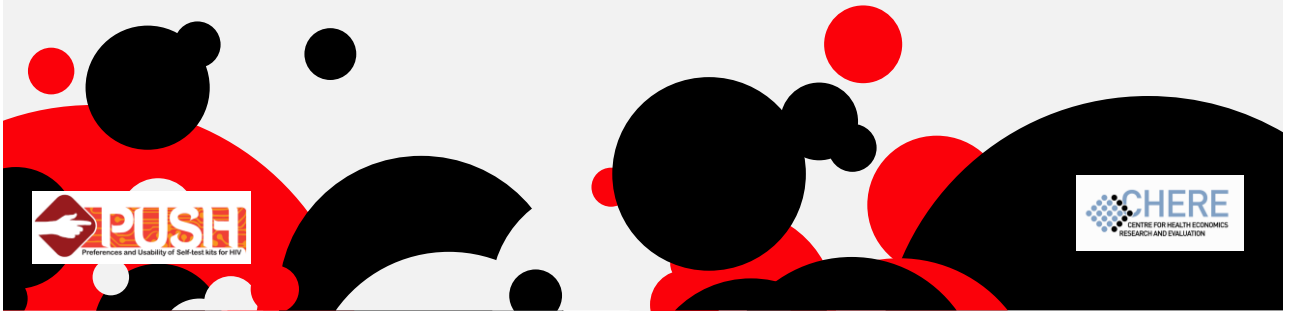


# What Australian gay and bisexual men want from HIV self-test kits: a discrete choice experiment (DCE)



Jason J Ong, Richard De Abreu Lourenco, Debbie Street, Muhammad S Jamil, Kirsty Smith, Fern Terris-Prestholt, Rebecca Guy for the PUSH Study Group



SETTING THE SCENE

2

## Background & Aim

- HIV disproportionately affects gay and bisexual men (GBM) in Australia
- HIV self-testing (HIVST) can increase HIV testing among GBM (Jamil et al, HIV Lancet, 2017; 4(6))
- Little is known about how HIV self-testing (HIVST) should be implemented in Australia.
  - Aim: to assess preferences of Australian GBM for HIVST relative to other testing methods, and for how to access HIVST.



## Background – A DCE?

- Choices e.g. in care, reveal how we trade-off between characteristics of care e.g. test accuracy, information, care access, modality.
- DCEs – a survey method from marketing, environmental and health economics - systematically measure those trade-offs.
  - Allow us to test what people prefer before something has come into us e.g. HIVST kits.
  - Results can be used to predict uptake (“choice”) or to assess value for money.



## Methods

### Recruitment:

- Individuals, 18 yrs and over
- Phase I: Weekly GRINDR advertisements over 6 weeks in Jan 2018 (with link to online survey).
- Phase I: Recruitment via sexual health clinics (**ongoing**).

### Two survey versions:

- Choosing between methods of testing.
- Choosing between self-testing kits.
- Respondents randomised to version.

16 scenarios per respondents.



## DCE 1: HIV Testing

Attribute	Levels
Cost:	Free; \$20; \$40; \$60
Speed of results:	1 minute; 20 minutes; 1 day; 3 days
Window period (time it takes after a risky event before test shows if you've been infected):	4 weeks; 6 weeks; 12 weeks;
Mode of test:	Venepuncture; oral swab; finger prick
% of tests that are correct:	92%; 95%; 99%; 99.9%
Specimen collected by:	Healthcare worker; yourself; peer

## DCE 2: Self-Testing Kits

Attribute	Levels
Cost:	Free; \$20; \$40; \$60
Test Access:	Order online; vending machine; pharmacy shelf; pharmacy staff; medical clinic; comm. org; sex-on prem.ven.
Packaging:	Large plain; large branded; small plain; small branded.
Information:	Written leaflet; online video; online chat.



Which of these two options would you prefer?

	HIV self-testing Option 1	HIV self-testing Option 2
Information on how to use the kit	Written instruction leaflet (text and pictures)	Option of having an online chat with peer
Packaging	A small branded package (size of egg carton containing 2 eggs)	A small plain package (size of egg carton containing 2 eggs)
Access	Order online with kits mailed to your home	Kits available from staff of a medical clinic
Cost (out of pocket)	\$60	\$40
Which would you choose?	<input type="radio"/>	<input type="radio"/>

If it was available, would you choose the option you preferred above over your current approach to HIV testing?

Select only one answer

Yes

No



## Methods

Analysed choice taking account of repeated responses across individuals, treating attributes as “random”:

- Allows for the extent to which an attribute matters to differ across individuals.

Explored importance of different respondent characteristics in driving preferences:

- Frequent vs infrequent testing (more than 2 years prior);
- Migrants (arriving in Australia last five years);
- Number of partners in the last six months (>1).



