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COVID-19 Self-Testing Preferences Linked to Political Perspectives: Social Determinants in the U.S. Pandemic

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INTRODUCTION
Throughout the pandemic, partisanship has been strongly associated with coronavirus disease 2019 (COVID-19) vaccination status and other pandemic behaviors, such as mask wearing.1,2 It is unknown whether political perspectives are also associated with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) testing preferences. This research letter examines whether political perspectives in the U.S. are associated with a preference for self-testing at home versus testing in clinical settings.

METHODS
Qualtrics hosted a web-based survey. The authors hired Prolific, in December 2021, to enroll a nonprobability sample of U.S. adults (aged ≥18 years) who were unvaccinated for COVID-19 because this population has higher COVID-19 mortality and morbidity risks. Participants reported sociodemographic characteristics and indicated their political perspectives using 3 items, each with 5-point, standardized scales measuring political party identification, favorability toward President Biden, and favorability toward former President Trump. These 3 political items that were highly correlated were aggregated into 1 variable with categories we labeled strong left to strong right, with a neutral middle point (Figure 1).

Participants were instructed to imagine that they decided to test for COVID-19 and to select a single testing option representing their testing preference. A randomly ordered list was provided that included clinical, home, and worksite testing options. These methods of measuring preference for a hypothetical scenario have shown predictive validity for future behavior.3−7

In a multivariable logistic regression analysis, testing preference was modeled as a binary outcome comprising home versus clinical setting. Those who preferred testing at work, which may not be mutually exclusive with self-testing or clinical testing, were excluded. The model was adjusted for age, gender, and ethnicity, which, on the basis of chi-square tests, were related to testing preference. A chi-square test for trend was conducted to test the relationship between the political spectrum and the proportion preferring self-testing.

RESULTS
Only 143 respondents (3.2%) preferred testing at work. Otherwise, a significant majority of respondents (3,084/4,299; 71.7%) preferred testing in a clinical setting (Appendix Table 1, available online). The adjusted odds of self-testing preference were higher among the political right (OR=1.57, 95% CI=1.25, 1.97 for strong right and OR=1.36, 95% CI=1.08, 1.72 for lean right) and the political center groups (OR=1.28, 95% CI=1.00, 1.65) than among those on the left of the political spectrum (Figure 1). In sensitivity analysis, the findings did not change after adding education and income as covariates (data not shown). Using the categories of the political spectrum defined as strong left, left, center, right, and strong right, the proportion with self-testing preferences increased with chi-square test for trend \( p=0.06 \).

DISCUSSION
Those with right and center politics were more likely to prefer self-testing than those with left politics. Given such preferences, the availability of self-testing kits could be prioritized in conservative counties, where most adults and youth have been unvaccinated.1,2 Relatedly, communities that prefer self-testing may experience underreporting of COVID-19 cases. Although most clinic-based test results are reported to public health authorities, many rapid self-test results are not.8

LIMITATIONS
This study has notable limitations. In particular, it was designed to examine preferences and not actual testing behavior, which can be influenced by other factors, such as access.9 For example, the availability of self-testing...
kits can vary. However, when the preferred option is available, it is reasonable to expect that preferences elicited through scenario-based methods are related to future behavior and show external validity.\textsuperscript{3–7} Additional research is needed to understand the specific beliefs driving political differences in testing preferences. This study focused on a high-risk population, and the HIV self-testing literature has shown that a similar approach can help to determine which service delivery models are effective for key populations.\textsuperscript{9} Before concluding whether the current results are generalizable to other populations, additional research would be needed.

CONCLUSIONS
The associations reported in this study support the growing scientific effort to identify social determinants of health disparities. In this study, partisanship had stronger associations with outcomes than several traditional sociodemographic measures, but such tests have been relatively rare.\textsuperscript{1,10} The authors are not aware of research that is similar to this study: the self-testing literature has shown that a similar approach can help to determine which service delivery models are effective for key populations.\textsuperscript{9} Brief political measures can be implemented more widely to examine how limited public health resources may be allocated most effectively.

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