

New Mexico Statewide Vaccination Messaging Survey Identifies Strategies To Help Achieve Full Vaccination Across the State

Authors:

Gabriel R. Sanchez, Ph.D.
Melanie Sayuri Dominguez
Betzaira Mayorga-Calleros, B.A.
Shannon Sanchez-Youngman, Ph.D.

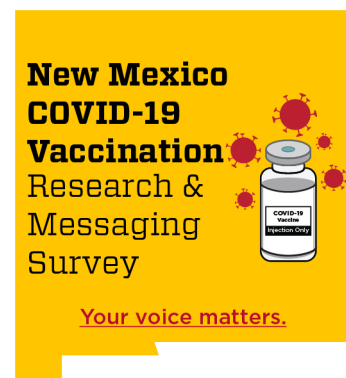
Introduction

The University of New Mexico (UNM) Center for Social Policy worked with several national partners to field a statewide survey of just over 2,000 New Mexico adults focused on better understanding the state's attitudes toward vaccination. The poll comes at a time when New Mexico approaches the critical mass of 60% adult vaccination and the final push toward more full coverage of adults and increased vaccination of children. The survey was part of a larger national survey project led by the Commonwealth Fund and the African American Research Collaborative, who led a team of diverse experts including data scientists, pollsters, social scientists, public health professionals and medical doctors to study knowledge and attitudes towards COVID-19 vaccines nationwide.

The study was designed to create nationally representative samples across race and ethnicity with large respondent bases of Black, Latino, Asian American and Pacific Islander, Native American and White populations. Overall, the survey interviewed 12,887 adults from May 7 - June 7, 2021. The survey was available in English, Spanish, Chinese, Korean, and Vietnamese, and had a median length of 20 minutes. The sample size and margin of error for each component of the survey is: Full national, 12,288, +/- 0.9%; Black, 2,281 +/-2.1; Latino, 2,944 +/-1.8; AAPI, 2,281 +/-2.1; Native American 1,921 +/-2.2; White, non-Hispanic, 2,861 +/-1.8. The AAPI sample included a small oversample of Pacific Islanders (n=246, +/- 6.2%). The survey also contained an oversample of New Mexico (2,057, +/-2.1%) adults which is why the Latino and White components are somewhat larger in the national sample. To adjust for this, all estimates the New Mexico sample are weighted to reflect its correct share of the national population. For each racial group, post-stratification weights were implemented using a raking algorithm to balance the sample to the 2019 Census ACS estimates for gender, age, education, nativity, and geography. A full methods statement is available here:

<https://africanamericanresearch.us/covid-poll-methodology/>

This survey provides data to create evidenced-based strategies to improve outreach efforts to New Mexico's population who are hesitant to become vaccinated or who have faced challenges with the process. This memo summarizes some of the main findings of the research with an eye toward actions that can be taken to help the state continue to set the pace for vaccination coverage nationally and remain on track for the opening up of all business operations.



New Mexico Among National Leaders in Vaccination

New Mexico has excelled through the first phase of vaccination dissemination, being among the national leaders in per-capita vaccination and serving as a [model for other states to follow](#). These numbers are particularly impressive given the demographic challenges the state faces which would predict much lower vaccination rates.

New Mexico's strong vaccination rates are being driven by its vaccination distribution plan, leading the nation to be the [first](#) to have a centralized, state-run vaccine registration site. This system is designed to be user-friendly where people can get text alerts sent to their phones for available appointments. The survey identifies that this system has been effective, as the vast majority (88%) of New Mexicans who have already been vaccinated indicated that it was an easy process for them to navigate.

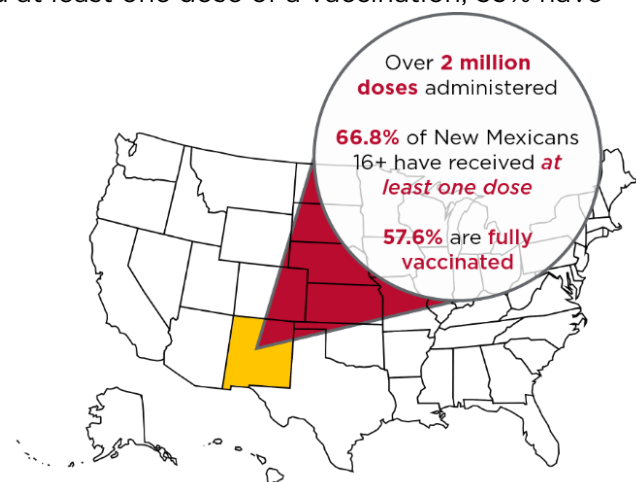
New Mexico's Department of Health has worked hard to address the issue of [equity](#) in vaccination distribution, collaborating with researchers from UNM and UNM Health Science Center to address gaps in vaccination within marginalized groups, including tribal populations, unhoused populations, and undocumented New Mexicans. The New Mexico Department of Health has also addressed accessibility issues by deploying [mobile vaccine clinics in remote parts of the state](#) that have particularly helped vulnerable populations. The state's early and continued efforts in bridging the gaps in vaccinations, along with its fast and efficient process in getting many people vaccinated quickly are commendable. The survey is focused on identifying any inequalities in access to a vaccine and strategies to help ensure the outreach process remains equitable.

This survey project is another example of the collaborative approach that has helped make New Mexico a national leader in vaccination. The survey instrument was developed with input from the New Mexico Department of Health and from experts and scholars in vaccination research, public health, medicine, health equity and public policy at research universities including UCLA, Yale, Penn State, the University of New Mexico, and the University of Maryland. Our team at the UNM Center for Social Policy has moved as quickly as possible to clean and interpret the survey data to make it accessible for outreach efforts.

