

20 January 2021

BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

Can home testing become a reality? New data sheds light.

From the beginning, one of the primary problems of the US pandemic response has been inadequate testing. It started with the US Centers for Disease Control and Prevention early fumbling on [faulty tests](#) and continued from there. During the year 2020, a national strategy to test and trace was never implemented. Despite early knowledge that testing was the best way to fully understand community prevalence, rollout was slow and uneven. This will be seen by historians as a colossal failure of leadership. At first, tests were so scarce that the CDC only advised testing those with certain specific symptoms and travel risks to obtain tests. Admittedly, we've come a long way. Nowadays, tests can be obtained in all communities, but with varying levels of difficulty. In some places, turnaround times have become so slow so as to render the tests nearly useless.

Now, about a year removed from the first confirmed case in the US, the possibility of home testing kits has become more realistic. A research letter published today in [JAMA Network Open](#) sought to address US adults' willingness to take part in a strategy that would allow at-risk or individuals known to have contracted SARS-CoV-2 to distribute testing kits to their social contacts. This method has already been successfully implemented for HIV testing.

Using an online survey platform, individuals were given information and instructions on the use of self-test kits. Respondents were asked how motivated they would be to do three things: distribute these kits to their social contacts, use a kit if given one by a social contact, or order a free self-test kit if exposed to covid-19.

Approximately 600 adults averaging 35 years of age were surveyed. Motivation to use the self-test kits was high with over 90 percent saying they would distribute to contacts. Numbers remained high (over 86 percent) when asked if they would use a kit given by a close contact. The self-selection group came in the lowest, with under 83 percent stating they would order a test if they were knowingly exposed to a person with covid-19.

Test subjects most motivated to participate in all three proposed activities were from households with above-average income levels. Hispanic ethnicity was also associated with higher levels of motivation to participate. Even when accounting for marital status, ethnicity, income and education, motivation levels in all groups never dipped below 70 percent in all arms.

While this study was nothing more than a demonstration of *willingness* to participate in at-home testing schemes, it shows promise that home testing could meaningfully identify carriers through self-identified contact tracing and testing. Including a broader age range of participants would add strength to the data, but this concept appears to be a promising avenue by which to increase testing.

—*Christopher Sampson, MD, FACEP*

POLICY BRIEFING

New details of national vaccine rollout plan.

As the United States continues to struggle with its vaccine rollout, President-elect Biden (perhaps President, depending when you read this), has detailed his plan to get shots in arms, focusing on five key areas.

The first component is somewhat controversial, as he broke with the [recommendation](#) given by the National Academies of Sciences, Engineering, and Medicine (NASEM). The expert body at NASEM argued for prioritization of all individuals with significant comorbidities to come after frontline workers, whereas Biden [intends](#) to vaccinate everyone over 65 first.

Further proposals by Biden are more straightforward, including his second planned phase, which utilizes the help of the Federal Emergency Management Agency (FEMA) to establish more vaccination sites across the country, in locations such as arenas and school gyms. The third proposed step is to increase the availability of supplies to vaccine manufacturers. While the Trump administration's promise to release vaccines from the federal reserve was quickly quashed after it became apparent there [was no reserve](#), it seems drugmakers will see increased manufacturing capacity, which of course relies on the availability of the needed supplies, which Biden has promised. Part four requires a more robust workforce to staff the vaccination centers and engage in more thorough contact tracing. The fifth part seeks to create an educational campaign to fight vaccine misinformation. Opening the eligibility pool is a conceptual goal that will be relatively easy to achieve. However, the remainder of the plan is financially dependent on passage of the American Rescue Plan, a \$1.9 trillion stimulus package [revealed](#) last week. Congress is expected to consider the legislation in the coming days and weeks. *Various.*

—*Brief19 Policy Team*

Kimi Chernoby, MD, JD, Policy Section Founder, Joshua Niforatos, MD Research Section Editor, Frederick Milgrim, MD, Editor-at-Large, Barb Cunningham, Copy-editor, Anna Fang, Week-in-Review. Megan Davis, social media. Kane Elfinan PhD, Publishing and Design. Jeremy Samuel Faust MD MS, Editor-in-Chief.
<http://www.brief19.com/> Twitter: [@brief_19](https://twitter.com/brief_19) submissions@brief19.com. Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health and public policy.