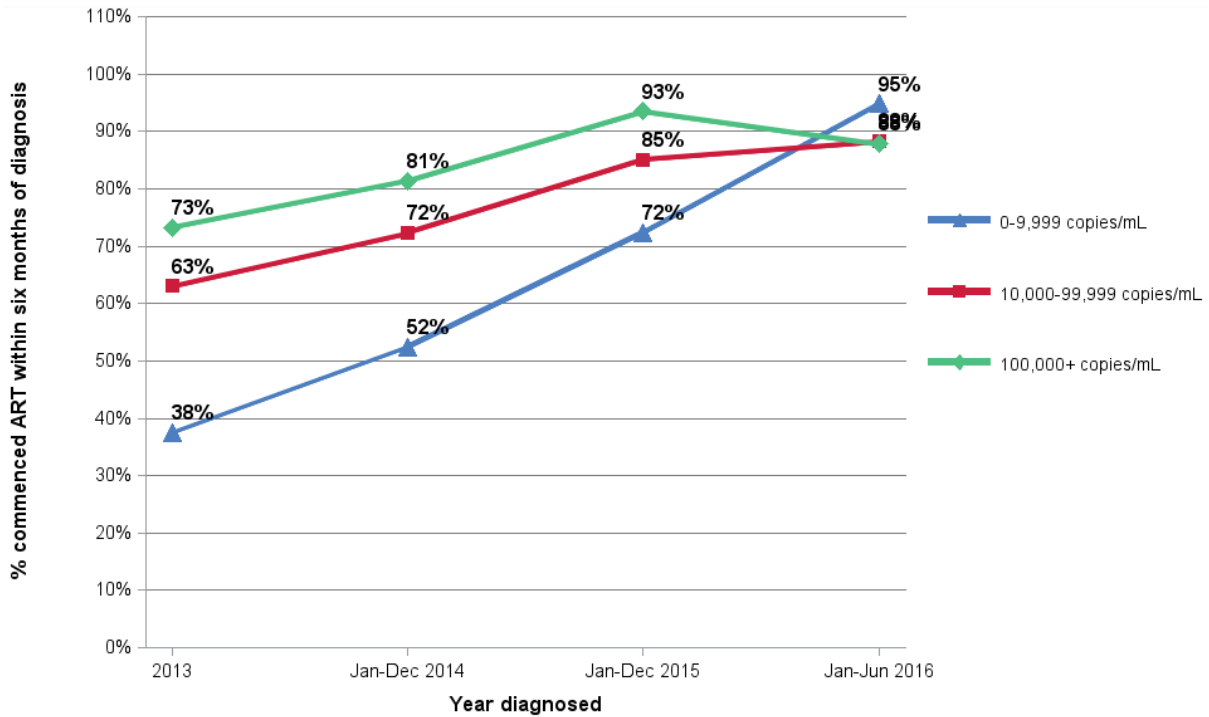
Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017
 Note: excludes new diagnoses with missing CD4 at diagnosis, some of whom had commenced ART within 6 months.

Comment

The proportion of people newly diagnosed with a CD4 count of 0-499 cells/ μ L who commenced ART within six months of diagnosis was 76% of the 2013, 78% of the 2014, 90% of the 2015 and 88% of the January to June 2016 new diagnoses cohorts.

The proportion of people newly diagnosed with a CD4 count of 500 or over who commenced ART within six months of diagnosis was 36% of the 2013, 62% of the 2014, 81% of the 2015 and 92% of the January to June 2016 new diagnoses cohorts.

Figure 36: HIV viral load at diagnosis of NSW residents notified with newly diagnosed HIV infection in 2013, 2014, 2015 and January to June 2016 and per cent which had commenced ART within six months of diagnosis



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017
 Note: excludes new diagnoses with missing HIVVL at diagnosis, some of whom had commenced ART within 6 months.