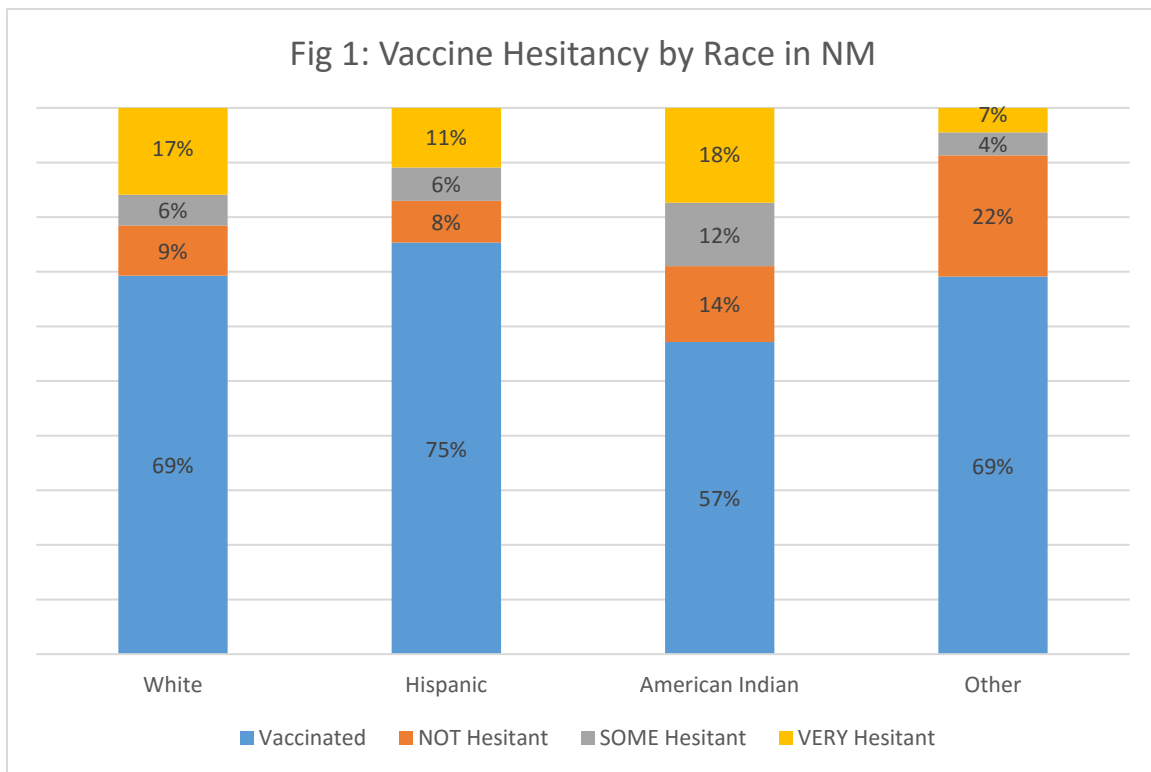
Vaccination Up-Take According to the Survey

As mentioned above, New Mexico is a leader in vaccination efforts. NMDOH data from June 11, 2021 shows that over 2 million doses have been administered in the state, 66.8% of New Mexicans 16+ have been vaccinated with at least one dose, and 57.6% have completed the vaccination series. Compared to [California](#), for example, as of June 10, 2021, 54.6% of people have been fully vaccinated and 11.3% have been partially vaccinated. In [New York](#), 55.4% of the population has had at least one dose and 48.5% has completed the vaccination series as of June 11, 2021.

Despite the state's Department of Health's best efforts, there are many New Mexicans who despite having access to vaccines may remain hesitant to do so. There is also a small percentage of the population have faced obstacles in acquiring a vaccine. According to the survey, 71% of the state's population have had at least one dose of a vaccination, 59% have received both doses, and 2% have had a single dose vaccination. Another 10% of the population in the state have had their first dose of a two-dose vaccination option. The survey identifies that there are important racial and ethnic differences in vaccination rates (see figure below). The Hispanic population in New Mexico is out in front with 68% being fully vaccinated followed by non-Hispanic Whites at 69%. The African American and Asian American/Pacific Islander population have a combined full vaccination rate of 69%, with Native Americans at 57% full vaccination.¹

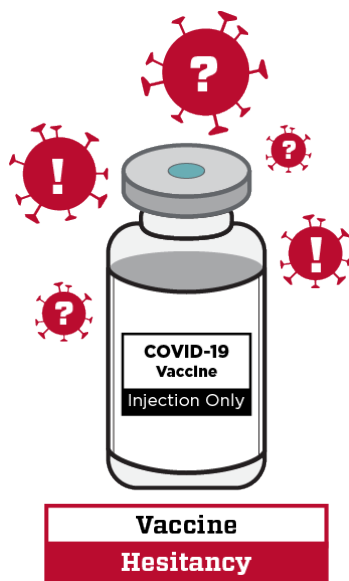


¹ Although at the time of completion of this report we did not have enough completed interviews to break out AAPI and African American respondents separately. However, our team is continuing to push the survey in the field for these specific groups and will update our numbers with breakouts of those two communities within the next couple of weeks. We also asked respondents for their preferred pan-ethnic identification terms and learned that Hispanic and Native American are the preferred names for the majority of New Mexicans from those communities.



Note: This graph merges both vaccination and hesitancy questions in the survey. Hesitancy was measured using the answer options showed in the next figure.

As the state continues to push forward to fully re-open business and recreation activities in the state, the survey suggests that most New Mexicans who are not vaccinated plan to do so. New Mexicans not fully vaccinated were asked what their plans were about getting the vaccine. The good news is that 15% of this group reported that they had already signed up to get vaccinated at the time of interview, and another 23% reported that they plan to get the vaccine as soon as they can.

