



The risk of HIV following refusal of an HIV test by MSM attending sexual health services in England

Flavien Coukan¹, Ross Harris², Malebogo Tlhajoane¹, Dana Ogaz¹, Peter Kirwan¹, Nicky Connor¹, Hamish Mohammed¹

¹ Blood Safety, Hepatitis, STI and HIV Division, Public Health England

² Statistics, Modelling and Economics Department, Public Health England

Introduction

- Joint BASHH/BHIVA and NICE guidelines focus on the promotion and facilitation of HIV testing.



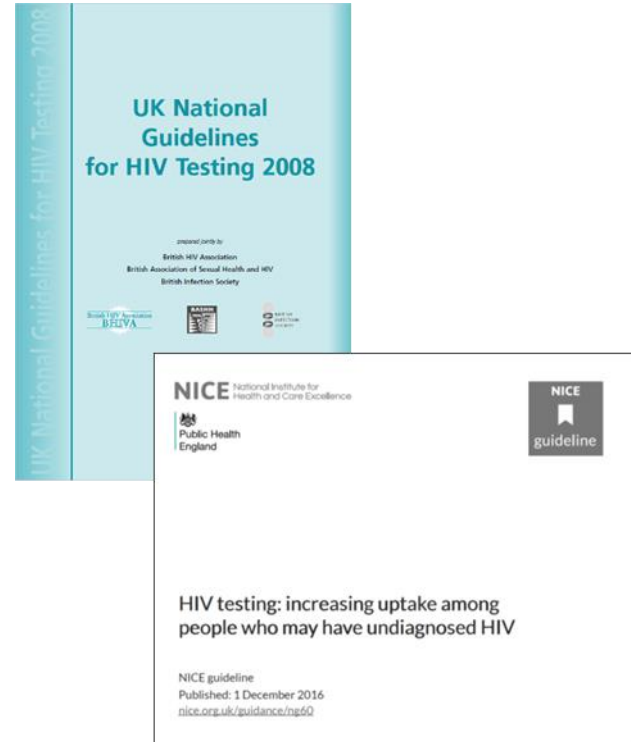
Introduction

- Joint BASHH/BHIVA and NICE guidelines focus on the promotion and facilitation of HIV testing.
- Only a small proportion of clinics have written policies on how to manage patients post HIV test refusal (Hoyos Miller et al. 2017).



Introduction

- Joint BASHH/BHIVA and NICE guidelines focus on the promotion and facilitation of HIV testing.
- Only a small proportion of clinics have written policies on how to manage patients post HIV test refusal (Hoyos Miller et al. 2017).
- There is a lack of data in regards to clinical management of patients following a test refusal, and then subsequent risk of HIV diagnosis.



Introduction

- Joint BASHH/BHIVA and NICE guidelines focus on the promotion and facilitation of HIV testing.
- Only a small proportion of clinics have written policies on how to manage patients post HIV test refusal (Hoyos Miller et al. 2017).
- There is a lack of data in regards to clinical management of patients following a test refusal.

Aim of the analysis:

