HOW TO SAVE A LIFE: SUCCESSFUL MODELS FOR PROTECTING COMMUNITIES FROM COVID–19

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON CIVIL RIGHTS AND HUMAN SERVICES

AND THE

SUBCOMMITTEE ON HEALTH, EMPLOYMENT, LABOR, AND PENSIONS

OF THE

COMMITTEE ON EDUCATION AND LABOR U.S. HOUSE OF REPRESENTATIVES

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HOW TO SAVE A LIFE: SUCCESSFUL MODELS FOR PROTECTING COMMUNITIES FROM COVID–19

Tuesday, September 28, 2021

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CIVIL RIGHTS AND HUMAN SERVICES,
SUBCOMMITTEE ON HEALTH, EMPLOYMENT,
LABOR, AND PENSIONS,
COMMITTEE ON EDUCATION AND LABOR,
Washington, DC.

The Subcommittees met, pursuant to notice, at 10:17 a.m., via Zoom, Hon. Suzanne Bonamici (Chairwoman of the Subcommittee on Civil Rights and Human Services) presiding.

Present: Representatives Bonamici, DeSaulnier, Courtney, Adams, Morelle, Wild, McBath, Hayes, Levin, Stevens, Leger Fernández, Mrvan, Bowman, Scott (*ex officio*), Allen, Thompson, Walberg, Banks, McClain, Harshbarger, Miller, Spartz, Fitzgerald, and Foxx (*ex officio*).

Staff present: Ilana Brunner, General Counsel; Ijeoma Egekeze, Professional Staff; Rashage Green, Director of Education Policy; Rasheedah Hasan, Chief Clerk; Sheila Havenner, Director of Information Technology; Carrie Hughes, Director of Health and Human Services; Ariel Jona, Policy Associate; Andre Lindsay, Policy Associate; Richard Miller, Director of Labor Policy; Max Moore, Staff Assistant; Mariah Mowbray, Clerk/Special Assistant to the Staff Director; Kayla Pennebecker, Staff Assistant; Veronique Pluviose, Staff Director; Banyon Vassar, Deputy Director of Information Technology; Cyrus Artz, Minority Staff Director; Michael Davis, Minority Operations Assistant; Rob Green, Minority Director of Workforce Policy; Taylor Hittle, Minority Professional Staff Member; Georgie Littlefair, Minority Staff Assistant; John Martin, Minority Deputy Director of Workforce Policy/Counsel; Hannah Matesic, Minority Director of Member Services and Coalitions; Audra McGeorge, Minority Communications Director; and Ben Ridder, Minority Professional Staff Member.

Chairwoman BONAMICI. The Subcommittee on Civil Rights and Human Services, and Subcommittee on Health, Employment, Labor, and Pensions will come to order.

Welcome, everyone. I note that a quorum is present.

The subcommittees are meeting today for a joint hearing to hear testimony on "How to Save a Life: Successful Models for Protecting Communities from COVID–19."

This is an entirely remote hearing, and, as such, the Committee's hearing room is officially closed. All microphones will be kept muted as a general rule to avoid unnecessary background noise. Members and witnesses will be responsible for unmuting themselves when they are recognized to speak or when they wish to seek recognition.

If a Member or witness experiences technical difficulties during the hearing, please stay connected on the platform, make sure you are muted, and use your phone to immediately call the Committee's IT director. His number was provided in advance. Should the Chair experience technical difficulty or need to step away, Chairman DeSaulnier or another majority Member is hereby authorized to assume the gavel in the Chair's absence.

To adhere to the Committee's five-minute rule, staff will be keeping track of time using the Committee's digital timer, which appears in its own thumbnail picture. Members and witnesses are asked to wrap up promptly when their time is expired.

Pursuant to Committee Rule 8(c), opening statements are limited to the Chairs and Ranking Members. This allows us to hear from our witnesses sooner and provides all Members with adequate time to ask questions.

I now recognize myself for the purpose of making an opening statement.

Good morning, everyone. Today, we are examining best practices for increasing COVID–19 vaccinations through the lens of health equity. To date, the CDC reports that 686,639 people—I am going to say that again—686,639 people in the United States have tragically died from COVID–19.