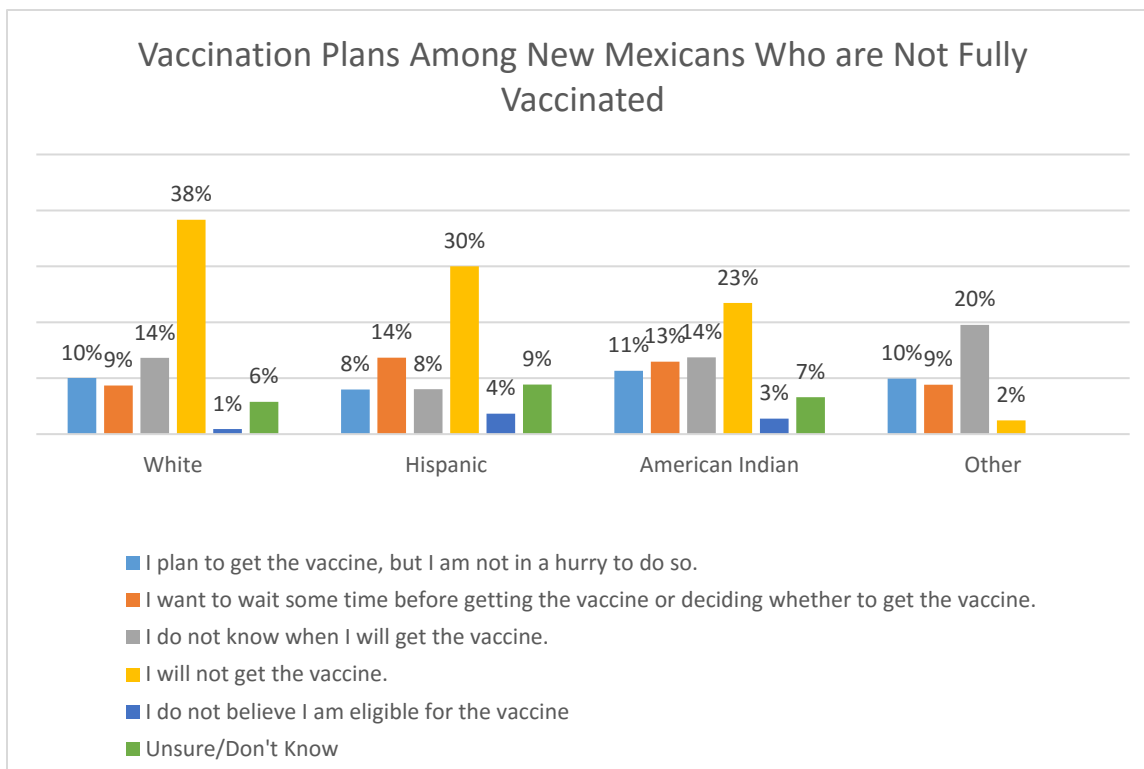


The most challenging number from this section of the survey is that roughly a third (32%) of New Mexicans who have not been vaccinated report that they do not plan to do so. When we look at internal variation on this item we can identify groups who are particularly resistant to the vaccine, including White New Mexicans (34%), New Mexicans who live in rural areas of the state (54%), self-identified Republicans (40%), and those between the ages of 50-64 (46%). Resistance to getting vaccinated is also high among the college educated (43%) and the uninsured (38%). These groups will obviously be more challenging to persuade than the other two-thirds of the sample who are not ideologically hesitant to vaccination.

More promising targets are the combined 31% of New Mexicans who plan to get the vaccine but are not in a hurry to do so, do not know when they will get a vaccine, or who are taking more time to decide if they will get the vaccine. Additionally, there is a small percentage (3%) of non-vaccinated New Mexicans who believe that they are eligible for a vaccine. This indicates that keeping

basic information in the field that stresses that all adults in New Mexico are eligible for a vaccine is necessary.

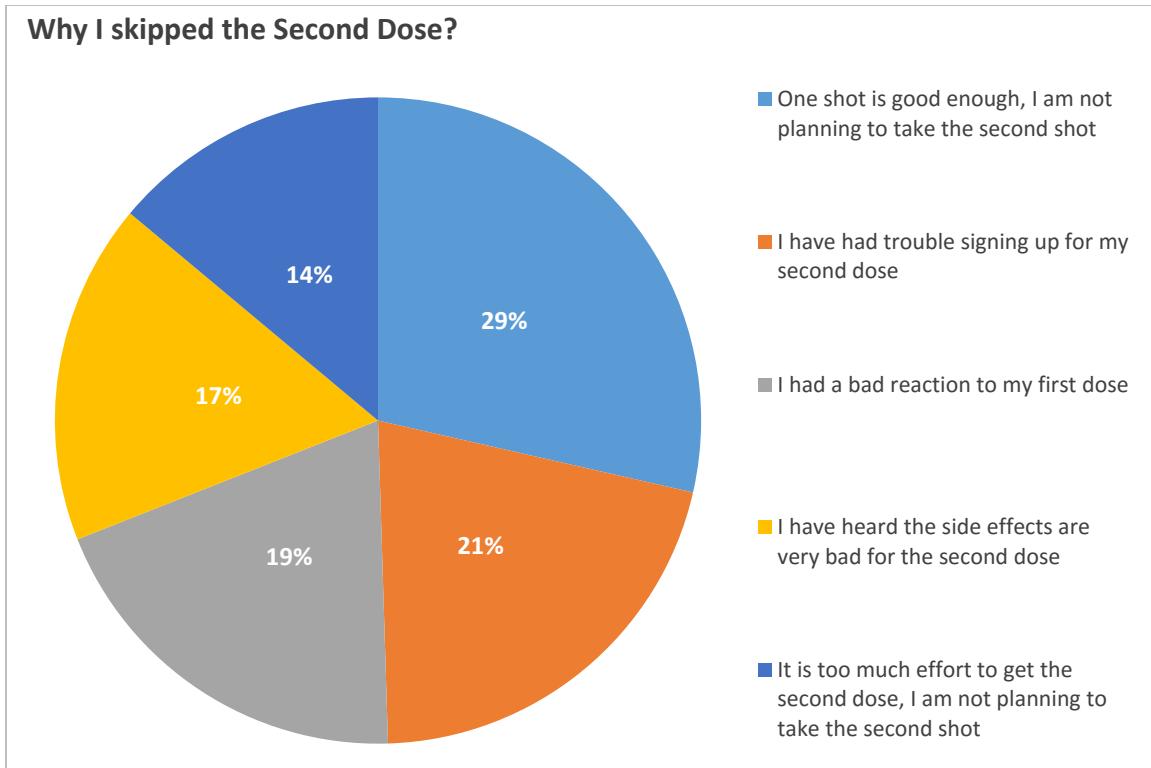
The figure below shows the breakdown of responses by racial or ethnic group across the sample for this measure to look for potential variation to help with targeted outreach. We removed the response options indicating that respondents have a plan to get vaccinated or have already scheduled an appointment for improved visual presentation and to emphasize targets for outreach. Unfortunately, White and Hispanic New Mexicans are the most likely to report that they do not plan to get vaccinated. Given that these two populations are the largest racial and ethnic groups in the state, and by a wide margin, this is a troubling finding.