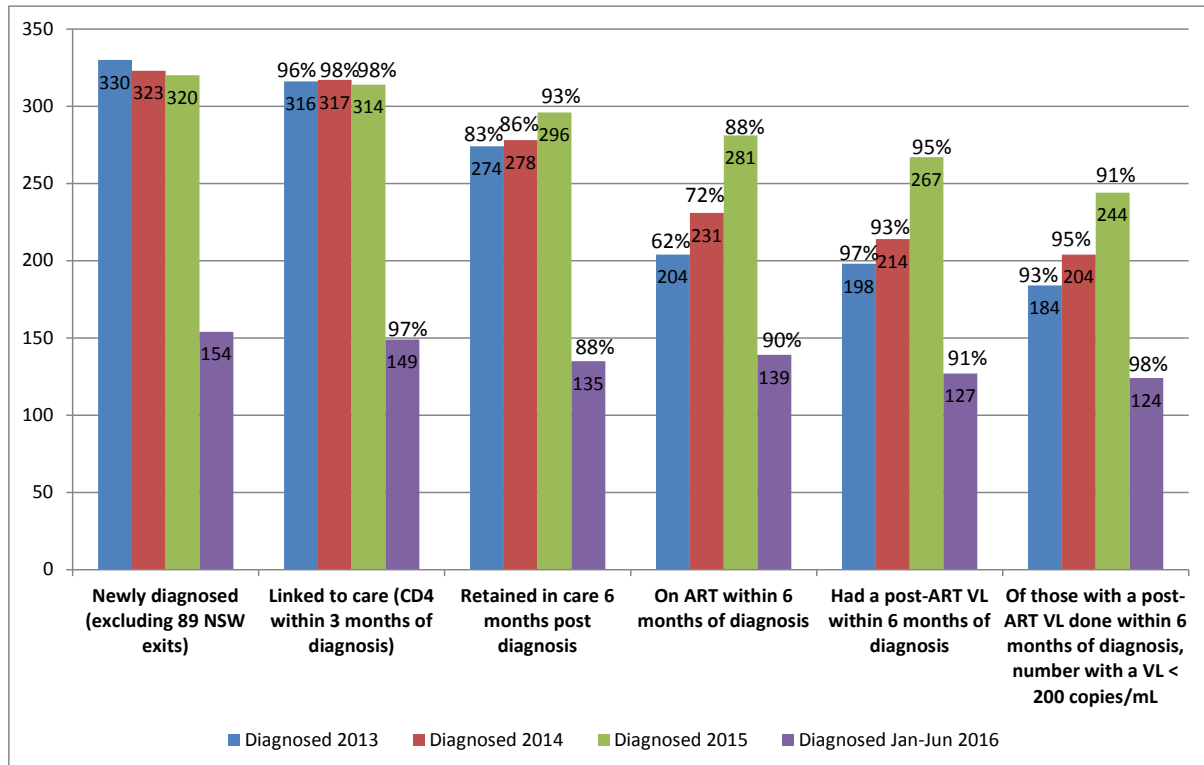
Comment

The proportion of people newly diagnosed with a HIV VL of 0-9,999 copies/mL who commenced ART within six months of diagnosis was 38% of the 2013, 52% of the 2014, 72% of the 2015 and 95% of the January to June 2016 new diagnoses cohorts with low viral load.

The proportion of people newly diagnosed with a HIV VL of 10,000-99,999 who commenced ART within six months of diagnosis was 63% of the 2013, 72% of the 2014, 85% of the 2015 and 88% of the January to June 2016 new diagnoses cohorts with mid viral load.

The proportion of people newly diagnosed with a HIV VL of 100,000 or over who commenced ART within six months of diagnosis was 73% of the 2013, 81% of the 2014, 93% of the 2015 and 88% of the January to June 2016 new diagnoses cohorts with high viral load.