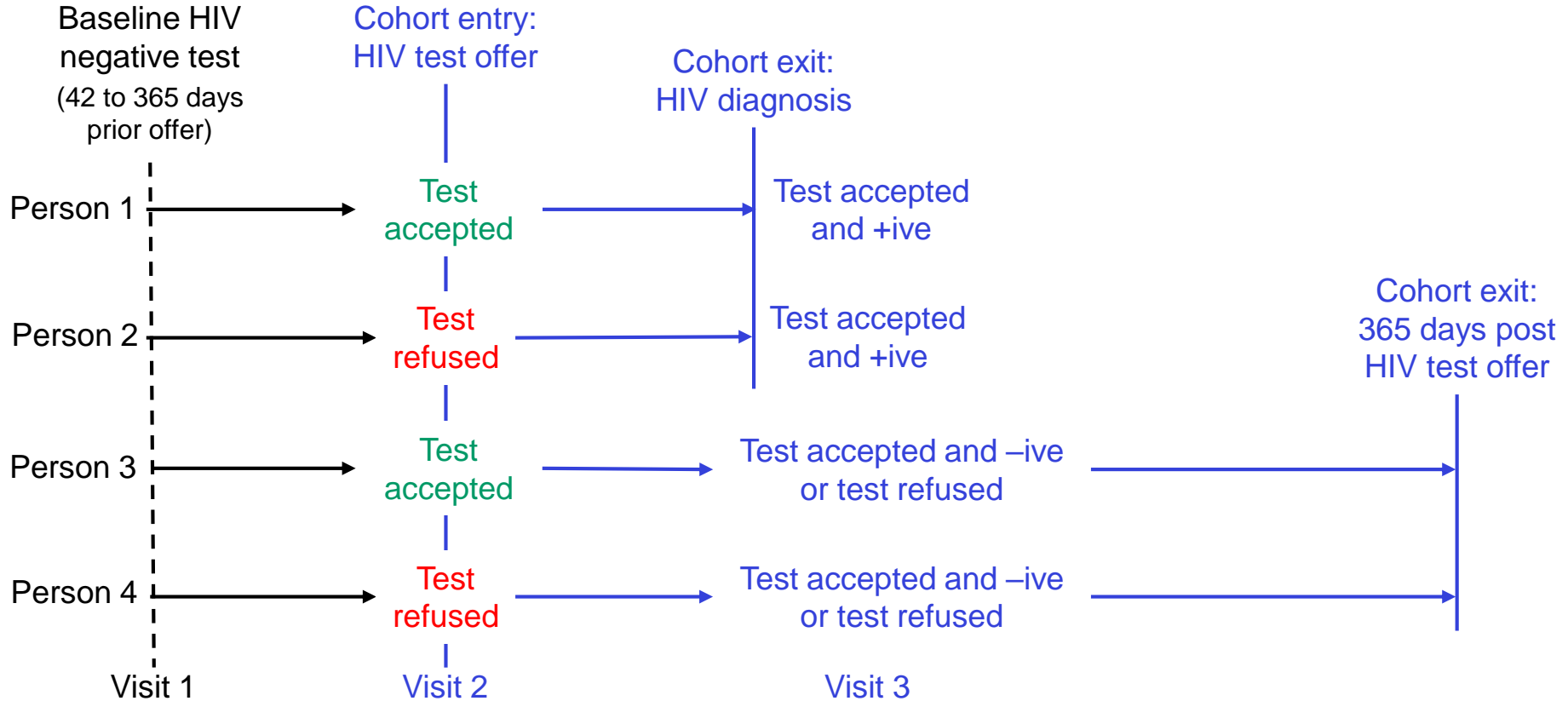
→ **To determine the risk of HIV following an HIV test refusal in repeat MSM attendees of sexual health services in England.**



Data source

- Data were extracted from the pseudonymised GUMCAD STI Surveillance System and restricted to:
 - repeat SHS attendees between 2009 and 2018
 - over the age of 14 years
 - MSM