Note: Respondents, who were not vaccinated, were asked: “Which is the closest toward your plan regarding the COVID-19 vaccine? Respondents were able to check multiple options.

Strategies for Helping Residents Acquire Full Vaccination

The survey suggests that 10% of New Mexicans who have a two-dose vaccination have received the first dose of vaccine but have yet to get the second. While most of these New Mexicans indicated that they are on their way to full vaccination, 15% report that they do not plan to get a second dose. These are high priority targets for outreach given that they are the closest to full vaccination. The figure below provides the reasons New Mexicans gave for why they had not received their second shot.



Note: Respondents who skipped the second vaccine were asked the following: “Which of the following best reflects why you have not yet taken the second dose of your vaccination?” Note that this is a very small subset of respondents limiting analysis of many demographic groups on this item.

Among those who are reluctant to get a second dose, the most common reason provided was the perception that “one shot was good enough”. The next most commonly cited reason provided was that they were “having a difficult time signing up for their second shot”, followed by “because they had a bad reaction with the first dose.” This is valuable information that provides insights on obstacles that are likely to not only impact reluctance for a second dose, but vaccination hesitancy more broadly.

There may be need to provide messaging that stresses the improved protection against the virus research has suggested you get from the second dose, as well as any other benefits state residents obtain with a second dose (such as not having to wear a mask in public). The perception that one shot is good enough protection could also suggest expanding access to a one-shot option for residents seeking appointments. Unfortunately, the survey also finds that the Johnson and Johnson vaccine, the only brand available in a one-shot vaccination at this point, is viewed with high skepticism among those not vaccinated. The very rare incidents of potentially life-threatening blood clots widely communicated by the media helps explain why only a third of the sample would “prefer a single dose vaccine even if it makes the process easier for them.”

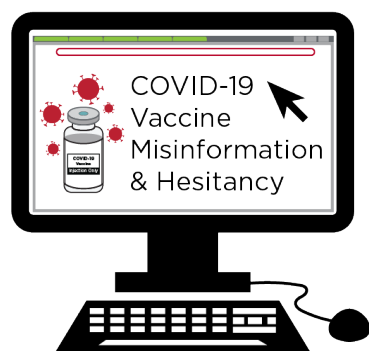
High percentages of all racial and ethnic groups in New Mexico agree with the statement that the Johnson and Johnson vaccine is “dangerous and can create blood clots and other serious health problems”. This high level of concern regarding this specific vaccine strongly suggests that the demand for the Johnson and Johnson vaccine will be lower than for the other vaccines, particularly among African Americans who, according to the survey, have the highest levels of concern nationally and in New Mexico. This is likely due to [Johnson and Johnson’s history with African American women](#) in particular, as the company continued

targeting African American and overweight women to buy their Baby Powder, despite concerns from the World Health Organization that this product was a possible carcinogenic.

Obstacles and Drivers to Skepticism Among New Mexicans

It is important to stress that the majority of unvaccinated New Mexicans did not report obstacles or challenges that has made it difficult for them to get the vaccine, a testament to the state's tremendous success to this point. However, the survey identifies some areas where improvement may help increase uptake of the vaccination moving forward. For example, 10% of New Mexicans reported that, "I am busy and not able to go during the hours when vaccines are offered". This has been a greater obstacle for parents and primary caregivers, of whom 17% reported inflexible vaccination hours as a reason for not getting vaccinated. Increasing access to evening and early morning vaccination could help improve vaccination rates, as well as getting the word out more widely that these options are available.

While the majority (63%) of unvaccinated New Mexicans have yet to attempt to sign up on the Department of Health's vaccination registration program to get registered for a COVID-19 vaccine, 13% attempted to sign up but were not successful. New Mexicans who took the survey in a language other than English were almost twice as likely to report challenges with registration, an indicator that improving access for language minorities could help improve uptake for this particular sub-group of New Mexicans. The survey finds that a large (78%) percentage of Hispanic and Asian American/Pacific Islanders in the state speak a language other than English in their home, and many consume COVID-19 information in that language. This highlights the need to continue outreach in multiple languages and provide translation for both vaccination information and vaccine registration.

