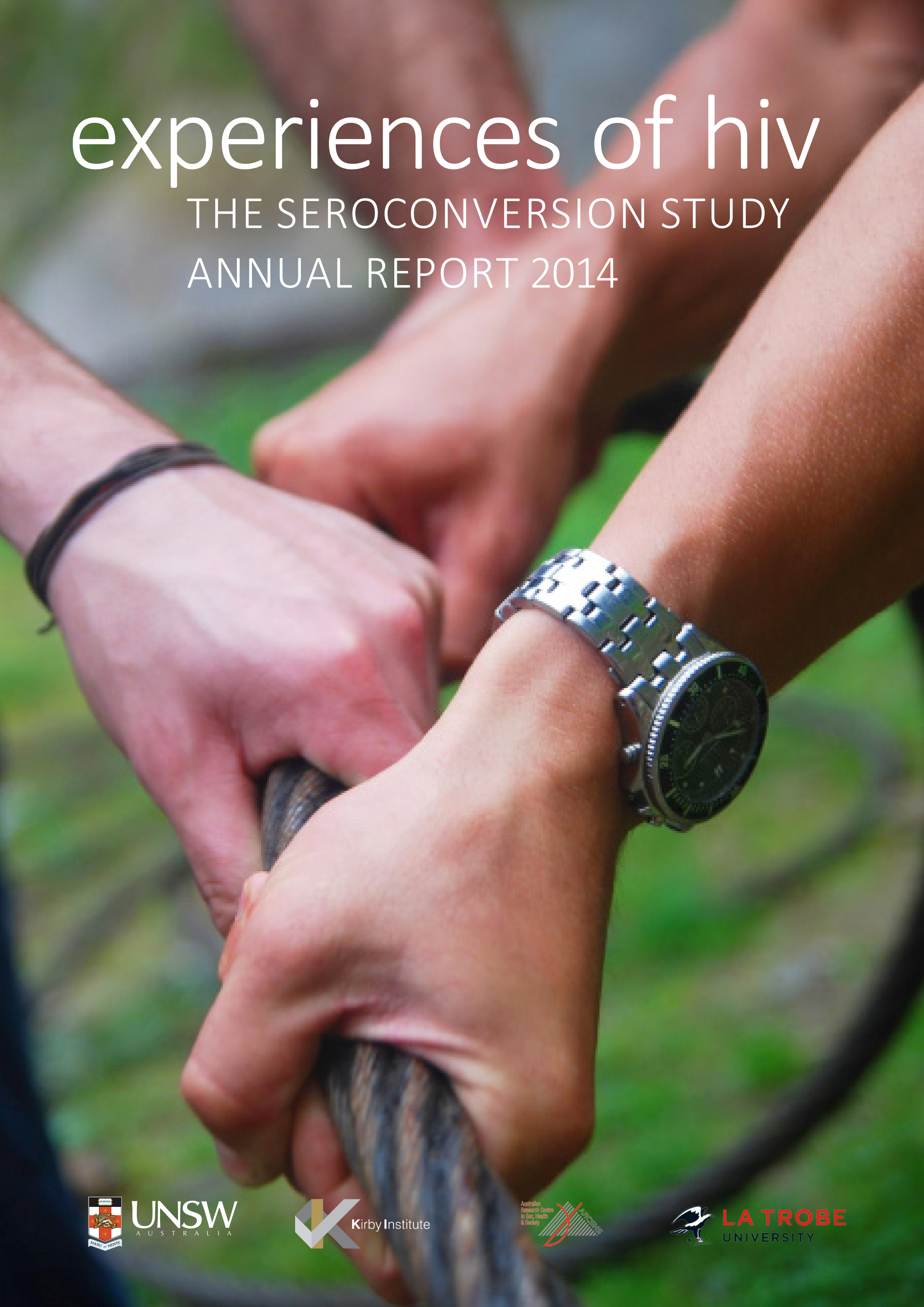

experiences of hiv

THE SEROCONVERSION STUDY

ANNUAL REPORT 2014

UNSW AUSTRALIA

Kirby Institute

Australian Research Centre in Sex, Health & Society

LA TROBE UNIVERSITY

experiences of hiv

THE SEROCONVERSION STUDY

ANNUAL REPORT 2014

Ian Down[1,2]
Kathy Triffitt[1]
Jeanne Ellard[2]
Graham Brown[2]
Garrett Prestage[1,2]

[1]The Kirby Institute, University of New South Wales
[2]Australian Research Centre in Sex, Health and Society, La Trobe University

Suggested citation: Experiences of HIV: The Seroconversion Study Report 2014. Monograph, The Kirby Institute, The University of New South Wales, Sydney Australia.

This publication is also available online:
www.hivss.net
www.kirby.unsw.edu.au/publications
www.latrobe.edu.au/arcshs/publications

ISBN: 978-0-7334-3573-7

Acknowledgements

The authors would like to thank the study participants and all the individuals and organisations who have helped with recruitment and referral of participants to the study.

Funding

This study has been funded by the Health Departments of New South Wales, Victoria, Queensland, Western Australia, South Australia, Tasmania, Australian Capital Territory and Northern Territory.

Currently, the study is funded by the Health Departments of New South Wales, Victoria, Queensland, Western Australia, Australian Capital Territory and Northern Territory.

Collaborating organisations

The Seroconversion Study is a collaboration between the Kirby Institute, the Australian Research Centre in Sex, Health and Society, the Centre for Social Research in Health and the AIDS Councils and people living with HIV (PLHIV) organisations in each state and territory.

This study was conducted by a research team at the Kirby Institute, University of New South Wales, Sydney, Australia and the Australian Research Centre in Sex, Health and Society, La Trobe University, Melbourne, Australia.

The Kirby Institute and the Australian Research Centre in Sex, Health and Society (ARCSHS) receive funding from the Commonwealth Department of Health and Ageing. The views expressed in this publication do not necessarily represent the position of the Australian Government. The Kirby Institute is affiliated with UNSW Medicine, UNSW Australia. ARCSHS is affiliated with the Faculty of Health Sciences at La Trobe University.

Further information

For more information, please contact Associate Professor Garrett Prestage

The Kirby Institute, Wallace Wurth Building, UNSW Australia, Sydney, NSW 2052, AUSTRALIA

Email: gprestage@kirby.unsw.edu.au | Telephone: 02 9385 0900 | Facsimile: 02 9385 0920

Contents

List of tables

Glossary of terms and acronyms

ART	antiretroviral therapy/treatment
ATSI	Aboriginal and Torres Strait Islander peoples
CLAI	condomless anal intercourse; previously referred to as unprotected anal intercourse (UAI)
CLAIC	condomless anal intercourse with casual partners; previously referred to as unprotected anal intercourse with casual partners (UAIC)
CLAIR	condomless anal intercourse with regular partners; previously referred to as unprotected anal intercourse with regular partners (UAIR)
Fuckbuddy	repeated sexual partner with whom one has sex on an ongoing basis, not necessarily involving an emotional attachment
High-risk event	the event that a participant believes led to him acquiring HIV
HIV	Human Immunodeficiency Virus
PLHIV	people living with HIV
PrEP	pre-exposure prophylaxis
RRS	non-condom based HIV risk reduction strategies
STI	sexually transmissible infection
TasP	HIV treatment as prevention

Executive summary

The Seroconversion Study continues to collect data from people in Australia recently diagnosed with HIV. This includes an online survey and an optional interview component for gay and bisexual men, and an interview component only for heterosexual men and women. In this report we present new data from 2013 and 2014, including from questions not asked in previous years.

Between March 2013 and November 2014, 131 gay and bisexual men completed the online survey. More than one in five of the men had acquired their infection while overseas, and two in five reported engaging in group sex at their high-risk event. The majority of infections were reported to have occurred in the context of casual sex, with less than one in ten infections being attributed to sex with regular partners - despite the fact that few men in relationships had clear spoken negotiated safety agreements with their partners.

More than one in ten men report having had a rapid HIV test at the time they were diagnosed, and all but one of those men said that they were satisfied with the process of testing this way – to the extent that they would not have chosen to have received their diagnosis another way.

More than half of the men were on treatment. Among those who were not on treatment, most were within the first weeks of their diagnosis, and expressed an intention to begin treatment as soon as they were able. This is a significant shift in attitudes to early treatment since the beginning of this study.

The ability to connect with other men who were also recently diagnosed was the most important source of support for the men. HIV organisations and support groups provided the opportunity for this to occur, as well as online methods.

