Estimates of mean vaccine efficacy against symptomatic COVID-19 infection working MSM summary:  $(\hat{\beta}_{TMLE} = 0.0344, p-value = 0.5184)$ 9 infection against symptomatic efficacy 06 06 vaccine Stochastic interventional 0.85 Posited change in standardized pseudo-neutralizing antibody (ID80)

Stochastic counterfactual vaccine efficacy v. COVID-19 infection across standardized shifts in pseudo-neutralizing antibody (ID80) levels, with projection of dose-response curve onto a linear working model for summarization.