31. Moher D, Liberati a, Tetzlaff J, Altman DG, Grp P. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement (Reprinted from Annals of Internal Medicine). *Phys Ther*. 2009;89(9):873-880. doi:10.1371/journal.pmed.1000097.

32. National Heart, Lung, and Blood Institute. Quality Assessment Tool for Observational Cohort and Cross- Sectional Studies; 2014. http://www.nhlbi.nih.gov/health-pro/guidelines/in-develop/cardiovascular-risk- reduction/tools/cohort. Accessed May 16 2016.].

33. Poisot T. The digitize Package : Extracting Numerical Data from Scatterplots. *R J*. 2011;3(June):25-26. http://journal.r-project.org/archive/2011-1/RJournal\_2011-1\_Poisot.pdf.

34. R Core Team (2017). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org/.

35. Burchell AN, Grewal R, Allen VG, et al. Modest rise in chlamydia and gonorrhoea testing did not increase case detection in a clinical HIV cohort in Ontario, Canada. *Sex Transm Infect*. 2014;90(8):608-614. doi:10.1136/sextrans-2014-051647.

36. Debattista J, Clementson C, Mason D, et al. Screening for Neisseria gonorrhoeae and Chlamydia trachomatis at Entertainment Venues Among Men Who Have Sex with Men. *Sex Transm Dis*. 2002;29(4):886-889. doi:10.1097/01.OLQ.0000099160.26205.22.

37. Mayer KH, Bush T, Henry K, et al. Ongoing sexually transmitted disease acquisition and risk-taking behavior among US HIV-infected patients in primary care: implications for prevention interventions. *Sex Transm Dis*. 2012;39(1):1-7. doi:10.1097/OLQ.0b013e31823b1922.

38. Rieg G, Lewis RJ, Miller LG, Witt MD, Guerrero M, Daar ES. Asymptomatic sexually transmitted infections in HIV-infected men who have sex with men: prevalence, incidence, predictors, and screening strategies. *AIDS Patient Care STDS*. 2008;22(12):947-954. doi:10.1089/apc.2007.0240.

39. Barbee LA, Tat S, Dhanireddy S, Marrazzo JM. Effectiveness and Patient Acceptability of a Sexually Transmitted Infection Self-testing Program in an HIV Care Setting. *J Acquir Immune Defic Syndr*. 2016;72(2):26-31. doi:10.1097/QAI.0000000000000979.

40. Chow E, Tomnay J, Fehler G, et al. Substantial Increases in Chlamydia and Gonorrhea Positivity Unexplained by Changes in Individual-Level Sexual Behaviors Among Men Who Have Sex With Men in an Australian Sexual Health Service From 2007 to 2013. *Sex Transm Dis*. 2015;42(2):81-87. doi:10.1097/OLQ.0000000000000232.

41. Volk JE, Marcus JL, Phengrasamy T, Blechinger D, Nguyen DP, Follansbee S. No New HIV Infections With Increasing Use of HIV Preexposure Prophylaxis in a Clinical Practice Setting. *Clin Infect Dis*. 2015;61:1601-1603. doi:10.1093/cid/civ778.

42. Health Protection Agency. *Sexually Transmitted Infections in Men Who Have Sex with Men in the United Kingdom: 2011 Report*. http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb\_C/1317131680627.

43. Ingleton A, Hope K, Najjar Z, Templeton DJ, Gupta L. Characteristics of gonorrhoea cases notified in inner and south-western Sydney, Australia: Results of population-based enhanced surveillance. *Sex Health*. 2016;13(5):484-488. doi:10.1071/SH15183.

44. Holmes KK, Johnson DW, Kvale P a, Halverson CW, Keys TF, Martin DH. Impact of a gonorrhea control program, including selective mass treatment, in female sex workers. *J Infect Dis*. 1996;174 Suppl:S230-9.

45. Althaus CL, Turner KME, Schmid B V, Heijne JCM, Kretzschmar M, Low N. Transmission of Chlamydia trachomatis through sexual partnerships: a comparison between three individual-based models and empirical data. *J R Soc Interface*. 2012;9(66):136-146. doi:10.1098/rsif.2011.0131.

46. Regan DG, Wilson DP, Hocking JS. Coverage is the key for effective screening of Chlamydia trachomatis in Australia. *J Infect Dis*. 2008;198(3):349-358. doi:10.1086/589883.

47. Kirkcaldy RD, Zaidi A, Hook EW, et al. Neisseria gonorrhoeae antimicrobial resistance among men who have sex with men and men who have sex exclusively with women: The gonococcal isolate surveillance project, 2005-2010. *Ann Intern Med*. 2013;158(5 PART 1):321-328. doi:10.7326/0003-4819-158-5-201303050-00004.

48. Jakobsson HE, Jernberg C, Andersson AF, Sjölund-Karlsson M, Jansson JK, Engstrand L. Short-term antibiotic treatment has differing long- term impacts on the human throat and gut microbiome. *PLoS One*. 2010;5(3). doi:10.1371/journal.pone.0009836.

49. Jernberg C, Lofmark S, Edlund C, Jansson JK. Long-term ecological impacts of antibiotic administration on the human intestinal microbiota. *IsmeJ*. 2007;1(1751-7362 (Print)):56-66. doi:10.1038/ismej.2007.3.

50. Andermann A, Blancquaert I, Beauchamp S, Dery V. Revisiting Wilson and Jungner in the genomic age: A review of screening criteria over the past 40 years. *Bull World Health Organ*. 2008;86(4):317-319. doi:10.2471/BLT.07.050112.

51. The EMIS Network. *EMIS 2010: The European Men-Who-Have- Sex-With-Men Internet Survey. Findings from 38 Countries.* Stockholm; 2013. www.ecdc.europa.eu (Accessed June 1 2017).

52. Plummer FA, Simonsen JN, Chubb H, et al. Epidemiologic evidence for the development of serovar-specific immunity after gonococcal infection. *J Clin Invest*. 1989;83(5):1472-1476. doi:10.1172/JCI114040.

53. Geisler WM, Lensing SY, Press CG, Hook EW. Spontaneous resolution of genital chlamydia trachomatis infection in women and protection from reinfection. *J Infect Dis*. 2013;207(12):1850-1856. doi:10.1093/infdis/jit094.

54. Raffle AE, Gray JM. Screening: Evidence and practice. *Bull World Heal Organ*. 2008;86(4):320. doi:10.2471/BLT.07.048744.

55. Jenness SM, Weiss KM, Goodreau SM, et al. Incidence of Gonorrhea and Chlamydia Following Human Immunodeficiency Virus Preexposure Prophylaxis Among Men Who Have Sex With Men : A Modeling Study. *Clin Infect Dis*. 2017;65(5):712-718.

56. Buyze J, Vandenberghe W, Hens N, Kenyon C. Current levels of gonorrhoea screening in MSM in Belgium may have little effect on prevalence: a modelling study. *Epidemiol Infect (In Press)*.