Introduction

Rates of new HIV diagnoses in Australia remained stable in 2013 (The Kirby Institute, 2014), while sexual risk behaviour among gay men remained high.

There is increasing acknowledgement of the role of non-condom based HIV risk reduction strategies (RRS) in protecting men from transmitting or acquiring HIV. In recognition of this, there is an emerging trend to no longer refer to anal intercourse without condoms as ‘unprotected’. Rather, it is increasingly described as ‘condomless’, as the United States Centers for Disease Control and Prevention recently decided to do (Colbert, 2014). Data from the Australian Gay Community Periodic Surveys reveal that about a third of gay men who report sex with casual partners have some condomless anal intercourse with those partners (CLAIC) (de Wit et al., 2014). Further analyses of these data by Holt et al. (2014) found that while the majority of men who report CLAIC frequently practice some form of RRS during anal intercourse, a quarter of them do not do so consistently.

In 2014, the US Public Health Service released the first comprehensive clinical guidelines for the use of antiretrovirals by HIV-negative people to prevent HIV infection. While pre-exposure prophylaxis (PrEP) is not yet generally available in Australia, there are a small proportion of Australian men using it informally (Zablotska et al., 2013), and demonstration projects, which will test and measure the effects of PrEP in real-world situations, have begun in three Australian states.

Data from the Seroconversion Study shows that those men who are more connected to gay community are more likely to report recent testing prior to their diagnosis (Down et al., 2014b). While Australia was slower to implement new HIV testing strategies, such as rapid testing, than was the case in similar jurisdictions overseas, there are now a number of community-based rapid testing initiatives that appear to be achieving higher rates of testing among men. There are some men who want access to the broader range of testing options, including home testing, to supplement their current testing (Bilardi et al., 2013, Prestage et al., 2012).

In 2014, barriers that restricted access to antiretroviral treatments were removed (Australasian Society for HIV Medicine, 2014). There have been highly visible education campaigns about the benefits of early treatment to counter the negative views that many people had around treatment (Down et al., 2014a).

About this report

This is the fourth report to be produced from the current incarnation of the HIV Seroconversion Study. Recruitment to the current version of the study is scheduled to end in the middle of 2015, and a comprehensive study report is planned for the end of the year.

In 2010, the study was adapted to enable participation by anyone in Australia who was recently HIV-diagnosed. A sub-study was established to collect data on the experiences of men who had not acquired their infection through sex with another man, and women. Thirteen women and fourteen men enrolled between 2010-2012. However, we have found it difficult to recruit women and heterosexual men, and since 2012. Part of the explanation for this may be due to the fact that we have also found it difficult to recruit participants through clinic settings, which would be the most likely source of participants from that population.

This report provides information on the men who have most recently enrolled in the study - between March 2013 and November 2014. Plans are underway to replace the current study with its focus on the risk event/s and initial diagnosis experiences with a more comprehensive study of recently diagnosed individuals that will be linked directly to community-based interventions providing peer support.

Since December 2007, when the current Seroconversion Study relaunched, 637 gay and bisexual men have completed an online survey, while more than 100 have been interviewed in-depth. Previous versions of the Seroconversion Study were conducted between 1992 and 2006, recruiting just over 300 respondents in that time. Using the primarily online method of enrolment in this most recent version of the study has allowed us to reach, and enrol, over twice as many recently diagnosed individuals in half as many years as was achieved in all previous versions of the study combined. This method of recruitment is clearly highly successful and should remain an important component in any future work with this population.

Table 1: Participation over time

Study period	Eligibility	Sample
December 2007-June 2010	Men recently diagnosed	247
June 2010-March 2013	Anyone over the age of 18 recently diagnosed	259
March 2013-November 2014	Anyone over the age of 16 recently diagnosed	131

Note: Includes only male participants who attribute their infection to sexual contact with another male.

Comparison across jurisdictions and over time

Towards the end of this report we compare some key variables across states and territories. The focus of this report is on responses to the recent, newly included questions, which will provide government and community partners with data on emerging priority areas. However, there are not yet sufficient numbers to justify separate analyses by states and territories. The final study report will include a comprehensive comparison of results from each jurisdiction and, where possible, changes that may be evident over the duration of the study.

Comparisons with other data sources

Where possible, comparisons between the data in the Seroconversion Study and other data sources are provided. In particular, we compare these data with results from the Pleasure and Sexual Health (PASH) Study. PASH recruited an online sample of more than 2,300 homosexually active men throughout Australia in 2009 (Prestage et al., 2009), and many of the questions asked of that sample are asked in the Seroconversion Study.

Methods

The Seroconversion Study collects both quantitative and qualitative data, through an online survey questionnaire and in-depth interviews. People who have recently been diagnosed with HIV infection are directed to a study website where they can find out more about the study. If they identify as a gay or bisexual male, can choose to enrol in the study by completing an online questionnaire. On completion of the survey, or if transmission was not through male-to-male sex, respondents are invited to volunteer for a face-to-face in-depth interview. Ethics approval has been obtained from the University of New South Wales and La Trobe University.

Eligibility

Eligibility criteria for the study include being over 16 years of age; having been diagnosed as HIV-positive for the first time within the two years prior to enrolment; and living in Australia. In jurisdictions where the Seroconversion Study had not been a regular feature of local surveillance activity before 2007, the requirement that the diagnosis had occurred within a maximum of two years prior to interview was relaxed to allow people who had been diagnosed up to five years prior to participate. Until 2014, only those over the age of 18 years were eligible to participate in the Seroconversion Study. However, given that 16 is the age of consent in most parts of Australia, we sought approval from the UNSW ethics committee to allow those aged between 16-18 to be eligible to participate in the study.

Table 2: How men are referred to the study

N=131	n	%
Direct online referral	70	53.4
Sexual health service	17	13.0
Community organisation staff	16	12.2
Workshop (e.g. Genesis, Phoenix)	15	11.5
Through other studies	5	3.8
Medical practice	4	3.1
Press advertisement	1	0.8
Other/unknown	3	2.3

Recruitment

Enrolments occur through four main source: referrals from state AIDS Council staff; recruitment from state-based PLHIV organisation staff; referrals from clinics, mostly sexual health services; or direct online enrolment by individuals who have found a link to the survey posted on another website. Among men in this most recent wave of recruitment, the majority found the survey online and enrolled in the study directly themselves.

Online survey

The online questionnaire includes demographic characteristics, details of participants' diagnosis with HIV, sexual practices at the time of their HIV infection, details of what occurred on the occasion they believe led to their HIV infection, details of the person they believe infected them, their sexual and drug use behaviour in the six months prior to their HIV infection, their beliefs about HIV and risk both prior to, and since their HIV diagnosis, sources of support and contact with the community and measures of mental well-being. There are a number of open-ended questions in the survey, which allow respondents to provide detailed responses; some of those responses are presented in this report to help illustrate common themes and patterns or in some cases uncommon or atypical cases.

In-depth interviews

In-depth interviews are conducted with participants who volunteer for these interviews upon completing the online survey. The focus of the interview is similar to that of the online questionnaire – a description of the occasion when they believe they were infected with HIV, and of the person they believe infected them. Interviews also include an open-ended discussion of participants' sexual practices at the time leading up to their diagnosis, and how they understood and managed risk. The men are also asked to describe their reactions to the diagnosis and to reflect on the ways in which the diagnosis affected their life in the immediate period after diagnosis and more recently. Men are also asked about their feelings towards HIV treatments, and any decisions they may have made about commencing treatment, as well as their knowledge about viral load and its implications on risk of HIV transmission. Approximately one quarter of survey participants volunteer to participate in the qualitative component of the study.

Results

Here we will report on the characteristics of the 131 gay and bisexual men who completed the online survey questionnaire between March 2013 and November 2014.

Profile of the sample

The mean age of the men at the time of their HIV diagnosis was 37.8 years (range 19 to 68). The men were strongly gay identified (92.1%), with 7.1% identifying as bisexual. The majority of the men were Australian born (70.2%), and of Anglo-Australian background (76.3%). Eight of the men (6.1%) were of Aboriginal or Torres Strait Islander background, which is higher than the proportion of Aboriginal or Torres Strait Islander men who had participated in the study between 2009-2013 (2.0%). More than half (51.9%) had a university education, including 15.3% with postgraduate qualifications.

The geographic distribution of the men in this sample matches approximately the geographic distribution of HIV diagnoses that occurred in Australia at the corresponding time.