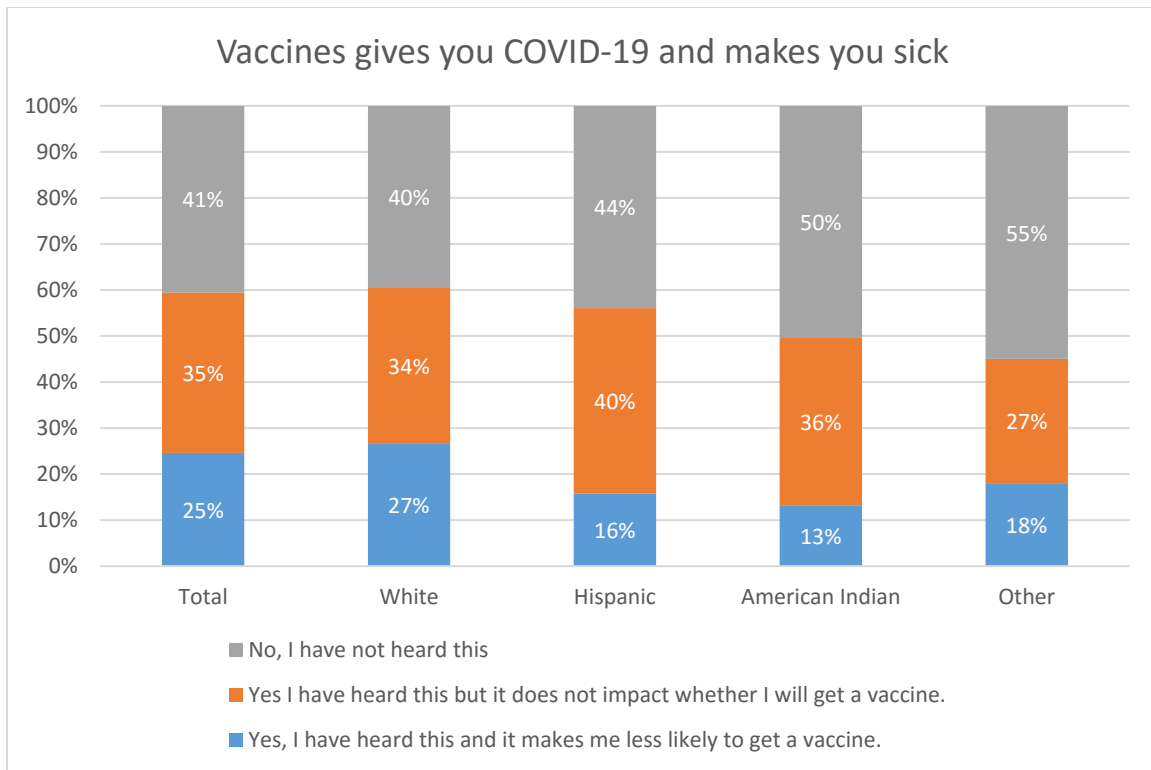


25% of respondents believe the COVID-19 Vaccine can "give you COVID-19 and make you sick."

The survey asked New Mexicans who had yet to get fully vaccinated about their attitudes regarding the vaccine, including hesitancy. This allowed our team to generate hesitancy levels for New Mexicans that we will use in our intersectional analyses and statistical modeling. In New Mexico, 47% of the non-vaccinated population reports that they have "some hesitancy or concerns about getting a COVID-19 vaccine. Furthermore, for unvaccinated people, only a third (34%) stated that they were either trying to get the

vaccine as soon as they could or that they already had an appointment to get vaccinated. Another 36% claimed that they would not get the vaccine, and 33% answered that they would get the vaccine but were unsure as to when, that they wanted to wait a little before getting it, or that they did not know when they would get it.

New Mexicans who were not vaccinated were also given a series of statements about vaccines that are circulating on the Internet and across social networks to assess how widely these anti-vaccination messages are resonating with the public, as well as whether they are having an impact on behavior. The statement "COVID-19 vaccines can give you COVID-19 and make you sick" decreases the desire to be vaccinated for 25% of unvaccinated New Mexicans. Messaging that contradicts this misinformation by stressing the safety of vaccines and that utilizes state residents who have gone through the process with minimal side effects may help. As reflected in the figure below, this is an issue of particular concern for White New Mexicans.

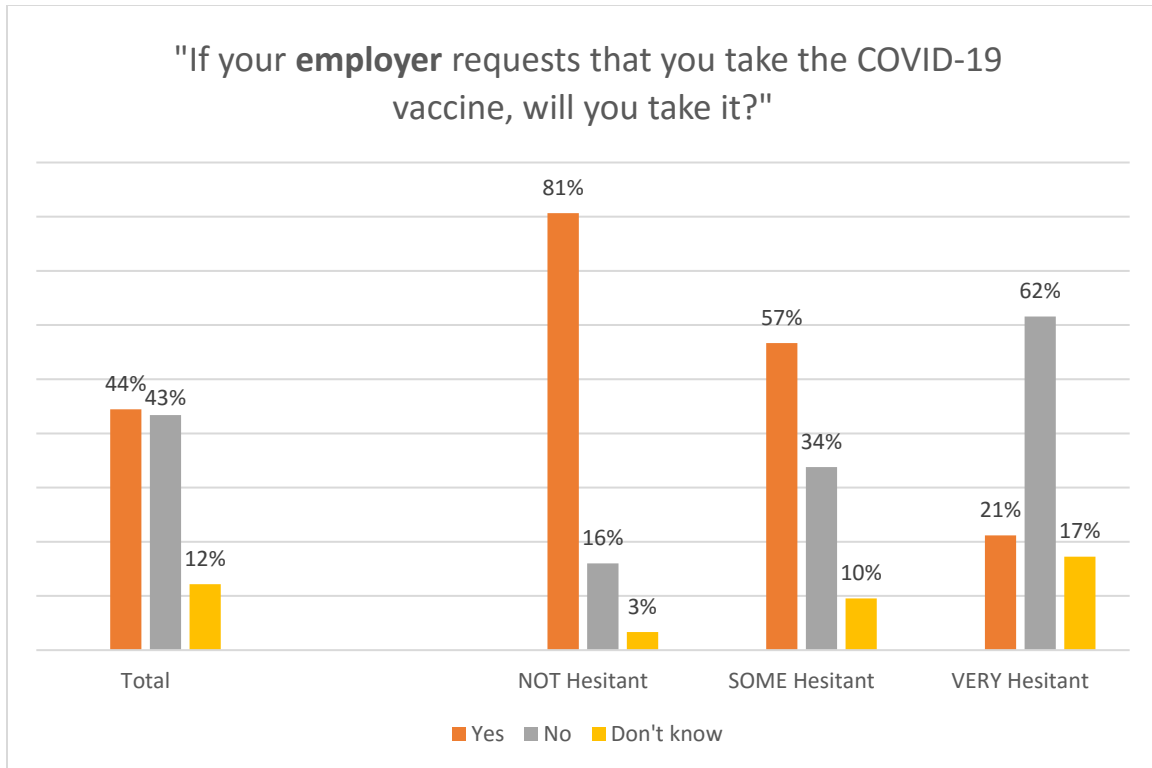


Note: this item was only asked of those who have not yet been vaccinated.

