Current gaps in the Australia's HIV prevention response

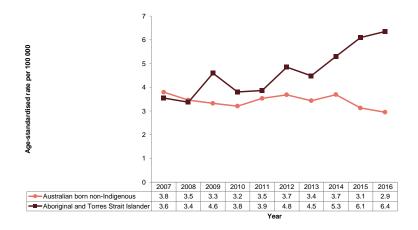
Andrew Grulich
HIV Epidemiology and Prevention Program
Kirby Institute, UNSW
November 2017
Kirby Institute



- Identifying emerging or potential prevention gaps using HIV surveillance
- · Gaps in
 - HIV Testing
 - HIV Treatment
 - PrEP
 - Safe sex



Newly diagnosed HIV notification rate per 100 000 Australian-born population, 2007–2016, by Aboriginal and Torres Strait Islander status

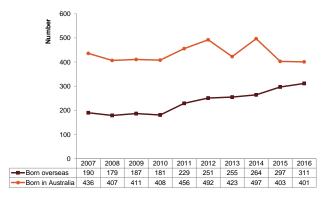


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New HIV diagnoses in men who reported male-to-male sex as an exposure risk, 2007–2016, by region of birth

Increasing diagnoses in overseas born-men



Year

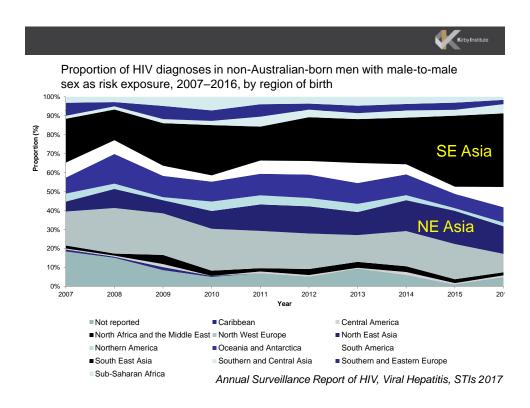


Newly diagnosed HIV by language spoken at home

Increasing diagnoses in people speaking a language other than English

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total ^b										
	947	901	945	908	980	1066	1030	1084	1027	1013
Language spoken at home										
English										
	727	688	717	679	778	797	527	835	735	735
Other language										
	60	55	94	79	83	102	87	116	154	149
Not reported										
	160	158	134	150	119	167	416	133	138	129

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Newly diagnosed HIV by age

Increasing diagnoses in those aged < 30

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total ^b	947	901	945	908	980	1066	1030	1084	1027	1013
Age group in years										
0-14	7	7	10	6	8	1	6	3	3	5
15-19	9	13	13	13	17	22	23	18	29	14
20-29	215	240	253	231	263	319	270	328	308	325
30-39	320	296	305	286	305	322	291	337	292	305
40-49	248	219	220	230	237	225	244	216	205	193
50+	148	126	144	142	150	177	196	182	190	171

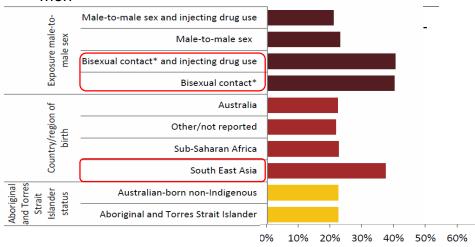
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Gaps in testing





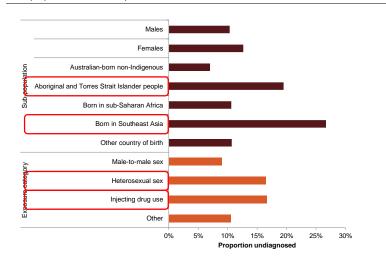
Gaps in testing: late diagnoses in gay and bisexual men



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Estimated proportion of people living with HIV who are undiagnosed, 2016, by subpopulation and exposure



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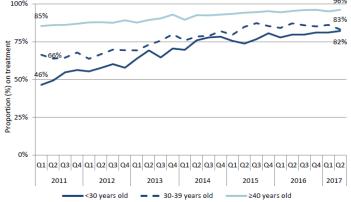
Gaps in treatment





Percent on HIV treatment by age group

Young men are less likely to be on treatment (but are catching up)



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

http://www.health.nsw.gov.au/endinghiv/Documents/q2-2017-nsw-hiv-data-report.pdf



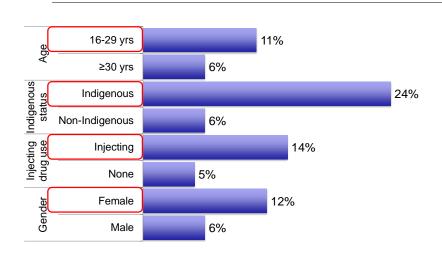
Predictors of not being on treatment by six months, NSW, 2013-2105

- Calendar year (strongest)
- Language spoken at home non-English
- · Higher CD4 count at diagnosis

B Telfer et al, Bradman theatre, Tuesday 230pm



Predictors of detectable viral load among people with HIV



D Callander, the ACCESS collaboration

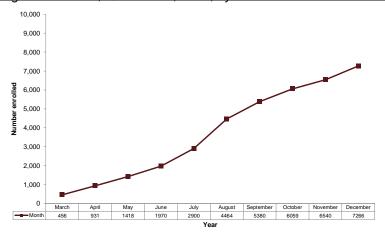


Gaps in PrEP





Cumulative number of gay men enrolled in PrEP implementation programs in NSW, Qld and Vic, 2016, by month