Table 3: Geographic distribution

N=131	Recruited	Residence	Diagnosis	High-risk event	Surveillance (2013)*
New South Wales	49 (37.4)	49 (37.4)	43 (32.8)	39 (29.8)	32.4%
Victoria	40 (30.5)	39 (29.8)	36 (27.5)	30 (22.9)	29.5%
Queensland	23 (17.6)	23 (17.6)	19 (14.5)	18 (13.7)	19.1%
Western Australia	10 (7.6)	8 (6.1)	9 (6.9)	8 (6.1)	9.0%
South Australia	3 (2.3)	3 (2.3)	4 (3.1)	2 (1.5)	5.6%
Australian Capital Territory	4 (3.1)	4 (3.1)	3 (2.3)	2 (1.5)	1.9%
Tasmania	0	1 (0.8)	1 (0.8)	0	0.9%
Northern Territory	2 (1.5)	1 (0.8)	2 (1.5)	0	1.5%
Overseas	-	1 (0.8)	12 (9.2)	30 (22.9)	-
Not provided	-	2 (1.5)	2 (1.5)	2 (1.5)	-

* Data from: Kirby Institute, 2014

More than one in five of the men (21.4%) had ever been paid for sex, almost half of whom (9.2% of the sample) had been paid for sex within the twelve months prior to completing the survey. This is an unusually high proportion of men who have recently undertaken sex work; among the men in the Pleasure and Sexual Health (PASH) Study, one in six report ever having been paid for sex, with 4.3% having been paid for sex in the previous year (Prestage et al., 2009).

Relationships

Participants are asked if they were in a relationship with someone they considered to be a regular partner, such as a boyfriend, at the time of the high-risk event they believe led to their infection with HIV. This was the case for over a third (35.1%) of the men in this sample. A third of these relationships were relatively new, less than one year in duration, while half were relationships of more than two years.

Table 4: Duration of regular relationship

N=46	n	%
Less than one month	3	6.5
1-3 months	6	13.0
4-12 months	6	13.0
1-2 years	8	17.4
More than two years	23	50.0

Note: Includes only those men who reported being in a regular relationship at the time of their high-risk event.

Of the men in the sample in a regular relationship, 10.9% were in a known serodiscordant relationship.

Table 5: Knowledge of regular partner's HIV status

N=46	n	%
Thought HIV negative	38	82.6
Thought HIV positive	5	10.9
I didn’t know	3	6.5

Note: Includes only those men who reported being in a regular relationship at the time of their high-risk event.

Of the men with a boyfriend at the time of the high-risk event, only 32 (69.6%) indicated that their partner had ever verbally told them their HIV status. This was not related to the duration of the relationship.

We asked men about the agreements they did, or did not, have with their boyfriends; both about the sex they could have within their relationship, and about the sex they may have outside of that relationship.

Table 6: Agreements with regular partner

N=46	**Within the relationship**		**Outside the relationship**	
	n	**%**	**n**	**%**
No agreement	16	34.8	23	50.0
Agreement, no sex at all	2	4.3	7	15.2
Agreement, no anal sex	1	2.2	2	4.3
Agreement, all sex was with a condom	11	23.9	8	17.4
Agreement, anal sex could be without a condom	16	34.8	6	13.0

Note: Includes only those men who reported being in a regular relationship at the time of their high-risk event.

Sexual preferences and desire

The receptive partner in anal sex is the most vulnerable to HIV infection. In the Seroconversion Study, more than half of participants report preferring to be the receptive partner. To compare this with other data, in PASH, men were asked whether they saw themselves as being more of a top or a bottom for anal intercourse. About a third (36.6%) described themselves as being more of a bottom, 31.0% felt they were more of a top, a quarter (26.5%) described themselves as versatile (Prestage et al., 2009).

Table 7: Sexual preference

N=131	**n**	**%**
Prefer to be bottom	70	53.4
Both equally, versatile	45	34.4
Prefer to be top	14	10.7
No response	2	1.5

The concept of ‘sensation seeking’ has been used in the analyses of sexual risk behaviour among gay men (Kalichman et al., 1994), and has been found to be associated with CLAIC and HIV seroconversion. Sensation-seeking refers to a psychometric measure of sexual preferences among individual gay men which understands sensation in physical terms.

On the measure of sexual sensation-seeking, the majority of men expressed at least some identification with all items on the list except the item suggesting that they would lie to obtain sex. Men most strongly identified with enjoying porn, and enjoying condomless anal sex.

Items are scaled according to the methods determined by Kalichman et al. (1995), with a range of scores from one to four. The overall mean score for the sample was 2.85, and median was 2.82. This score is quite high, compared with the men in PASH whose mean score was 2.71 and median was 2.73 (Prestage et al., 2009).

Table 8: Sexual sensation-seeking scale

N=131	**Mean**	**Standard Deviation**
I enjoy watching porn	3.19	0.89
I enjoy the sensation of fucking or being fucked without a condom	3.17	0.97
I enjoy the company of sensual people	3.15	0.75
I like to have new and exciting sexual experiences and sensations	3.08	0.80
I am interested in trying out new sexual experiences	3.06	0.78
The physical sensations are the most important thing about sex	3.01	0.76
I feel like exploring my sexuality	2.92	0.88
When it comes to sex, physical attraction is more important to me than how well I know the person	2.87	0.88
I like wild 'uninhibited' sexual encounters	2.80	0.99
My sexual partners probably think I am a 'risk-taker'	2.38	0.99
I have said things that were not exactly true to get a person to have sex with me	1.75	0.94

Pre-exposure prophylaxis

In 2010, trial results were published demonstrating that pre-exposure prophylaxis (PrEP) could be up to 95% effective in preventing HIV infection, if adhered to correctly (Grant et al., 2010). While not yet widely available in Australia, there has been much discussion about PrEP in recent community media. Still, just a quarter of the men in this sample reported having heard of PrEP at the time of their high-risk event.

Table 9: Heard of PrEP at time of high-risk event

N=131	n	%
No	79	60.3
Yes	33	25.2
No response	19	14.5

While some of these men could potentially have been suitable candidates for PrEP, the fact that just one in five of the men cite risky behaviour as a reason for testing for HIV at the time of their diagnosis (see Table 25) suggests many of the men may not have considered themselves as someone who might need PrEP.

Very few men reported any doubt that PrEP would protect them, or a reluctance to take PrEP due to an aversion to taking medication, suggesting that concerns about side-effects or reluctance to take medication are unlikely to be barriers for future potential users.

Table 10: Reasons why not using PrEP at time of high-risk event

N=131	n	%
I didn’t know anything about it	72	55.0
Risk was not planned	29	22.1
I didn’t know how to get it	25	19.1
I don’t plan my sex life	17	13.0
I didn’t think I would ever put myself at risk of HIV	15	11.5
I don’t like to take medication	3	2.3
I didn’t believe it would protect me	2	1.5

Note: Multiple responses were possible.

Prior HIV testing history

From the Australian Gay Community Periodic Surveys, we know that around nine in ten men engaged in gay community life have ever tested for HIV (de Wit et al., 2014). Among the men who enrolled in the Seroconversion Study during 2013–2014, a similar proportion (86.3%) report having ever tested for HIV, prior to the test that returned their HIV-positive result.

Table 11: Ever tested for HIV prior to diagnosis

N=131	n	%
Had tested previously	113	86.3
Had never tested previously	16	12.2
No response	2	1.5

Less than two-thirds (60.7%) of HIV-negative men in the Periodic Surveys report their most recent HIV test as being within the previous 12 months. Among men recently enrolled in the Seroconversion Study, a similar proportion (61.8%) report a previous HIV test within 12 months prior to the test at diagnosis. In fact, almost half of the men in the sample (46.8%) report more than one HIV test in the 12 months prior to their diagnosis.

Table 12: Time since last HIV-negative test

N=113	n	%
Less than one month	4	3.6
1-6 months	55	49.1
7-12 months	22	19.6
More than one year	31	23.7
No response	1	0.8

Note: Includes only those men who reported a previous HIV-negative test.

Table 13: Number of times tested for HIV in year prior to diagnosis

N=81	n	%
Once	19	23.5
Twice	27	33.3
Three times	20	24.7
Four or more times	14	17.3
No response	1	1.2

Note: Includes only those men who reported a previous HIV-negative test in the 12 months before their diagnosis.

In the most recent version of the survey questionnaire, we asked men about their usual HIV testing pattern prior to diagnosis. One in five (19.1%) report that they tested every three months, while almost two thirds (63.4%) were testing at least once per year.