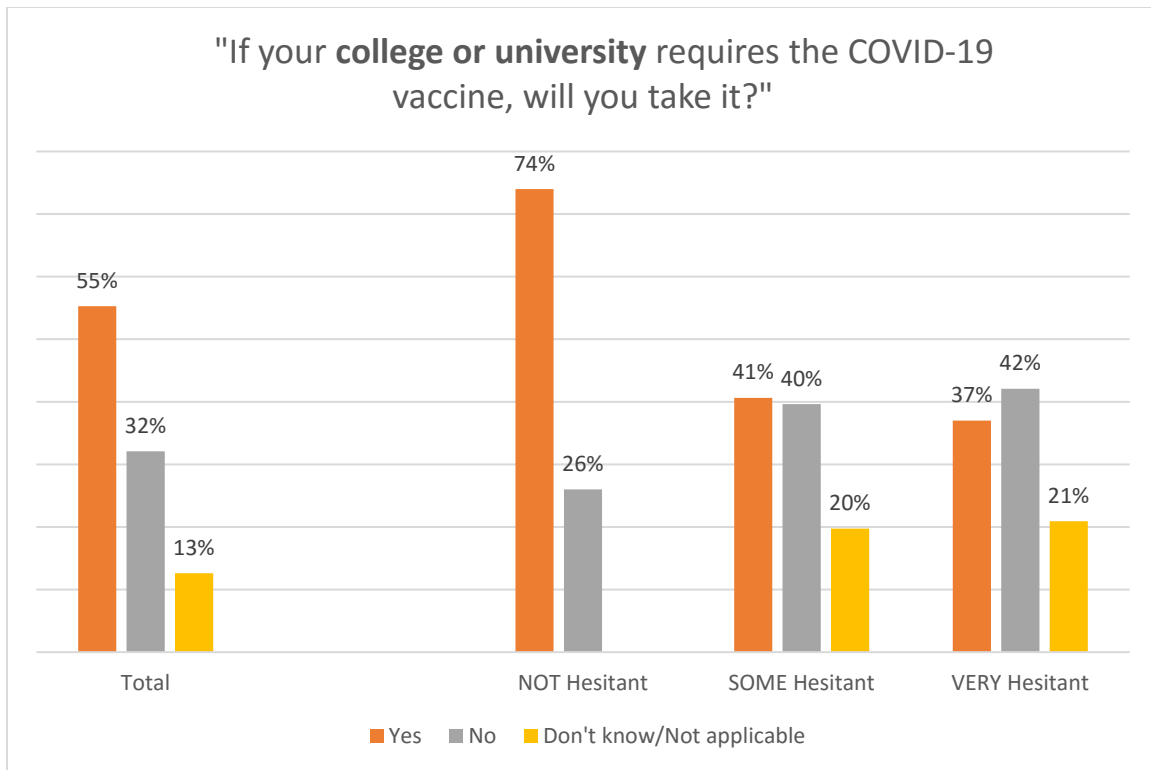
Strategies to Help Achieve Wider Vaccination

Given that many entities across the state are considering making vaccination a formal requirement or providing increased incentives for vaccination, the survey asked New Mexicans who have yet to get a vaccine if they would be motivated to get vaccinated if their employer requested that they do so.

New Mexicans that have not received the COVID-19 vaccine were asked if they would get a vaccine if their employer requested that they do so, noting that some employers are already requesting that their employees receive a COVID-19 vaccine to continue employment. Overall 44% of all New Mexicans who are not yet vaccinated report that they would get a vaccine if their employer requested this. Although New Mexicans who are not ideologically hesitant about the vaccine are much more likely to report that they would comply with employer requested vaccination (81%), one in five of those highly resistant would do so as well. This suggests that partnering with as many employers (both public and private) to encourage and incentivize vaccination would be a game changer in our efforts to reach herd immunity.



Our survey also asked college students in the state who have not received the COVID-19 vaccine if they would take the vaccine if their college or university required it. Overall, 55% of New Mexicans currently enrolled in a college or university would become fully vaccinated if their institution required that they do so. The state's many higher education institutions could have a marked impact on the vaccination rates of young adults (a key target given lower vaccination status) by continuing to encourage students to become vaccinated in order to attend in-person classes in the fall.



As the state expands incentives for those yet to get vaccinated, the survey sheds some light on the effectiveness of that intervention. The survey asked New Mexicans who were yet to get vaccinated if they would be motivated to participate in vaccination if they were given an incentive across a range of gift amounts randomly distributed across the sample: \$25-\$500. These incentives are effective, particularly among residents under the age of 30, urban residents, and those with lower incomes. The impact of incentives does not appear to vary dramatically based on the incentive amount, suggesting even small gift cards or other incentives could have a marked impact on vaccination uptake. We provided the Department of Health with preliminary evidence noting the effectiveness of incentives while the survey was in the field which helped motivate the \$100 incentive utilized in the final push to reach 60% full vaccination before the end of June. This has been highly successful. However, it is important to note that incentives are not nearly as effective interventions for the toughest targets, such as rural residents of the state and those highly hesitant to get a vaccine.

New Mexicans Who Remain Hesitant to Become Vaccinated Prefer to Become Vaccinated in Their Primary Care/Private Doctor's Office

The survey included measures of where New Mexicans who have yet to get a vaccine would prefer to be vaccinated. Most New Mexicans (45%) prefer to receive the vaccine in their doctor's office, and particularly those who are somewhat (60%) and highly resistant to a vaccine (49%). There is also a higher preference for receiving a vaccine in their doctor's office among Republicans and rural residents of the state.

In short, it is clear that expanding access to appointments for individual vaccines will be critical to see increased uptake among the state's hardest targets. We believe that part of the motivation for this option among these particular segments of the state may be stigma, as these residents may wish to get protection from the vaccine anonymously. As we report in the next section, doctors are highly trusted messengers about the vaccine in the state. This

suggests that many New Mexicans who are ideologically hesitant to the vaccine will need the encouragement of their personal doctor to get over the finish line and get fully vaccinated. The next most commonly cited preferred location are hospitals which were identified by 24% of residents who were not yet vaccinated. There are smaller but meaningful percentages of respondents who prefer drive-up (17%) or community clinic events (16%), or large vaccination events in their own communities. Providing multiple paths to the vaccination is recommended, with an emphasis on ensuring doctor's offices have as much support as possible to meet the demand for vaccination through that avenue.