Figure 37: HIV care cascade indicators measured six months post diagnosis on 1127 of 1216 NSW residents newly diagnosed with HIV infection in January 2013 to June 2016 who had not permanently exited NSW



Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017

Comment

HIV surveillance data were used to construct an HIV care continuum (or cascade) at an interval six months after diagnosis for NSW residents newly diagnosed January 2013 onwards. In this report follow up data were available on people newly diagnosed to 30 June 2016. The HIV care continuum reflects their linkage to HIV services, retention in care, early uptake of treatment and subsequent HIV viral load suppression.

Included in the cascade were the 1127 of 1216 (93%) NSW residents newly diagnosed 1 January 2013 to 30 June 2016 who had not permanently migrated out of NSW within 6 months (330 of 353 diagnosed 2013, 323 of 344 diagnosed 2014, 320 of 347 diagnosed 2015 and 154 of 172 diagnosed January to June 2016). Of the 89 (7%) not included in the cascade who were reported to have permanently exited NSW, 17 (1%) had not been eligible for follow up as they exited NSW upon diagnosis, while the other 72 (6%) had been eligible for follow up and were reported to not be in care six months post diagnosis as they had also permanently exited NSW.

Cascade indicators for those newly diagnosed January to June 2016 new diagnoses are underrepresented in this report due to delay in return of some follow forms.

Since 2013, increasing proportions of people newly diagnosed in NSW have been linked to HIV services, retained in care, commenced ART, had a post-ART viral load and achieved viral load suppression within six months of diagnosis. Overall virological suppression by the six months follow up was achieved by 56% of the 2013 diagnoses cohort, 63% of the 2015 diagnoses cohort, 76% of the 2015 diagnoses cohort and 81% of the January to June 2016 diagnoses cohort.

Of all the 1127 NSW residents newly diagnosed 1 January 2013 to 30 June 2016 included in the cascade, 97% (n=1096) were linked to care (CD4 count at diagnosis used as proxy measure); 87% (n=983) were reported to be retained in care six months post diagnosis; 76% (n=855) had commenced ART within six months of diagnosis; 94% (n=806) had a post-ART viral load by time of follow up, and 94% (n=756) of these had a VL<200 copies/mL. Overall 67% of the 1127 NSW residents newly diagnosed 1 January 2013 to 30 June 2016 included in the cascade had achieved viral suppression by six months follow up. Of the 144 of 1127 not retained in care at six months post diagnosis follow up, 85 (8%) were reported lost to follow up, 15 (1%) had died within six months of diagnosis, 15 (1%) had been referred and were in between services and 29 (3%) had another or unknown reason not in care. Overall 27 of 1127 (2.2%) in the cascade had been notified as dead at the time of reporting.

5 Sustain the virtual elimination of HIV related deaths

5.1 What is the number of deaths for which HIV/AIDS was reported as underlying cause?

Ascertaining the number of deaths due to HIV is complex in an era when people with HIV have access to effective treatment giving them a long life expectancy. People with HIV are subject to the same causes of morbidity and mortality as are people without HIV. Methods to better estimate deaths attributable to HIV are being investigated.

Appendix A: Characteristics of NSW residents notified with newly diagnosed HIV infection 1981 to 2016