Table 14: Usual HIV testing pattern

N=131	n	%
Monthly	1	0.8
Every three months	25	19.1
Every six months	40	30.5
Annually	17	13.0
Less than once a year	29	22.1
No response	19	14.5

Previously, we asked those who had not tested for HIV within the 12 months prior to their diagnosis about the reasons they did not test in that time. With the revised questionnaire we asked all men if there had ever been any reasons that they had delayed testing, and if yes what those reasons were. A third of men said they never put off testing. Those who had delayed testing were more likely to have done so because they did not want to know the results (28.2%), because they were not experiencing symptoms that caused them to be concerned that they may have acquired HIV (27.5%), or because they did not believe they had done anything risky that may have exposed them to HIV (14.5%).

To a lesser extent, some men cited barriers such as the hassle involved in testing; the need to discuss their sex lives with their doctor; and more generally not wanting to go to the doctor for HIV testing; as reasons for them delaying getting tested. Many of these potential structural barriers have been removed or modified in some way in recent years, possibly making these less important reasons than might have been the case in previous years.

Table 15: Reasons you may have delayed HIV testing

N=131	n	%
Nothing, I never put off testing	43	32.8
I didn't want to know the result	37	28.2
I had no illness which made me worry	36	27.5
I did not do anything risky	19	14.5
The process of getting tested is too much hassle	17	13.0
I didn’t want to have to discuss my sex life	17	13.0
I didn’t want to go to the doctor about this	14	10.7
I didn’t like needles	14	10.7
I didn’t like having to return for the results	13	9.9
I didn’t want my family or other people to know	7	5.3
My doctor didn't bulk bill	5	3.8
I didn’t want to be seen getting a sexual health check-up	5	3.8
Some other reason	8	6.1

Note: Multiple responses were possible.

We asked men if cost was ever a factor in their deciding where to go for HIV testing, or in determining their frequency of testing. The majority of men said cost was not a factor in deciding where to test (84.5%), though for one in eight this was a factor. Almost one in seven (13.8%) said cost was a factor that influenced the frequency with which they would test.

Sexually transmissible infections

More than two-thirds of men report having tested for a sexually transmissible infection (STI) other than HIV in the 12 months prior to their HIV diagnosis, including almost half (48.9%) who tested more than once in that period.

Table 16: Number of times tested for STIs in year prior to diagnosis

N=131	n	%
Once	25	19.1
Twice	32	24.4
Three times	23	17.6
Four or more times	9	6.9
No STI test in that period	40	30.5
No response	2	1.5

We asked men about their attitudes towards STIs, other than HIV. Most men understood the role STIs play in facilitating HIV transmission, with three quarters agreeing that STIs increase the risk of transmission. 79.0% believed that STIs were easy to treat, while almost two-thirds considered them to be merely an inconvenience. A third of men believed STIs to be an inevitable part of being a sexually active gay man. Just under half the men reported not really thinking about other STIs.

Table 17: Attitudes to STIs

N=131 %	Strongly disagree	Disagree	Agree	Strongly agree
I didn't really think about them	22.4	32.8	24.8	20.0
They increase the chances of picking up or passing on HIV	5.6	20.2	54.8	19.4
They are easy to treat	3.2	17.7	63.7	15.3
They are just an inconvenience	17.1	26.0	45.5	11.4
They are inevitable	19.7	44.3	28.7	7.4

High-risk event

Nearly all men (98.5%) were able to describe an event involving sex with another man, which they believe to be the event they acquired HIV. Most (76.3%) occurred in Australia, while almost a quarter happened in another country. For 14 men, the high-risk event occurred while on an overseas holiday, while eleven men describe a high-risk event occurring while they were living and working in another country. This important finding is currently under more detailed analysis, and will be reported on further.

Nearly half (45.8%) described the high-risk event as having occurred in someone's home, either their own home or the home of their sex partner. Nearly a third described the event as being at a sex-on-site venue (21.4%) or a beat (3.8%).

In two-fifths (38.3%) of high-risk events described, the men were engaging in group sex. Mostly, the men were having sex with casual partners at the high-risk event (69.5%), though in a quarter of cases (24.4%) fuckbuddies were there, and in 11.5% of cases, the participant’s boyfriend was there.

Most men (84.0%) engaged in some CLAI during their high-risk event. Thirteen men (9.9%) report only insertive CLAI on this occasion, 55.0% report only receptive CLAI, while 19.1% report reciprocal CLAI. More than a third of the men (37.4%) report receptive CLAI with ejaculation as their highest risk activity.

Table 18: Sexual behaviour at the high-risk event

N=131	n	%
Any anal intercourse	115	87.8
Any condomless anal intercourse	110	84.0
Receptive anal intercourse	102	77.9
Condomless receptive anal intercourse	97	74.0
Withdrawal	38	29.0
with ejaculation	67	51.1
Insertive anal intercourse	39	29.8
Condomless insertive anal intercourse	38	29.0
Reciprocal condomless anal intercourse	25	19.1

Two in five of the men (39.7%) used amyl at the high-risk event, 20.6% were using crystal, while 19.1% had taken erectile medication. Just 6.1% of the sample was using these three drugs in combination on that occasion. These drugs have been found to be most strongly associated to sexual risk behaviour and HIV seroconversion (Prestage et al., 2009b).

Source person

More than two-thirds of men reported that the person they believed to be the source of their infection was a casual partner. For one in eight, this partner was described as a fuckbuddy, while nine men believe they acquired HIV while having sex with their boyfriend. These proportions remain consistent with those reported among men recruited into the Seroconversion Study during 2007-2013.

Table 19: Relationship to the source person

N=131	n	%
Casual partner	89	67.9
Fuckbuddy	17	13.0
Regular partner/boyfriend	9	6.9
Other	4	3.1
Not provided	12	9.2

A quarter of the men who described the source person as a casual partner nonetheless described some prior knowledge of that partner, including one in six who had had sex with the partner prior to the high-risk event. Nonetheless, most casual partners on the occasion of the high-risk event were men who were previously unknown to them.

Among those men who describe the source person as being their regular partner or boyfriend, two-thirds of them believed this partner to be HIV-negative at the time of the risk event. Among men who described the source person as being a fuckbuddy, about a third believed him to be HIV-positive and about half were unaware of his HIV status. The majority of casual partners on the occasion of the high-risk event were men whose HIV status the respondents did not know.

Table 20: Knowledge of source person's HIV status

N=131	Casual partner		Fuckbuddy	Regular partner
	n	%	n	n
Thought HIV-positive	12	13.8	6	2
Thought HIV-negative	22	25.3	3	6
Didn't know	53	60.9	8	1
Not provided	2	2.2	-	-

Half of the men met the source person using mobile or online communication. About a quarter met the partner at a sex venue, or public sex space, while about one in ten met at a gay social venue.

Table 21: Meeting the source person

N=131	n	%
Using a mobile phone application (e.g., Grindr, Scruff)	31	23.7
Over the internet/online dating site (e.g., Manhunt, Gaydar)	30	22.9
At a sauna	16	12.2
At a sex club	15	11.5
At a gay bar	12	9.2
At a beat	6	4.6
Through friends	4	3.1
Other	10	7.6
Not provided	7	5.3

Diagnosis

At the time they were diagnosed with HIV, men most commonly sought testing at a sexual health clinic, or through their regular doctor.

Table 22: Testing service used at time of diagnosis

N=131	n	%
Sexual health clinic	56	42.7
My regular doctor	43	33.1
First available doctor	13	9.9
Interstate or overseas	5	3.8
Hospital	4	3.1
I did it myself, at home	2	1.5
Community event	1	0.8
Health check for visa	1	0.8
Other	2	1.6

The majority of men (87.8%) were diagnosed at a service that was in an inner city, or suburban area.

Table 23: Location of testing service

N=131	n	%
Inner city	82	62.6
Suburban area	33	25.2
Regional town	7	5.3
Overseas	3	2.3
Other /not provided	6	4.6

We asked men about the type of clientele that would tend to access that service, more specifically we asked if that practice had a high caseload of people with HIV, or a high proportion of gay men. Nearly half believed that at least half the clientele was comprised of gay men. The majority believed that at least some of the clientele were HIV-positive; with about one in five believing at least half were HIV-positive.

Table 24: Testing service clientele

	HIV-positive people		Gay men	
N=131	**n**	**%**	**n**	**%**
None	19	14.5	9	6.9
A few	44	33.6	35	26.7
About half	16	12.2	14	10.7
Most	12	9.2	37	28.2
All	0	0	10	7.6
I didn't know	36	27.5	21	16.0
Not provided	4	3.1	5	3.8

Concern about symptoms was the common reason for seeking testing, though for one in three, the test was part of their regular testing pattern. Only about one in five understood that they had put themselves at risk, and were seeking testing for this reason.