## Demographics (n=1,002)

	n (%)
Mean age in years (sd)	36.8 (12.0)
Sex at birth	
- Male	996 (99.4)
- Female	6 (0.6)
Last HIV test	
- Within last 2 years	784 (78.2)
- More than 2 years ago	76 (7.6)
- Never tested	142 (14.2)
Gender Identity	N= 769
- Male	754 (98.1)
- Female	1 (0.1)
- Non-binary	14 (1.4)
Country of birth	
- Australia	683 (68.2)
- Outside Australia	319 (31.8)
Highest level of education	
- Trade certificate/diploma/TAFE	229 (22.9)
- University	277 (55.0)

	n (%)
Sexual identity	
- Gay/homosexual	752 (75.1)
- Bisexual	210 (21.0)
- Straight/heterosexual	16 (1.6)
- Queer	14 (1.4)
- Other	10 (1.0)
Ave. no. men who you had anal sex in the last 6 months (sd)	16.5 (316.0)
Median no. men who you had anal sex in the last 6 months (IQR)	3 (1-6)
Group sex in the last 6 months	
- Every week	13 (1.3)
- Monthly	30 (3.0)
- No more than 5 times	167 (16.7)
- Once	147 (14.7)
- Never	645 (64.4)



All factors matter in choosing a testing method.

Further testing showed differences across resp.

- Migrants more sensitive to costs (cheaper better).
- Infrequent testers more sensitive to window period (able to detect infection sooner).



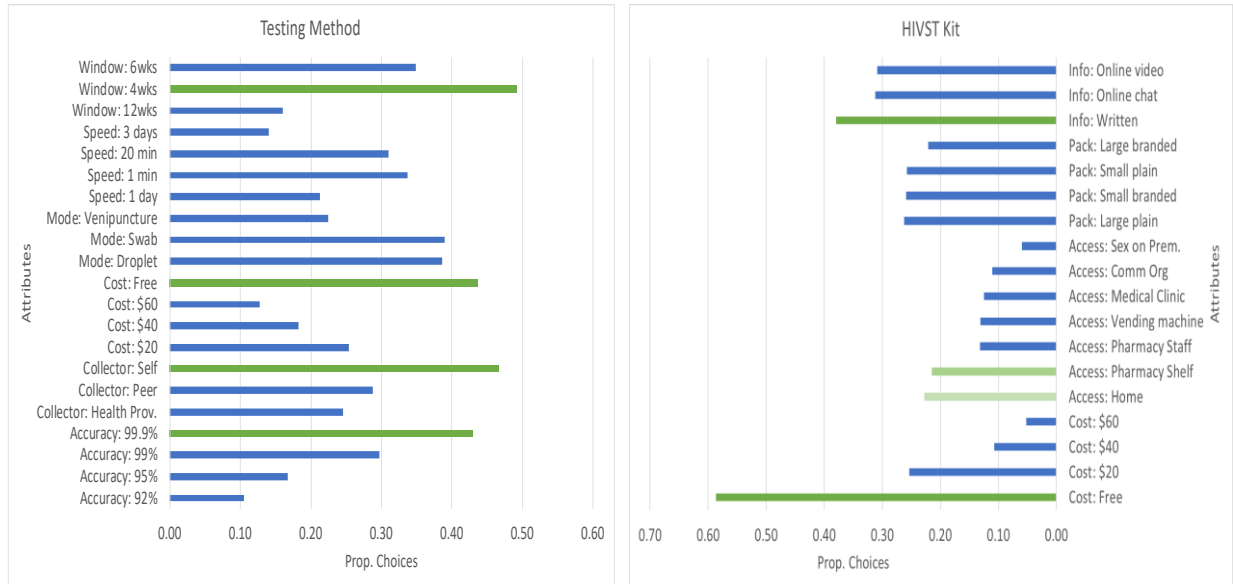
Some level of each factors matter to choice of test kit.

Further testing showed differences across resp.

- Infrequent testers sensitive to where kits available (favour vending machine, avoid medical centre)
- Those with many partners sensitive to where kits available (avoid pharmacy).



## Impact on choices



## Conclusion

- In choice of testing method – prefer test that has shorter window period, self-administered, is more accurate and cheaper (free).
- In choice of HIVST kit – prefer kits that can be accessed more privately and cheaply (free).
- Observe differences across individuals – migrants more sensitive to costs, infrequent testers and those with many partners more sensitive to where HIVST are available.
- Information from a large (n=1,002) sample on preferences:
  - Phase II from sexual health clinic recruitment will add to data.
  - Use preferences to inform communication and roll-out to influence uptake.

## Acknowledgements

Australian NHMRC Research Grant 568971



PUSH study group also includes: Benjamin Bavinton, Marcus Chen, Eric Chow, Damian Conway, Christopher Fairley, Andrew Grulich, Martin Holt, Adam Hynes, Karl Johnson, John Kaldor, Ruthy McIver, Anna McNulty, Garrett Prestage, Mark Stoove.

Individuals who completed the survey!