**“Getting a
COVID-19 vaccine
can protect the
lives of my
family, friends,
and those I love.”**

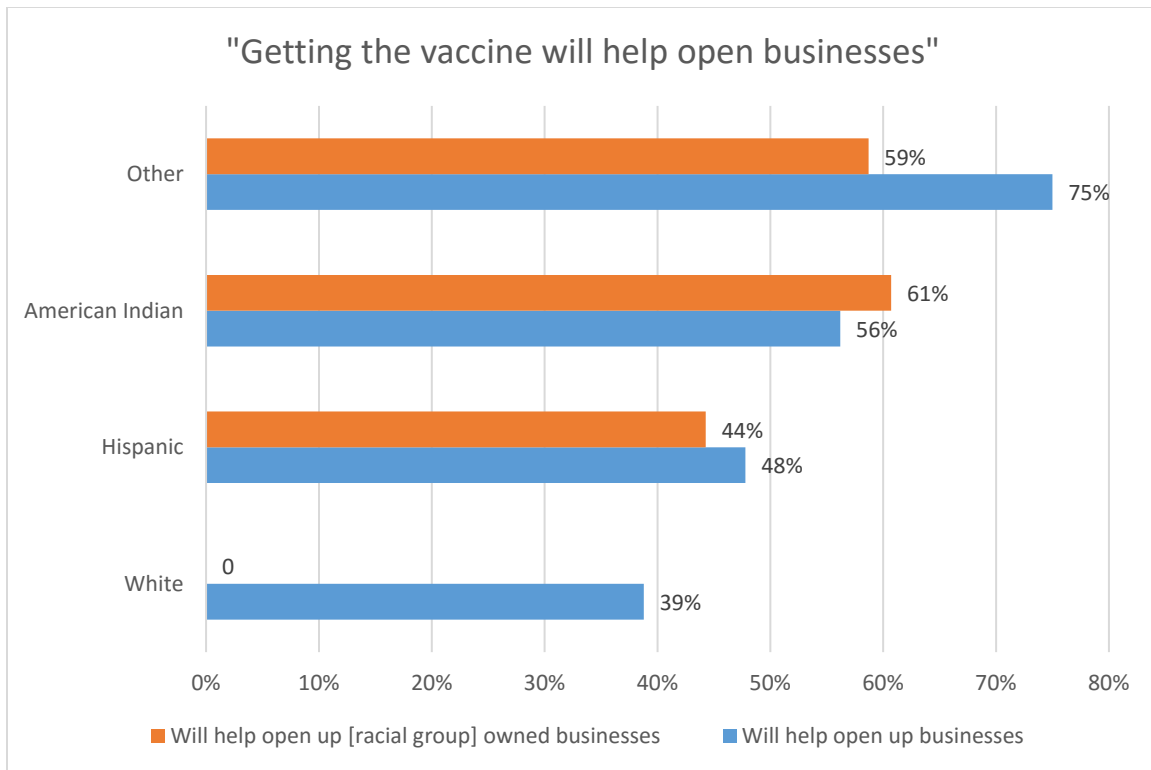
Messages and Messengers That Have Traction in New Mexico

The survey focused most of our time with respondents on testing messages we created with assistance from our team of vaccination and communication experts that are intended to motivate those who are unvaccinated to consider doing so. New Mexicans were read a series of messaging themes and were then asked if hearing this message made them more likely to want to get a vaccine, including whether the message made them much more likely to want to get vaccinated.

One of the strongest overall messages is “getting a COVID-19 vaccine can protect the lives of my family, friends, and those I love.” This

message has nearly universal effectiveness across sub-groups of the state, but is particularly impactful among racial and ethnic minorities, all of which being more likely to say this message made them more likely to get a vaccine than Whites.

Messages focused on the ability of mass vaccination to “help businesses open up and for the economy to rebound” is also effective. When we focused this message on helping minority owned businesses from the communities in which New Mexicans are from this message is particularly powerful. For example, 61% of Native American respondents not yet vaccinated said they were more likely to want a vaccine when they were messaged with “getting a vaccine will help open up Native American owned businesses here in New Mexico and help the economy in our community rebound quickly.” Hispanic New Mexicans were similarly influenced by a message that cued Hispanic-owned businesses. Taking a nuanced approach where messages are tailored to particular audiences will be much more effective than a more general outreach effort.



The strength of the survey is the ability to identify messages that resonate with specific segments of New Mexico's unvaccinated population. For Native Americans the strongest overall message is "the best way to prevent the continued devastation to the Native American/American Indian community, protect our elders, and preserve our cultural ways is to get vaccinated and encourage others to do the same." The survey identified that a larger percentage of immigrants, Hispanic and Asian American/Pacific Islander residents are concerned about their personal and private information being shared with immigration officials. The following messaging theme can help offset these fears: "Federal law requires that any personal information that you share when signing up for the vaccine is anonymous and must be secure. Your information will be kept safe and cannot be shared." People between the ages of 18-29 are also significantly receptive to this message addressing privacy concerns.

The survey also attempted to identify the strongest messages for particularly sub-groups of the state's population, including across geography types. Below are the messages that performed well in different types of localities in the state:

- Urban Residents – Stressing that "the COVID-19 vaccine is free."
- Suburban Residents and Small Towns: "Even though I am healthy, getting vaccinated will allow me to see loved ones who are older or more vulnerable. The best way to protect the elders in our community is to get vaccinated and encourage others to do the same."
- Rural Counties: "Getting a vaccine will help open up businesses here in New Mexico and help the economy in our community rebound quickly."