Table 25: Reasons for testing at time of diagnosis

N=131	n	%
I had an illness which made me worry	55	42.0
It was part of my regular testing pattern	41	31.3
I did something risky	27	20.6
I had sex with someone I knew or thought was HIV positive	17	13.0
My doctor suggested it	12	9.2
A partner told me they had tested HIV positive	8	6.1
A partner did something risky	4	3.1
My partner asked me to get tested	4	3.1
I changed partners	3	2.3
A condom slipped or broke	2	1.5

Note: Multiple responses were possible.

We asked men about their thoughts about getting tested at that time. For almost two-thirds, they had no expectation that their result would come back HIV-positive. Motivations for testing were: finding out their status to protect (and reassure) their partners, and also knowing their status so they could begin to treat their infection as early as possible.

Table 26: Thoughts about getting tested

N=131 %	Not at all	Somewhat	Very much
I had absolutely no expectation that I would test positive	37.1	26.7	36.2
If I'm positive, I should find out so I can protect my partners	29.2	36.3	34.5
The sooner I get tested, the sooner I can start treatment	45.5	32.1	22.3
Getting tested will ease my anxieties	33.0	46.1	20.9
I wanted to be able to reassure my partners that I didn't have HIV	57.5	23.9	18.6
I didn't think about it	50.9	31.8	17.3

When asked directly about their perceived likelihood that their result would be HIV-positive, one in five believed this to be very likely, with one in four believing this to be somewhat likely. Almost half (45.0%) believed it unlikely that their result would come back positive.

Table 27: Expectation of testing HIV positive

N=131	n	%
Very likely	27	20.6
Somewhat likely	33	25.2
Somewhat unlikely	24	18.3
Very unlikely	35	26.7
I didn't think about it	9	6.9
Not provided	3	2.3

In the majority of cases, men were tested and asked to return at a later date to hear their results. Fifteen men (11.5%) received their diagnosis following a rapid HIV test. Two men had tested themselves at home, using an HIV self-test, despite the fact that, at this stage, HIV home tests are not currently approved for general distribution in Australia.

Table 28: How test results were delivered

N=131	n	%
I went back at a later date to see the doctor/nurse	98	74.8
They gave me the results about 30 minutes later, after the test	15	11.5
I got the results over the phone	9	6.9
I did the test myself	2	1.5
They sent me a text message	1	0.8
They emailed me	1	0.8
Other/No response	5	3.9

When asked to reflect on how they felt when receiving their HIV-positive test results, more than a third said they felt OK about this, while one in six were frightened by the news. Men also described feeling supported, reassured, and a small number even felt relieved. Of the 13 men who received their diagnosis other than in person (i.e., by phone, email, text, or by themselves), five said ‘it was OK’, three felt ‘alone’ and three felt ‘frightened’.

Table 29: Feelings about receiving test result

N=131	n	%
It was OK	47	35.9
Frightened	23	17.6
Supported	17	13.0
Alone	11	8.4
Reassured	5	3.8
Relieved	5	3.8
Something else	11	8.4

Most men were satisfied with the way in which they received their test results, with one in seven indicating they would have preferred to have the result some other way. Of the 13 men who received their diagnosis other than in person, two said they would have preferred to have received the result some other way.

Table 30: Would you have preferred to get your results some other way?

N=131	n	%
No	93	71.0
Yes	19	14.5
I don't know	16	12.2
Not provided	3	2.3

Most commonly, the men expressed a preference to receive their diagnosis following a rapid test, with the result being known within about 30 minutes of the test being conducted.

Table 31: Most preferred method of getting results

N=35	n	%
Straight away, or about 30 minutes after test	15	42.9
From a repeat visit with the doctor/nurse	9	25.7
Some other way	6	17.1
At home, by myself	3	8.6
Via email	2	5.7

Note: Includes only those men who answered 'yes' or 'I don't know' to the question of preferring to receive their results some other way.

Men were asked about the topics discussed with their doctor at the time they received their diagnosis. Most commonly, the doctor would provide advice about contacting recent sex partners who may have been exposed, as well as providing information about sources of support and counselling. During this initial discussion, about half of the participants reported that the diagnosing doctor discussed clinical markers, such as viral load and CD4 cells and gave advice about disclosing status, including information about any legal requirements.

Table 32: Things discussed with diagnosing doctor at time of diagnosis

N=131	N	%
Contacting any recent sex partners	83	63.4
Advice about where to go for counselling and support	83	63.4
Advice about what organisations are available to help you	81	61.8
The issue of telling other people about your HIV status	79	60.3
What HIV treatment options might be available for you	66	50.4
Legal requirements around telling your HIV status to sex partners	63	48.1
What viral load means	62	47.3
What CD4 means	61	46.6
What this would mean for you having safe sex	57	43.5

Note: Multiple responses were possible.

Clinical markers

We asked men about their CD4 and viral load test results, both at the time of their diagnosis, or shortly after, and their most recent results.

Table 33: CD4 and viral load at diagnosis

CD4 count **N=131**	n	%
Less than 200	16	12.2
200-500	43	32.8
Over 500	44	33.6
I don't know	19	14.5
I haven't had a CD4 test	5	3.8
No response	4	3.1

Viral load **N=131**	n	%
Less than 400	8	6.1
400-10,000	16	12.2
Over 10,000	72	55.0
I don't know	24	18.3
I haven't had a viral load test	5	3.8
No response	6	4.6

Table 34: Most recent CD4 and viral load results

CD4 count **N=131**	n	%
Less than 200	9	6.9
201-350	15	11.5
351-500	21	16.0
Over 500	46	35.1
I don't know	13	9.9
I haven't had a CD4 test	5	3.8
No response	22	16.8

Viral load **N=131**	n	%
Undetectable	45	34.4
Detectable	46	35.1
I don't know	12	9.2
I haven't had a viral load test	5	3.8
No response	23	17.6

For many, at the time of their diagnosis, 'viral load' and 'CD4' were new terms. However, post-diagnosis, most men had a good understanding of what the terms represented as illustrated in the following quote from an in-depth interview conducted in 2014:

> *"I didn't know what CD4 was before I got diagnosed - no clue what role it played in my life. I didn't even know we had CD4. And then viral load: didn't have a clue either. So, at least for me: viral load [is] the infection level we're at, and the CD4 [is] health-wise where you're at; so the lower it is, then the sicker you will get"*

Treatments

Among these men, there were high levels of confidence in the efficacy of antiretroviral therapy; both for extending and improving the quality of life for those taking treatment, and in reducing the chances of transmitting HIV. In general, the men felt that treatments allowed people with HIV to take control, had few side effects and they were easy to take. The 2012 TAXI-KAB study (Thinking About eXposure to Infection – Knowledge, Attitudes, and Beliefs) sought to measure Australian gay men's knowledge, attitudes and beliefs about recent developments in HIV prevention, such as Treatment as Prevention and pre-exposure prophylaxis, as well as their understandings of risk and risk reduction. When these results are compared with the same questions of participants of the TAXI-KAB study (Bradley et al., 2012), it appears that this sample of recently diagnosed men are more optimistic about HIV treatments in terms of their tolerability, their ability to sustain health, and the role they play in reducing the chances of onward transmission, than were the men in the TAXI-KAB study.

Table 35: Thoughts about HIV treatments

N=131 **%**	Strongly disagree	Disagree	Agree	Strongly agree
They are effective, and they will extend HIV-positive men's lives	1.9	0	29.1	68.9
They improve HIV-positive people's health	1.9	2.9	26.9	58.3
Taking them feels like taking control of HIV	2.0	4.9	43.1	50.0
They can reduce the chances of someone passing on HIV	4.0	7.9	45.5	42.6
They are mostly easy to take	2.0	13.0	52.0	33.0
Taking them can reduce someone's chances of getting HIV	11.3	28.3	43.4	17.0
They have few serious side effects	8.9	27.7	51.5	11.9
They have serious side effects	7.1	37.5	48.2	7.1
They should be avoided until absolutely necessary	40.2	45.1	8.8	5.9
They are toxic and will eventually damage people's health	25.3	38.4	31.3	5.1
Taking them feels like giving in to HIV	57.4	29.7	9.9	3.0
They are complicated to take	28.0	55.0	16.0	1.0

Just over half of the men had begun antiretroviral therapy, with almost a third not yet having begun treatment. The remaining one in six men did not provide a response to this question.