We are now experiencing a resurgence of the virus as the Delta variant continues to spread across the country. Every day, we continue to lose an average of more than 2,000 of our loved ones, friends, and neighbors. Unfortunately, millions of unvaccinated Americans are still at risk of succumbing to this deadly virus.

Vaccination rates have been lowest in the most underserved areas, particularly rural and BIPOC—Black, indigenous, and people of color—communities. And, for a multitude of reasons that our expert witnesses will discuss, many unprotected Americans are simply not getting the vaccinations they need to stay safe and healthy. These individuals are not concentrated in any single region of the country or on any one end of the political spectrum. So, we, as policymakers, should be working together to better support our public health professionals in reaching those populations.

To address obstacles to vaccination, the American Rescue Plan Act has invested more than $240 million in community-led efforts and provided significant funding to increase vaccination rates in rural areas. These investments helped bolster the efforts of a wide range of community-based organizations and federally funded partners, such as the Aging Network supported by the Older Americans Act and the Community Action Network authorized by the Community Services Block Grant.

These efforts have been essential to saving lives of those who have long been medically underserved. For example, many community action agencies across the country have supported vaccinations by engaging in outreach and education, providing vaccine registra-

tion, scheduling assistance and transportation, and hosting vaccination clinics or supporting, importantly, mobile units.

To highlight the successful approaches of these entities, I ask unanimous consent to enter into the record a report from the National Community Action Foundation entitled "Community Action and Health Equity in response to COVID–19."

Without objection, so ordered in the record.

Chairwoman BONAMICI. Today's hearing is an opportunity to learn from successful initiatives so we can provide every community with the tools they need to finally defeat this virus. If we listen to the advice of our medical experts and work together, we can keep our communities healthier and save lives.

So, thank you again for your witnesses for being here today.

I now yield to the distinguished Ranking Member, Mrs. Spartz, for her opening statement. She will be serving as Ranking Member of the Subcommittee on Civil Rights and Human Services for this hearing.

I turn it over to you, Mrs. Spartz.

[The prepared statement of Chairwoman Bonamici follows:]

STATEMENT OF HON. SUZANNE BONAMICI, CHAIRWOMAN, SUBCOMMITTEE ON CIVIL RIGHTS AND HUMAN SERVICES

Today, we are examining best practices for increasing COVID–19 vaccinations through the lens of health equity.

To date, the CDC reports that 686,639 people in the United States have tragically died from COVID–19.

We are now experiencing a resurgence of the virus as the Delta variant continues spreads across the country. Every day, we continue to lose an average of more than 2,000 of our loved ones, friends and neighbors.

Unfortunately, millions of unvaccinated Americans are still at risk of succumbing to this deadly virus. Vaccination rates have been the lowest in our most underserved areas, particularly rural and BIPOC—Black, indigenous and people of color—communities.

And for a multitude of reasons that our expert witnesses will discuss, many unprotected Americans are simply not getting the vaccinations they need to stay safe and healthy. These individuals are not concentrated in any single region of the country or on any one end of the political spectrum, so we, as policymakers, should be working together to better support our public health officials in reaching those populations.

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If we listen to the advice of our medical experts and work together, we can keep our communities healthier and save lives.

So thank you, again, to our witnesses for being here today. I now yield to the distinguished Ranking Member, Ms. Spartz, for her opening statement. She will be serving as the Ranking Member for the Subcommittee on Civil Rights and Human Services for this hearing. I turn it over to you, Ms. Spartz.

Mrs. SPARTZ. Thank you, Madam Chairman.

I believe it is an important discussion to have, how do we manage and mitigate pandemic risks, look at them comprehensively, and stop politicizing serious government decisions to play politics with people's lives or advance a party agenda.

Let's look at the prior year's successes: Operation Warp Speed was the gold standard of vaccine development and distribution. Under President Trump, who promptly cut red tape and regulations, our private healthcare sector was able to produce a lifesaving vaccine in record time. This proved yet again that America's healthcare system thrives when government gets out of the way and supports private innovation.

As we continue discussing successful models for protecting communities from COVID–19, we must acknowledge that the most effective mitigation and prevention strategy, vaccination, is both free and widely available for every American over age 12. Our free enterprise system and the private healthcare industry made this miraculous feat possible.