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Emerging gaps in PrEP uptake

- Residing in a state/territory without easy access to PrEP
- In comparison to NSW GBM newly diagnosed with HIV, men who enrol in the EPIC-NSW study are less likely to be
 - Overseas born, particularly Asian-born
 - Aged < 30 years
 - No difference in indigenous status

R Guy et al, Royal Theatre, Monday 415pm

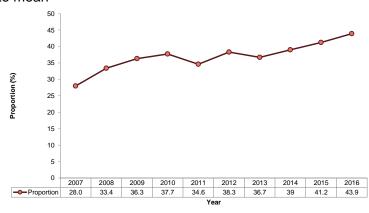
Gaps in safe sexual behaviour





"Safe sex"

Trends in condomless sex with casual partenrs: not what it used to mean



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Potential gaps in "safe sex"

 In the new environment, requires analysis of characteristics of gay men who report condomless anal sex with casual partners and do not use PrEP

M Holt, Bradman Theatre, Tuesday 1155am



Gaps in our understanding of where the gaps are

- Understanding of gaps nationwide
- Understanding of gaps in bisexual men
- Understanding of gaps in heterosexuals and others
- Understanding of social and cultural dimensions of the gaps and how to address them







Behaviour Working Group

investigators and steering C'ttee

Professor Andrew Grulich Dr Christine Selvev Professor David A Cooper A/Professor Rebecca Guy A/Professor Garrett Prestage A/Professor Martin Holt Ms Jo Holden Professor Anthony Kelleher A/Professor Iryna Zablotska Mr Tim Duck A/Professor Levinia Crooks Mr Craig Cooper Ms Karen Price Professor John de Wit Professor John Kaldor Mr Bill Whittaker Dr Denton Callander Dr Heather-Marie Schmidt Ms Barbara Telfer

HIV Treatment Working Group Professor Tony Kelleher

PrEP Working Group

Professor Andrew Grulich Ms Jo Holden

A/Professor Martin Holt Mr Scott McGill

Ms Karen Price

Dr Ben Bavinton

Mr Dale Halliday Mr David Crawford

Mr Phillip Keen

A/Professor Iryna Zablotska Dr Heather-Marie Schmidt

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Professor Tony Kelleher
Ms Jo Holden
Dr Limin Mao
Professor Andrew Grulich
Mr Craig Cooper
A/Professor Rebecca Guy
Ms Marlene Velecky
Mr Neil McKellar-Stewart
Ms Katy Roy
Ms Barbara Telfer
Ms Nishtha Dwivedi
Mr Phillip Keen

HIV Testing Working Group A/Professor Rebecca Guy

A/Professor Garrett Prestage Mr Tim Duck Mr Tim Duck Dr Denton Callander A/Professor Martin Holt Professor Andrew Grulich Professor Andrew Grulich Mr James Gray Dr Ben Bavinton Ms Vickie Knight Ms Karen Price Mr Philip Cunningham Mr George Andrews Mr Stephen Watkins Mr Johann Kolstee MS Vickie Bowden Mr Jack Bradley Professor John de Wit Mr Phillip Keen Mr Phillip Keen

Molecular Epidemiology Working Group

Professor Tony Kelleher Ms Jo Holden Dr Angie Pinto Professor Andrew Grulich Dr Christine Selvey Mr Craig Cooper Mr Tim Duck Ms Karen Price Dr Heather-Marie Schmidt A/Professor Levinia Crooks Mr Nail Frase



Professor David Wilson

Mr Alan Brotherton

Ms Tina Gordon

Mr Phillip Keen





Mr Phillip Keen



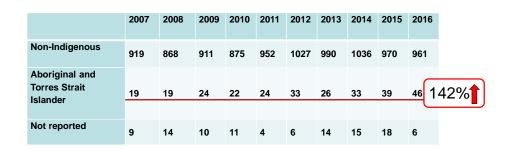
Extra slides





Newly diagnosed HIV in indigenous people

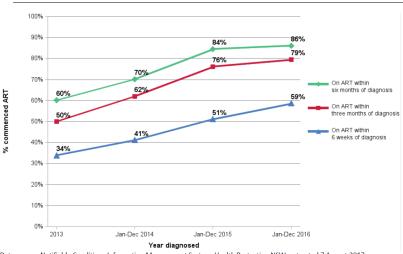
Increasing diagnoses in indigenous people



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Percent on treatment 6 months after HIV diagnosis, NSW



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

http://www.health.nsw.gov.au/endinghiv/Documents/q2-2017-nsw-hiv-data-report.pdf



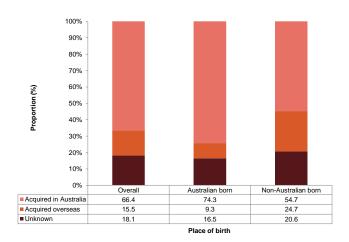


Summary: gaps in the prevention response in gay and bisexual men

	Increasing diagnoses	Testing gap	Treatment gap	PREP gap	Risk behaviour gap
OS born, non-English speaking	+ (Asian born)	+	+	+ (Asian born)	_
Indigenous	+	+	+	-	-
Age < 30	+	+	+	+	-
Bisexual	?	+	?	?	?



Likely place of HIV acquisition in newly diagnosed HIV in men who reported male-to-male sex, 2014–2016, by country of birth



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