Demographics	1981 to 2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		Total	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	
Gender	1487	100	326	100	336	100	305	100	331	100	413	100	353	100	344	100	347	100	317	100	17945	100
Male	1369	92.1	294	90.2	295	87.8	280	91.8	310	93.7	376	91.0	323	91.5	319	92.7	318	91.6	291	91.8	16503	92.0
Female	899	6.0	32	9.8	38	11.3	23	7.5	21	6.3	36	8.7	27	7.6	24	7.0	28	8.1	22	6.9	1150	6.4
Transgender	30	0.2	0	0.0	2	0.6	2	0.7	0	0.0	1	0.2	3	0.8	1	0.3	1	0.3	4	1.3	44	0.2
Unknown	247	1.7	0	0.0	1	0.3	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 person	115	0.8	8	2.5	9	2.7	7	2.3	5	1.5	12	2.9	8	2.3	7	2.0	6	1.7	10	3.2	187	1.0
Non-Aboriginal person	7891	53.1	302	92.6	315	93.8	293	96.1	323	97.6	395	95.6	343	97.2	329	95.6	338	97.4	305	96.2	10834	60.4
Not stated	6867	46.2	16	4.9	12	3.6	5	1.6	3	0.9	6	1.5	2	0.6	8	2.3	3	0.9	2	0.6	6924	38.6
Age in years																						
0-4	37	0.2	0	0.0	1	0.3	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	39	0.2
5-9	21	0.1	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	1	0.3	24	0.1
10-14	35	0.2	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	36	0.2
15-19	265	1.8	3	0.9	3	0.9	5	1.6	6	1.8	9	2.2	9	2.5	2	0.6	6	1.7	3	0.9	311	1.7
20-24	1841	12.4	39	12.0	34	10.1	29	9.5	34	10.3	44	10.7	37	10.5	41	11.9	45	13.0	39	12.3	2183	12.2
25-29	2995	20.1	58	17.8	58	17.3	56	18.4	55	16.6	77	18.6	64	18.1	51	14.8	63	18.2	60	18.9	3537	19.7
30-34	3066	20.6	44	13.5	42	12.5	49	16.1	65	19.6	71	17.2	48	13.6	64	18.6	61	17.6	63	19.9	3573	19.9
35-39	2507	16.9	64	19.6	59	17.6	43	14.1	59	17.8	64	15.5	42	11.9	45	13.1	45	13.0	48	15.1	2976	16.6
40-44	1774	11.9	52	16.0	58	17.3	51	16.7	45	13.6	48	11.6	44	12.5	46	13.4	32	9.2	30	9.5	2180	12.1
45-49	1009	6.8	32	9.8	30	8.9	30	9.8	26	7.9	38	9.2	45	12.7	29	8.4	26	7.5	33	10.4	1298	7.2
50-54	595	4.0	14	4.3	28	8.3	7	2.3	25	7.6	28	6.8	24	6.8	26	7.6	28	8.1	18	5.7	793	4.4
55-59	319	2.1	10	3.1	12	3.6	22	7.2	10	3.0	14	3.4	22	6.2	15	4.4	13	3.7	12	3.8	449	2.5
60-64	176	1.2	6	1.8	1	0.3	5	1.6	2	0.6	13	3.1	6	1.7	14	4.1	15	4.3	6	1.9	244	1.4
65-69	92	0.6	0	0.0	4	1.2	6	2.0	2	0.6	4	1.0	9	2.5	7	2.0	7	2.0	4	1.3	135	0.8
70 or over	54	0.4	4	1.2	5	1.5	1	0.3	2	0.6	3	0.7	2	0.6	3	0.9	6	1.7	0	0.0	80	0.4
Unknown	87	0.6	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	87	0.5
HIV risk exposure	1981-2007	%	2008	%	2009	%	2010	%	2011	%	2012	%	2013	%	2014	%	2015	%	2016	%	1981-2016	%
			8		9		0		1		2		3		4		5		6			