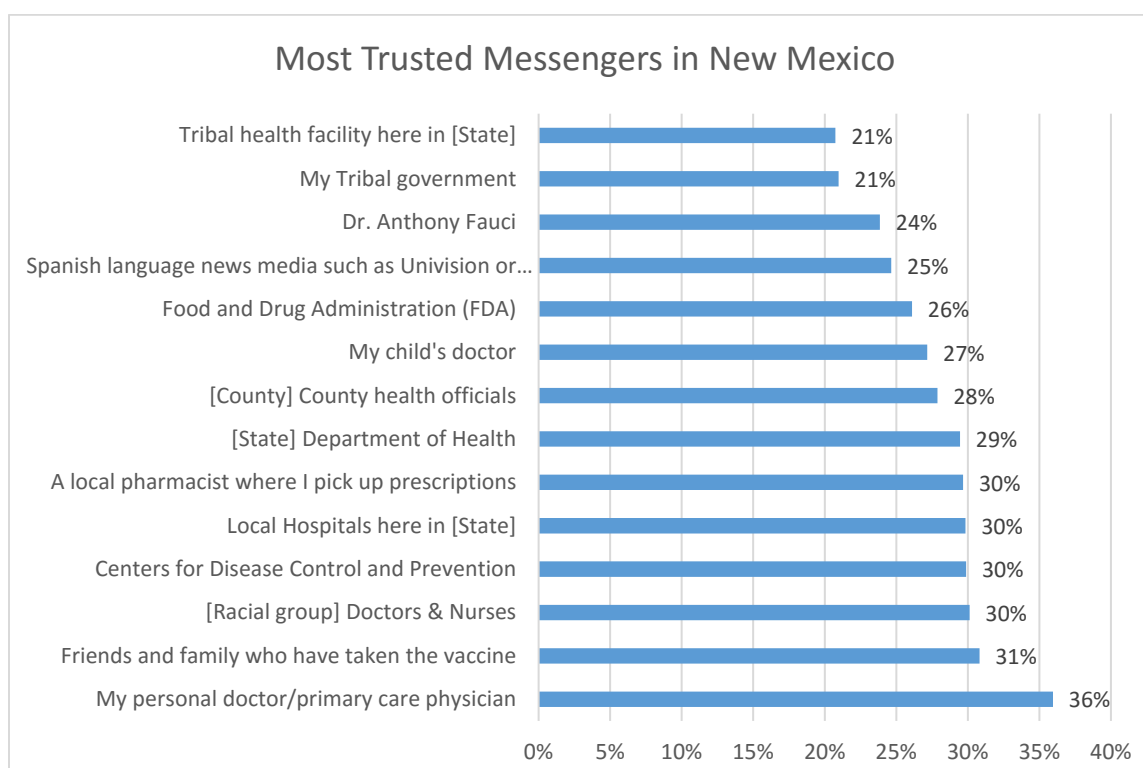
Finally, given that the data suggests that partisanship has a pronounced impact on attitudes toward vaccination, including hesitancy, we analyzed the data to identify some messaging

themes that are particularly persuasive among this specific sub-group of the population. Below are two of the messages that performed particularly well among self-identified Republicans in the survey's sample:

- “Because people who are vaccinated for COVID-19 almost never get the disease, getting vaccinated will help us stop having to wear masks.” – 36% of Republicans report that this message makes them more likely to want to get a vaccine.
- “Former President Donald Trump got a COVID-19 vaccine and is now encouraging everyone to get vaccinated.” – 37% of Republicans report that this message makes them more likely to want to get a vaccine.

In regards to messengers, the survey tested a wide range of potential messengers who might be persuasive in delivering some of these high performing messages. New Mexicans identified their own doctor or primary care physician as their most trusted messenger overall. Medical professionals (both doctor and nurses) are also strong performing messengers overall for promoting the vaccine. This general approach may be advisable given that roughly a quarter of the sample reported that they do not have a primary care physician.

Similar to the need to nuance messaging for specific communities in the state, we found that messenger categories test better among racial and ethnic minorities when we reference that the doctors are from their own racial or ethnic group. We therefore suggest that images used in creative material promoting the vaccine should be diverse and ideally feature local medical professionals from each respective community. Finally, the Department of Health's effort to feature local New Mexicans as messengers has been a good decision, as friends and family who have taken the vaccine are also highly trusted messengers.



Note: Respondents were asked the following question: On a scale of 0 to 10, with 0 meaning you do not trust at all and 10 meaning you totally trust, how much would you trust each of the following if they participated in a campaign to encourage Americans to get the vaccine. The percentage above provides the percentage who identified the messenger as one of their highest on the scale.

Next Steps: Look to our Webpage for More Analysis

Our team intends to investigate additional strategies to improve trust in the vaccination process among all New Mexicans. This will include drawing more from this survey to help connect the best performing messages into outreach materials that can improve vaccine uptake and help New Mexico remain a role model for other states as we continue the push forward in the fight against the COVID-19 virus. This has already been very successful, as our team was able to brief the different teams within the state tasked with creating messaging to encourage New Mexicans to become vaccinated as soon as the data was out of the field. This allowed those outreach efforts to use the data-tested messages from the survey and to remove the obstacles identified in the survey from the vaccination process quickly.

Our team at the UNM Center for Social Policy will continue to analyze the survey and provide additional report to inform the wider community on key findings. Our next report will focus on attitudes toward vaccination of children among parents from the sample, as well as projected participation in an annual COVID-19 vaccine. We will also analyze the content in the survey focused on discrimination experiences of New Mexicans within the health systems of the state, and the economic stress that New Mexicans continue to experience as a result of the pandemic.

Please see our COVID-19 webpage for more of our research and info-graphics to use for outreach efforts. <https://csp.unm.edu/covid-19/index.html>

The research and report was funded by the W.K.Kellogg Foundation.

You can also find the full set of national and New Mexico results from the survey at the following webpage: <https://covidvaccinepoll.com/app/aarc/covid-19-vaccine-messaging/#/?nm=true>

About the Author Team

Gabriel R. Sanchez, Ph.D., is the Founding Robert Wood Johnson Foundation Chair in Health Policy, Director of the Center for Social Policy, and Co-Founder of the Native American Budget and Policy Institute at the University of New Mexico.

Melanie Sayuri Dominguez is a Ph.D. Candidate in the Department of Political Science and a Doctoral Fellow at the Center for Social Policy at the University of New Mexico.

Betzaira Mayorga-Calleros, B.A., is a doctoral student in the Department of Political Science and a Fellow at the UNM Center for Social Policy at the University of New Mexico.

Shannon Sanchez-Youngman, Ph.D., is an Assistant Professor in the College of Population Health and Director of the Center for Social Policy Fellowship Program at the University of New Mexico