Table 36: Are you on antiretroviral therapy?

N=131	n	%
Yes	68	51.9
No	39	29.8
Not provided	24	18.3

From February 2013, we began asking men the month and year they started treatments. Only 32 men provided sufficient data to allow us to calculate the time period between receiving their diagnosis and beginning treatment. Nonetheless, we calculated the mean time period as being 4.3 months. Of the 32 men, 15 had started treatment within the first month of diagnosis. After accounting for the approximately one-third who had not yet commenced treatment at the time of the survey, this suggests that about one-third of recently diagnosed men commence treatment within a month of receiving their diagnosis.

Table 37: Time since diagnosis

	On treatment (n=68)	Not on treatment (n=39)
N=107	n	n
Less than three months	10	24
4-12 months	24	5
13-24 months	13	5
More than two years	21	5

Note: Includes only those men who provided a response to the question about being on treatment.

Men on treatments

Most commonly, men reported beginning treatment based on the advice of their doctor. A wish to maintain a strong immune system and to reduce the chances of transmitting HIV to others were also strong motivators to begin treatment.

Table 38: Reasons for going on treatments

N=68	n	%
My doctor advised me to	51	75.0
Taking treatments will help me maintain a strong immune system	39	57.4
So I am less likely to transmit HIV to sex partners	31	45.6
My T-cells (CD4 count) had dropped fairly low	30	44.1
I generally have no problem taking medication	21	30.9
I decided to go on treatments myself	20	29.4
I experienced an AIDS-related condition	11	16.2
Someone at a community organisation advised me to begin treatments	3	8.3
A friend or my partner advised me to begin treatments	4	5.9

Note: Includes only those men who reported having commenced treatments, multiple responses were possible.

Prescribing guidelines changed in 2014, and information about the benefits of early treatment appear to be reaching the men in this sample. Some men felt confident that there was a consensus about the benefits of early treatment in the health promotion materials they came across.

> *"All of the material I was provided with (or found) seemed to point to benefits of early treatment"*

While some men would rely on the advice of their doctor, and follow their recommendations, many would actively seek advice and information from a range of sources to help inform their decisions around treatment initiation:

> *"My doctor gave me a range of options and outlined the potential outcomes for me. I then consulted with others that I had recently met who were at various stages of taking and not taking medications. I also spoke with a local support group representative."*

Men who were not on treatments

Thirty-nine men had not yet begun treatment at the time they completed the survey. The majority of these men had received their HIV diagnosis within the previous three months, though for about a quarter, it had been more than a year since their diagnosis (Table 37).

Most commonly, these men were being advised by their doctors to delay treatment until their clinical markers indicated that it was necessary.

Table 39: Doctor's most recent advice about treatments

N=39	n	%
I should wait until the clinical signs show that it is necessary	12	30.8
It’s too soon for me to decide	11	28.2
I should be on anti-retroviral treatments	4	10.3
Waiting for results of resistance tests before starting	4	10.3
Something else	8	20.6

Note: Includes only those men who reported not having commenced treatments.

More than two-thirds of men not on treatments agreed with their doctor’s most recent advice about treatments.

Table 40: Did you agree with your doctor's advice?

N=39	n	%
Strongly disagree	3	7.7
Disagree	5	12.8
Agree	19	48.7
Strongly agree	8	20.5
No response	4	10.3

Note: Includes only those men who reported not having commenced treatments.

More than a quarter of the men not on treatments had a CD4 count of less than 500 cells.

Table 41: Most recent CD4 and viral load results among men not on treatment

CD4 count N=39	N	%
Less than 200	1	6.9
200-350	4	10.3
351-500	6	15.4
Over 500	17	43.6
I don't know	6	15.4
I haven't had a CD4 test	5	12.8

Viral load N=39	n	%
Undetectable	1	2.6
Detectable	24	61.5
I don't know	8	20.5
I haven't had a viral load test	5	12.8
No response	1	2.6

Note: Includes only those men who reported not having commenced treatments.

Clinical markers were the most commonly cited reasons for men choosing not to begin treatment, as well as an absence of symptoms. A fifth of men were delaying available treatments in anticipation of better future treatment options.

Table 42: Reasons for not being on treatments

N=39	N	%
My CD4 count is still high	15	38.5
My viral load is still fairly low	10	25.6
I haven't experienced an AIDS-related condition	9	23.1
I want to preserve my future options for as long as possible	8	20.5
I generally avoid taking medications	5	12.8
My doctor advised against it	4	10.3
I decided not to go on treatments myself	2	5.1
A friend or partner advised against starting treatment	1	2.6
I never have unsafe sex with HIV-negative men	1	2.6

Note: Includes only those men who reported not having commenced treatments, multiple responses were possible.

Even among men who were not on treatments, there was a belief that treatment would reduce their risk of transmitting HIV and was a factor they would take into account in decisions to commence treatment in the future. Still, the men felt that being on treatments alone did not eliminate the risk of transmitting HIV and intended to use condoms when having sex with HIV-negative men, even if they had an undetectable viral load. They were much less likely to use condoms if they were having sex with HIV-positive men.

Table 43: Treatment and transmissibility

N=39 **%**	Strongly disagree	Disagree	Agree	Strongly agree
I would take HIV treatments to prevent me from passing on HIV	7.7	7.7	23.1	61.5
Even if I was on treatments, I would still use condoms with sex partners who were not HIV-positive	5.1	12.8	28.2	53.8
Even if I was on treatments, I would still use condoms with sex partners who were HIV-positive	25.6	25.6	23.1	25.6
If my viral load is undetectable, I would not always need to use condoms with sex partners who are not HIV-positive	5.6	20.2	54.8	19.4

Note: Includes only those men who reported not having commenced treatments.

Treatment as Prevention (TasP): knowledge and beliefs

When asked what evidence there was of the efficacy of HIV Treatment as Prevention (TasP), half of all the men in the sample believed there was evidence that HIV treatment reduced the risk of sexual transmission of HIV, during both heterosexual and homosexual sex. Nearly one in ten did not believe this had been demonstrated in either context, while a quarter did not know if evidence were available. When the same question was asked in the TAXI-KAB study in 2012, almost half of men responded that they ’didn’t know’, while one in five believed there had been no research results to support the efficacy of TasP (Bradley et al., 2012), so knowledge appears to be higher among the men in the Seroconversion Study.

Table 44: Knowledge of evidence of efficacy of TasP

N=131	**n**	**%**
Yes, in heterosexual sex	9	6.9
Yes, in male homosexual sex	8	6.1
Yes, in any sexual situation	54	41.2
No, this has not been shown for any type of sex	10	7.6
I don’t know	28	21.4
Not provided	22	16.8

While less than half believed it was unlikely for an HIV-positive man to pass on HIV while he is on treatments, slightly fewer believed transmission could still be likely while on treatments.

Table 45: Likelihood of an HIV-positive man passing on HIV while on treatments

N=131	n	%
Very unlikely	17	13.0
Unlikely	34	26.0
Likely	36	27.5
Very likely	10	7.6
I don't know	12	9.2
Not provided	22	16.8

Yet, just over a third of the men (35.9%) believed that men with HIV should begin treatments in order to reduce their chance of transmitting HIV to their partners; with a slightly lower proportion (32.1%) believing they should only do this if treatment was also going to improve their health.

Table 46: Starting treatments to reduce the chance of passing on HIV

	On treatment (n=68)		Not on treatment (n=39)	
N=107	n	%	n	%
Yes, always	31	45.6	15	38.5
They should commence treatments, but only if it is also good for their health	28	41.2	13	33.3
No, HIV treatments make no difference to the risk of passing on HIV	6	8.8	4	10.3
They should not commence treatments unless it is also good for their health	3	4.4	7	17.9

Note: Includes only those men who provided a response to the question about being on treatment.

Sex since diagnosis

After receiving an HIV diagnosis, studies have shown that many men tend to adapt their sexual behaviour in ways that reduce their likelihood of transmitting the virus to their sexual partners (Gorbach et al., 2011, Snowden et al., 2011). Men in the Seroconversion Study were asked whether they had changed their sexual behaviour since receiving their diagnosis. Post-diagnosis, sexual behaviour change mostly appears to take the form of risk reduction strategies aimed at protecting partners.