Men who have sex with men (MSM)	9041	60.8	236	72.4	221	65.8	226	74.1	268	81.0	322	78.0	264	74.8	257	74.7	264	76.1	235	74.1	11334	63.2
MSM and person who injects drugs (PWID)	402	2.7	11	3.4	17	5.1	8	2.6	11	3.3	14	3.4	16	4.5	19	5.5	20	5.8	24	7.6	542	3.0
Hetero-sex only	1153	7.8	64	19.6	75	22.3	51	16.7	41	12.4	58	14.0	61	17.3	49	14.2	52	15.0	47	14.8	1651	9.2
PWID	492	3.3	12	3.7	12	3.6	9	3.0	8	2.4	10	2.4	7	2.0	8	2.3	4	1.2	4	1.3	566	3.2
Blood disorder, blood or tissue recipient	275	1.8	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	277	1.5
Vertical transmission	45	0.3	0	0.0	2	0.6	1	0.3	0	0.0	0	0.0	1	0.3	1	0.3	0	0.0	1	0.3	51	0.3
Other	34	0.2	0	0.0	2	0.6	1	0.3	1	0.3	2	0.5	1	0.3	4	1.2	3	0.9	1	0.3	49	0.3
Unknown	3431	23.1	3	0.9	6	1.8	9	3.0	2	0.6	7	1.7	3	0.8	6	1.7	3	0.9	5	1.6	3475	19.4
LHD of residence																						
South Eastern Sydney	4539	30.5	118	36.2	106	31.5	109	35.7	124	37.5	150	36.3	125	35.4	112	32.6	128	36.9	83	26.2	5594	31.2
Sydney	2233	15.0	77	23.6	92	27.4	76	24.9	88	26.6	113	27.4	87	24.6	82	23.8	83	23.9	94	29.7	3025	16.9
Northern Sydney	782	5.3	25	7.7	39	11.6	19	6.2	24	7.3	23	5.6	25	7.1	18	5.2	24	6.9	20	6.3	999	5.6
Western Sydney	525	3.5	26	8.0	21	6.3	20	6.6	31	9.4	25	6.1	27	7.6	27	7.8	20	5.8	24	7.6	746	4.2
South Western Sydney	485	3.3	16	4.9	21	6.3	25	8.2	18	5.4	31	7.5	33	9.3	31	9.0	33	9.5	32	10.1	725	4.0
Hunter New England	353	2.4	14	4.3	16	4.8	16	5.2	10	3.0	14	3.4	17	4.8	27	7.8	17	4.9	16	5.0	500	2.8
Nepean Blue Mountains	222	1.5	7	2.1	3	0.9	3	1.0	4	1.2	5	1.2	3	0.8	6	1.7	6	1.7	2	0.6	261	1.5
Illawarra Shoalhaven	173	1.2	3	0.9	5	1.5	8	2.6	5	1.5	9	2.2	7	2.0	6	1.7	7	2.0	8	2.5	231	1.3
Central Coast	148	1.0	6	1.8	5	1.5	5	1.6	4	1.2	10	2.4	5	1.4	8	2.3	5	1.4	11	3.5	207	1.2
Northern NSW	147	1.0	4	1.2	5	1.5	8	2.6	11	3.3	5	1.2	5	1.4	7	2.0	8	2.3	5	1.6	205	1.1
Mid North Coast	102	0.7	8	2.5	6	1.8	3	1.0	4	1.2	3	0.7	6	1.7	7	2.0	6	1.7	2	0.6	147	0.8
Western NSW	91	0.6	3	0.9	3	0.9	4	1.3	3	0.9	7	1.7	5	1.4	2	0.6	2	0.6	5	1.6	125	0.7
Murrumbidgee-Albury	60	0.4	3	0.9	2	0.6	7	2.3	2	0.6	5	1.2	3	0.8	3	0.9	4	1.2	9	2.8	98	0.5
Southern NSW	30	0.2	3	0.9	6	1.8	1	0.3	2	0.6	8	1.9	4	1.1	4	1.2	2	0.6	6	1.9	66	0.4
Far West	4	0.0	0	0.0	2	0.6	0	0.0	0	0.0	2	0.5	0	0.0	0	0.0	0	0.0	0	0.0	8	0.0
Unknown or other	4979	33.5	13	4.0	4	1.2	1	0.3	1	0.3	3	0.7	1	0.3	4	1.2	2	0.6	0	0.0	5008	27.9
Total	14873	100%	326	100%	336	100%	305	100%	331	100%	413	100%	353	100%	344	100%	347	100%	317	100%	17945	100%

Data source: Notifiable Conditions Information Management System, Health Protection NSW, extracted 7 February 2017.

Appendix B: 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.