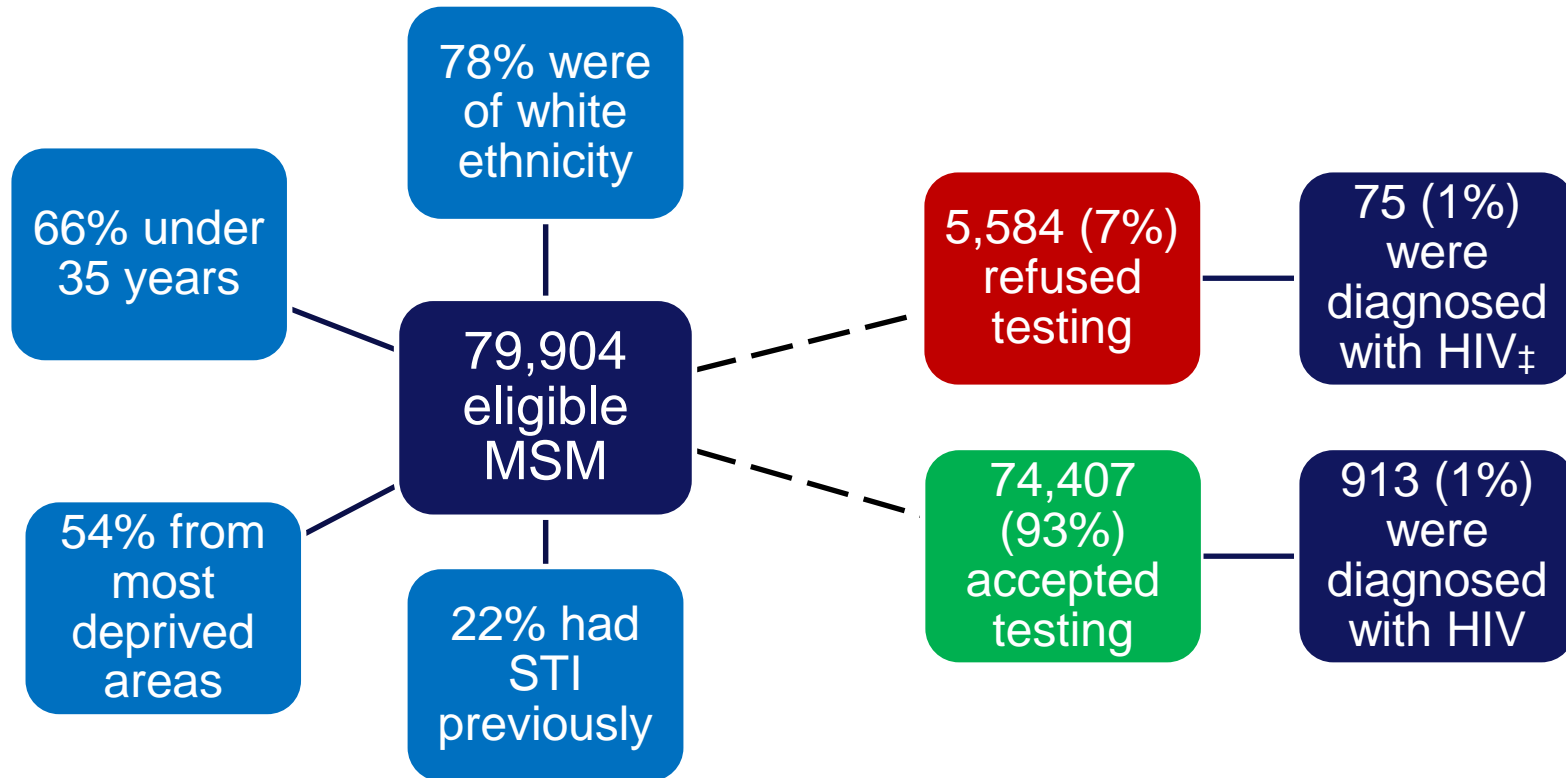
Methods – inclusion criteria



Methods – statistical analysis

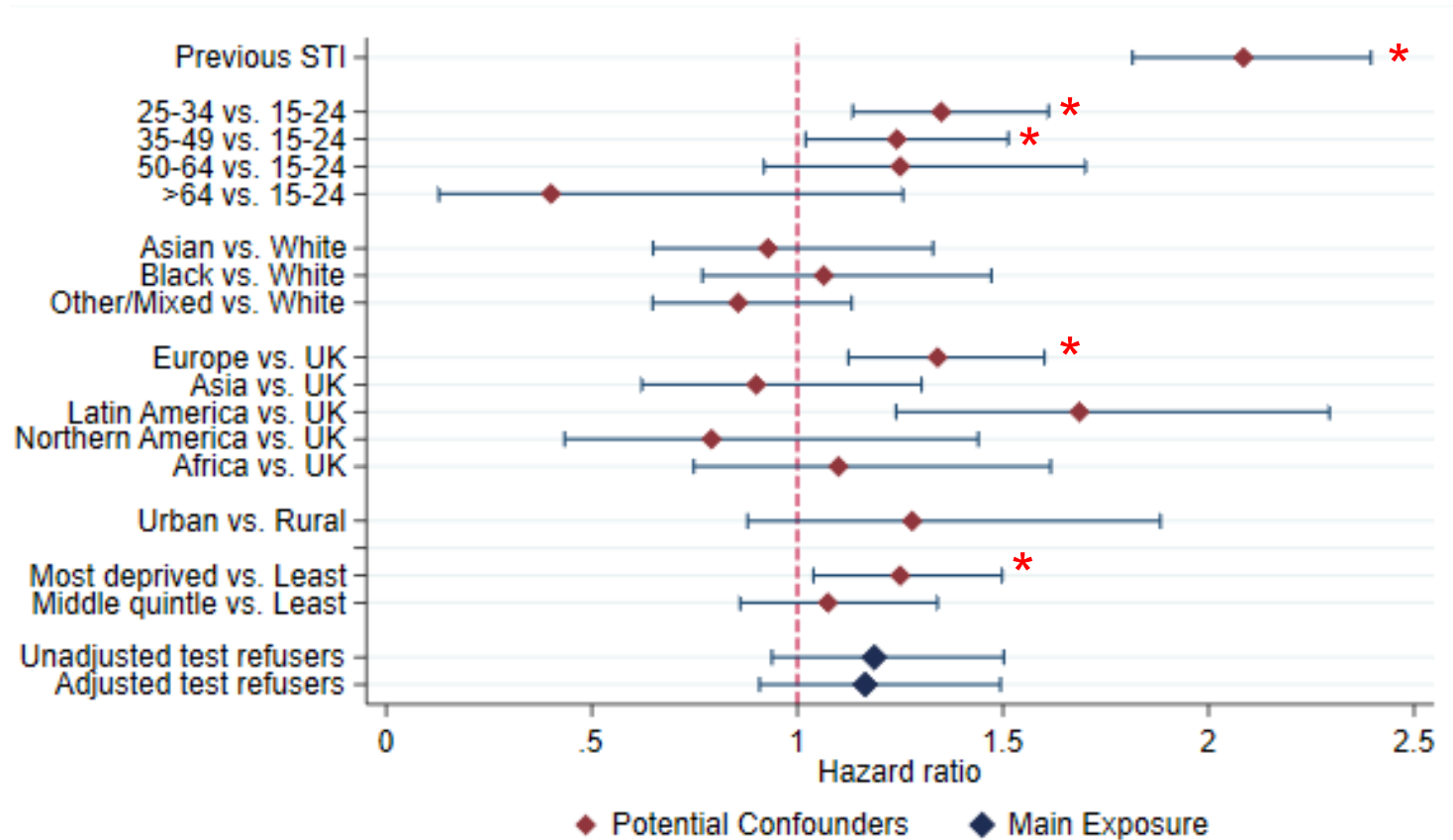
- A multivariable Weibull model was fitted to assess the association of HIV diagnosis in repeat attendees and HIV test refusal, after adjustment for potential socio-demographic confounders
 - Main Exposure: Prior HIV test refusal
 - Confounding variables:
 - Age
 - Ethnicity
 - Region of birth
 - Residential area level of socioeconomic deprivation (IMD)
 - Clinic size
 - Year of cohort entry
 - Anogenital bacterial STI diagnosis in the previous 365 days.

Baseline characteristics of study population



‡ after previous refusal

Hazard ratios for HIV diagnosis amongst MSM in England, 2009 - 2018



Limitations

- This analysis used data on HIV diagnoses, not seroconversion directly. As a result, we are unable to determine the precise time of seroconversion.

Limitations

- This analysis used data on HIV diagnoses, not seroconversion directly. As a result, we are unable to determine the precise time of seroconversion.
- Repeat attendees are more likely to regularly test for HIV so the results might be an underestimation of the overall HIV risk associated with test refusal.

Limitations

- This analysis used data on HIV diagnoses, not seroconversion directly. As a result, we are unable to determine the precise time of seroconversion.
- Repeat attendees are more likely to regularly test for HIV so the results might be an underestimation of the overall HIV risk associated with test refusal.
- We are not able to follow-up patients attending different services.

Conclusion

- There was a weak evidence of a 17% increased HIV risk in MSM who had refused HIV testing.

Conclusion

- There was a weak evidence of a 17% increased HIV risk in MSM who had refused HIV testing.
- Further investigations should be performed to explore outcomes in populations more likely to refuse HIV testing, such as black ethnic minorities.

Conclusion

- There was a weak evidence of a 17% increased HIV risk in MSM who had refused HIV testing.
- Further investigations should be performed to explore outcomes in populations more likely to refuse HIV testing, such as black ethnic minorities.
- With the introduction of the new specification for GUMCAD and the collection of behavioural data, we will be able to investigate those relationships in more depth.

Acknowledgments

- We would like to thank the GUMCAD team and data reporters, without whom this analysis would not have been possible.

Thank you!