Table 47: Sexual behaviour since diagnosis

N=131	n	%
Reduce the number of partners I have sex with	69	52.7
Sought out HIV-positive men for sex	51	38.9
Stop having sex altogether	48	36.6
Avoid sex with HIV-negative partners	41	31.3
Tell people my HIV status before sex more often	36	27.5
Reduce my drug use	27	20.6
I have become more of a bottom	20	15.3
Avoid telling people my HIV status before sex more	19	14.5
Increased my drug use	12	9.2
Increased the number of partners I have sex with	9	6.9
Avoid sex with HIV-positive partners	8	6.1
I have become more of a top	6	4.6
Sought out HIV-negative men for sex	3	2.3

Note: Multiple responses were possible.

Men described nuanced strategies designed to minimise the chances of putting their partner, and themselves, at risk, for example:

> *"I was very, very careful of neg and unknown guys before I became undetectable. I don't have sex with poz guys unless they are undetectable and on ART. I never want to infect anyone and always disclose my status and discuss unfamiliar topics to guys before sex so they know about the risks of sex with me and they can use that knowledge in assessing sex with future partners. So, my sexual behaviour changed to being totally safe with neg guys when I was first diagnosed and before I stabilised as undetectable. Once undetectable if a (believed to be) neg guy asked to fuck me raw I*

> *discuss their risk of HIV infection and my risk of catching other STIs (or an ART resistant strain of HIV) from them."*

Disclosure

Men were asked about what influenced their decisions when considering disclosing their HIV status to others. Most did so out of consideration of their partners, and their own peace of mind. Fear of stigma or rejection and legal sanction were much less important considerations for most men.

Table 48: Factors influencing decisions around disclosure

N=131 %	Not important	Somewhat important	Very important
Doing the right thing	2.9	18.4	78.6
Respect for my partner	3.9	17.6	78.4
My own piece of mind	4.9	18.6	76.5
The possibility of being discriminated against or abused	29.4	26.5	44.1
The law	18.8	38.6	42.6
Fear of being rejected	35.3	29.4	35.3

A number of men provided information about their experiences of disclosing their HIV status to others. While there were examples of positive experiences, men spoke of carefully selecting who they would disclose to:

> *"I have limited disclosure to a very small number of people - that is why I think I have had no adverse experiences in that regard."*

Some men described bad experiences of disclosing; including poor reactions even from a health professional:

> *"Very mixed responses which has surprised me, especially from within the gay community. One situation I found astonishing, I had to go to the emergency department at [regional] hospital not long after being diagnosed due to an accident. I had to tell the female doctor who was attending to me, I found it hard as it was then the first time I had said it. Her reaction was really bad, she stepped back from me and excused herself and left the room. Ten minutes later someone else came in."*

This man felt empowered by disclosing, and in doing so, actively trying to confront stigma:

> *"I pretty much tell anyone (and it's on all of my profiles) because, just like being gay, you change the power balance by being out. I'm not ashamed of myself and no one can try and make me feel ashamed if I'm upfront and confident about who I am. I can best provide support for other poz (and gay) people by being 'out and proud'."*

Online profiles

Men mostly use the internet and/or mobile phone applications to meet sex partners, and are more likely to disclose their HIV status when meeting partners online, compared to when meeting men at physical venues (Horvath et al., 2008). We asked men about how they described their HIV status on their online profiles on hook-up sites, both before their diagnosis, and after.

Table 49: HIV status disclosure in online profiles prior to diagnosis

N=131	n	%
Some or all said 'HIV-negative'	69	52.7
I left all or some of them blank	31	23.7
Some or all said 'Ask me'	17	13.0
I didn’t have any online of mobile app profiles	5	3.8
Something else	6	4.6

Prior to their HIV diagnosis, the majority of men (52.7%) disclosed their HIV-negative status on their online profiles. However, following diagnosis, less than a quarter of men (22.1%) clearly stated their HIV-positive status on their profiles.

Table 50: HIV status disclosure in online profiles since diagnosis

N=131	n	%
Removed my profile from a particular site/app	32	24.4
I left all or some of them blank	31	23.7
Changed my status to 'Ask me'	30	22.9
Changed my status to 'HIV-positive'	29	22.1
Removed any reference to HIV status	24	18.3
Kept if the same as before	22	16.8
Set up a new profile on a different site/app	10	7.6
Set up a new profile on the same site/app	7	5.3
Something else	6	4.6

Note: Multiple responses were possible.

Support

The most valued source of support for recently HIV-diagnosed men comes from peers. When asked about the methods they had used to seek contact with peers, men were more likely to report contacting HIV organisations and support groups for people with HIV. Half the men reported having sought contact with peers via the Internet.

Table 51: Connecting with other positive men

N=131	n	%
Contacting HIV organisations	44	33.6
Looking for HIV-positive support groups	39	29.8
Looking on gay dating websites	32	24.4
Communicating through online forums	30	22.9
Something else	10	7.6

Note: Multiple responses were possible.

Workshops for newly diagnosed people

Men are asked if they have attended a workshop for people newly diagnosed; just under half of those who provided a response to the question said they had. Almost half of those who had not attended a workshop intended to do so in the future.

Those who had participated in a workshop were invited to comment on their experience, and their comments were overwhelmingly positive:

> *"Best thing I ever done. My knowledge of HIV was 1990 era so that was a big help to me. A lot of info and wonderful folks to be with and super caring."*

Even those who had prior knowledge of HIV and considered themselves to be widely read on the topic, learned important new information about transmission risk:

> *"It was very supportive. Most of the topics I have read about extensively since my partner is positive. However, they covered how risky certain activities are to transmitting the virus which I did not find during my research."*

> *"Very informative and made me aware I was not the only person affected and what to do in the future for myself."*

Hearing about people’s lived experiences had more resonance for some men, rather than hearing advice from a medical expert:

> *“More beneficial than talking with my HIV specialist as I got to hear experiences of other men and know I'm ok and I'm not alone. Gave me strength, hope, information and education and the possibility of new friendships :)”*

For some, the workshops provided their first opportunity to connect with other HIV-positive men:

> *“Was the first opportunity I had to meet up with other positive guys going through similar experiences.”*
>
> *“Empowering and good to share experiences with like-situationed people.”*

Overall, the men who participated in workshops benefitted from the experience, and believed the experience had given them the information, confidence and connections to move forward:

> *“It was an amazing experience for me I learned so much about HIV and it gave me the confidence to be a positive man, it was also amazing to meet other people who know what I'm going through.”*
>
> *“I learnt a lot about myself and the way I think about HIV.”*

The only recommendation from the men was that more opportunities for peer networking be made available:

> *“Do more of them and more like them.”*

Comparison across jurisdictions

Key variables were compared across the states and territories. The men in Queensland appeared to be slightly older, with the men in Western Australia being younger. The majority of the Indigenous Australian participants were in New South Wales. Fewer of the men in Victoria appeared to have recently tested for HIV, prior to their diagnosis. Men in New South Wales and Victoria were more likely to have attended a peer workshop for newly diagnosed people.

Given the small sample size being reported in this report, it is not possible to clearly identify any significant differences across jurisdictions. The final study report will include a comprehensive comparison of results from each jurisdiction.

Table 52: Differences across jurisdictions

N=131	NSW (n=49)	VIC (n=40)	QLD (n=23)	WA (n=10)	ACT (n=4)	NT (n=2)	TOTAL
Age in years (mean)	37.0	38.0	41.7	32.4	38.0	34.5	37.8
Indigenous Australian	5	1	2				8
Born							
Australia	61.2%	74.4%	87.0%	6	3	1	71.3%
Elsewhere	38.8%	25.6%	13.0%	3	1	1	28.7%
Sexuality							
Gay	93.9%	92.1%	91.3%	9	3	1	92.1%
Bisexual	6.1%	5.3%	8.7%		1		7.1%
Tested within one year of diagnosis							
Yes	69.4%	60.0%	65.2%	5	3	1	72.3%
No	30.6%	40.0%	34.8%	2	1		27.7%
On treatments[1]							
Yes	61.9%	62.5%	73.7%	4	1		51.9%
No	38.1%	37.5%	26.3%	4	2		29.8%
Completed workshop							
Yes	55.6%	55.6%	0	1	1	1	18.3%
No	44.4%	44.4%	2	3	1		20.6%

1: It is important to remember that many of these men completed the survey within the first few weeks of receiving their diagnosis

Conclusions

The revisions to the survey questionnaire that were implemented in 2013 have allowed us to capture data that address each of the key priority areas in HIV prevention and health promotion.

Pre-Exposure Prophylaxis

Just a quarter of the men in the Seroconversion Study had heard of PrEP at the time of their high-risk event. Nonetheless, the risk profile of many of these men prior to their HIV diagnosis suggests that they may have been excellent candidates for PrEP, which may also have protected some of them from infection. With demonstration projects now underway in three Australian states, this is likely to change, with more men able to access PrEP.

Testing

The provision of a range of HIV testing options has been embraced by men, with one in ten men in this sample receiving their diagnosis following a rapid test. Fear of testing positive remains a deterrent for almost a third of men, leading to some delays in testing.

Treatments

Recent efforts to build community awareness about the benefits of early initiation of HIV treatments appear to have led to a shift in thinking about current treatments, with half the men in this sample prepared to initiate treatment soon after diagnosis. Nonetheless, almost a third of the men were not yet on treatment, though all were engaged in monitoring and many were intending to treat. Of the men not yet on treatments, a quarter had been diagnosed HIV-positive more than one year prior to them completing the survey; while a similar proportion reported their last CD4 count as less than 500 copies.

Disclosure

Most men do disclose their HIV status to others, mainly for altruistic reasons. However, men continue to report poor responses from some of those to whom they disclose.

Support

There is enormous value placed on learning and sharing about living with HIV within a peer environment. The role of peer support cannot be underestimated; it appears to play a significant role in making decisions about treatments, understanding sexual risk, and providing confidence and support to assist with disclosure.

Recommendations

For policy and program development

- Continue to provide, and expand, the range of HIV testing opportunities for gay and bisexual men; including those in community settings and those using rapid HIV tests; and including making home self-testing available to those who prefer this option.
- Continue work to reduce the psychosocial barriers to testing. In particular, support programs to increase factual knowledge about the impact of HIV treatments on the consequences of HIV infection, and the benefits of early treatment, to counter the misinformation that is the likely basis of much of the fear of HIV testing.
- Continue efforts to increase men's accurate understandings of treatments so, at the point of diagnosis, informed decisions can be more easily made.
- Continue work with s100 prescribers to provide education around developments in HIV treatments and changes in treatment policy.
- Develop a strategy to ensure the continuation of the provision of PrEP, following the conclusion of current demonstration projects, as well as the expansion of access to PrEP to others seeking access who have been unable to participate in the current demonstration projects.
- Continue to incorporate HIV risk reduction messages in health promotion, including increasing the community level understanding of PrEP and undetectable viral load.
- Further investigation into the proportion of new HIV diagnoses made among those who acquired their infection overseas, and more detailed analysis of the factors associated with this.
- Continue to support research into the implementation of advances in testing and biomedical prevention technologies.
- Continue to offer peer support to people newly diagnosed. Identify opportunities to develop and strengthen existing programs, as well as explore others models of service delivery that will enable all recently diagnosed individuals in Australia the ability to access peers.
- Continue efforts to reduce stigma towards, and ignorance about, people with HIV, so that men need not feel afraid to disclose their status.
- Data that indicate low levels of discussion between doctors and patients around important issues such as contact tracing, treatment options and precautions around avoiding onward transmission suggest that additional work could be conducted with clinicians to encourage these

discussions to occur. Additionally, other opportunities should be provided to allow for these discussions to occur, especially with peers.

- Work with partners to develop and improve processes for study recruitment to occur through clinical settings, in order to increase participation, particularly among harder to reach populations, such as women and heterosexual men.

For the Seroconversion Study

Though the current Seroconversion Study is scheduled to end in June 2015, it remains important to continue to collect data from people in Australia who are newly HIV-diagnosed.

- Maintain and expand current processes for collecting data from people in Australia newly diagnosed with HIV.
- Develop a framework to evaluate the impact of peer-based interventions and their ability to increase treatment uptake and increase knowledge around safer sex practices.

References

Australasian Society for HIV Medicine (2014). Australia puts into action bold new reforms on HIV New PBS indication for HIV treatments. Sydney, Australia.

Bilardi, J, Walker, S, Read, T, Prestage, G, Chen, M, Guy, R, . . . Fairley, C (2013). Gay and Bisexual Men’s Views on Rapid Self-Testing for HIV. AIDS and Behavior 17(6): 2093-2099.

Bradley, J, Prestage, GP, Bavinton, B, M., H, Murphy, D, Guy, R, . . . Batrouney, C (2012). TAXI-KAB (Thinking About eXposure to Infection: Knowledge, Attitudes, and Beliefs) Report. The Kirby Institute, University of New South Wales Sydney.

Colbert, C (2014). CDC updates term for 'unprotected sex'. The Bay Area Reporter. San Francisco, USA.

de Wit, J, Mao, L, Adam, P and Treloar, C (2014). HIV/AIDS, hepatitis and sexually transmissible infections in Australia: Annual report of trends in behaviour 2014 (Monograph 6/2014). Centre for Social Research in Health, UNSW Australia Sydney.

Down, I, Ellard, J, Triffitt, K, Brown, G and Prestage, GP (2014a). Factors associated with recent previous HIV testing among a sample of recently HIV-diagnosed gay men in Australia: A cross-sectional study. Sexually Transmitted Infections Online first 4th November 2014.

Down, I, Prestage, GP, Triffitt, K, Brown, G and Ellard, J (2014b). Recently diagnosed gay men talk about HIV treatment decisions. Sexual Health 11(2): 200-206.

Gorbach, PM, Weiss, RE, Jeffries, R, Javanbakht, M, Drumright, LN, Daar, ES and Little, SJ (2011). Behaviors of recently HIV-infected men who have sex with men in the year postdiagnosis: effects of drug use and partner types. J Acquir Immune Defic Syndr 56(2): 176-182.

Grant, RM, Lama, JR, Anderson, PL, McMahan, V, Liu, AY, Vargas, L, . . . Glidden, DV (2010). Preexposure Chemoprophylaxis for HIV Prevention in Men Who Have Sex with Men. New England Journal of Medicine 363(27): 2587-2599.

Holt, M, Lea, T, Mao, L, Zablotska, I, Prestage, G and De Wit, J (2014). Consistent and inconsistent use of HIV risk reduction strategies by Australian gay and bisexual men who report unprotected anal intercourse with casual male partners. AIDS and Behavior Under review.

Horvath, KJ, Oakes, JM and Rosser, BR (2008). Sexual negotiation and HIV serodisclosure among men who have sex with men with their online and offline partners. J Urban Health 85(5): 744-758.

Kalichman, SC, Johnson, JR, Adair, V, Rompa, D, Multhauf, K and Kelly, JA (1994). Sexual sensation seeking: scale development and predicting AIDS-risk behavior among homosexually active men. J Pers Assess 62(3): 385-397.

Kalichman, SC and Rompa, D (1995). Sexual sensation seeking and Sexual Compulsivity Scales: reliability, validity, and predicting HIV risk behavior. J Pers Assess 65(3): 586-601.

Prestage, GP, Brown, G and Keen, P (2012). Barriers to HIV testing among Australian gay men. Sexual Health 9(5): 453-458.

Prestage, GP, McCann, PD, Hurley, M, Bradley, J, Down, I and Brown, G (2009). PASH: Pleasure and Sexual Health. National Centre in HIV Epidemiology and Clinical Research, The University of NSW Sydney, Australia.

Prestage, GP, Jin, F, Kippax, S, Zablotska, I, Imrie, J and Grulich, A (2009). Use of illicit drugs and erectile dysfunction medications and subsequent HIV infection among gay men in Sydney, Australia. Journal of Sexual Medicine 6(8): 2311-20.

Snowden, JM, Raymond, HF and McFarland, W (2011). Seroadaptive behaviours among men who have sex with men in San Francisco: the situation in 2008. Sex Transm Infect 87(2): 162-164.

The Kirby Institute (2014). HIV, viral hepatitis and sexually transmissible infections in Australia: Annual Surveillance Report 2014. The Kirby Institute, University of New South Wales Sydney, Australia.

Zablotska, IB, Prestage, GP, de Wit, J, Grulich, AE, Mao, L and Holt, M (2013). The informal use of antiretrovirals for preexposure prophylaxis of HIV infection among gay men in Australia. J Acquir Immune Defic Syndr 62(3): 334-338.

For more information contact:
Associate Professor Garrett Prestage
Phone: +61 2 9385 0900
Facsimile: +61 2 9385 0920
Email: g.prestage@unsw.edu.au

This publication is also available online:
http://www.kirby.unsw.edu.au/publications
http://www.latrobe.edu.au/arcshs/publications

ISBN 978-0-7334-3573-7