The timing of the pandemic to happen during an intense election year caused it to be politicized even further. And despite claiming to be the party of science, Democrats fueled the public's vaccine hesitancy by spawning doubt over whether a Republican President could be trusted to deliver a safe and effective COVID–19 vaccination. This politically motivated disinformation was cowardly, cost people their lives, and exacerbated health disparities.

Unfortunately, the Biden administration continues to sow fear, doubt, and confusion. Through ever-changing guidance and policies drafted along ideological lines, President Biden has created another pandemic: misinformation. We need our Commander-in-Chief to put facts before factions and to clearly communicate with the public about the State of COVID–19, the vaccine's effectiveness, and the path forward to a pre-pandemic level.

From the latest vaccine mandates, which are not based on risk or science, to precluding our children from in-person learning, which is not based on risk or science, this President has traded our country's long-term viability for short-term political wins for the Democrat Party.

To capitalize on early successes, we experienced responding to COVID–19, it is imperative that we establish local and State control, working together with those leaders to execute policy that encourages vaccination and government transparency, not government force and fear. It backfires and only belongs to totalitarian regimes, not a constitutional republic of free people. Only then can we begin to regain our pre-pandemic prosperity.

Thank you to our witnesses for joining us in what I hope, for a change, will be a fact-based, productive, and meaningful discussion.

And I yield back.

[The prepared statement of Mrs. Spartz follows:]

STATEMENT OF HON. VICTORIA SPARTZ, MEMBER, SUBCOMMITTEE ON CIVIL RIGHTS AND HUMAN SERVICES

It's an important discussion to have: how do we manage and mitigate pandemic risks, look at them comprehensively, and stop politicizing serious government decisions to play politics with people's lives and advance a party agenda.

Let's look at the prior year's successes: Operation Warp Speed was the gold standard of vaccine development and distribution. Under President Trump, who promptly cut red tape and regulations, our private health care sector was able to produce several lifesaving vaccines in record time.

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Thank you to all our witnesses for joining us in what, I hope for a change, will be a fact-based, productive, and meaningful discussion.

Chairwoman BONAMICI. Thank you, Ranking Member Spartz.

And now I recognize the distinguished Chair of the Subcommittee on Health, Employment, Labor, and Pensions, Chairman DeSaulnier, for the purpose of making an opening statement.

Chairman DESAULNIER. Thank you, Chair Bonamici. Thank you so much for this hearing.

And thank you to all of our witnesses, really terrific, for your words here and for your work.

The Delta variant is continuing to pose a serious threat to our public health as we mourn the loss of more than 680,000 family Members, friends, neighbors and fellow countrymen so far. This is particularly true for communities that have historically been left behind by our healthcare system and suffered the greatest losses during this pandemic.

Despite these significant challenges, hope is far from lost. COVID–19 vaccinations continue to be our most effective strategy to prevent people from succumbing to this virus. And the critical investments we provided in the American Rescue Plan are helping to expand vaccinations in the areas that need them most.

Yet, even as we fight against the Delta variant, we are still seeing lawmakers and leaders politicize vaccinations instead of fol-

lowing the science and putting the health of our communities first. This is a disservice to the American people that we all represent. We have a responsibility to unite behind this scientifically proven vaccine and public health guidance that are saving lives as we speak.

In the area I am very privileged to represent, San Francisco Bay area, Contra Costa County, we have been working to make significant investments in vaccine equity. In May, the equity gap between White residents in my county and African American residents was 22 percent. By August, thanks to the hard work of people in our public health system, by August, however, that equity gap had decreased from 22 percent to 6 percent: 22 percent to 6 percent.

To achieve these significant improvements, the Contra Costa Regional Medical Center recognized, the public hospital, that they had to do more than just set up vaccine sites in neighborhoods with low vaccination rates. They created a system, preferential, with preferential scheduling in those neighborhoods where residents in ZIP Codes with the worst health outcomes were given the first appointments. They also created a multilingual call center to schedule appointments for residents that conducted outreach through text campaigns and direct phone calls to residents in those communities.

By coupling or equity lens with data and technology systems, Contra Costa County was able to prioritize residents and address the equity gap in a significant way in a short period of time.

Today, I look forward to hearing from our witnesses about what we should do in best practices, what we should do from lessons they have learned in their critical efforts to help underserved communities recover from this historic pandemic and then make sure that all Americans benefit.

I am now happy to recognize my friend, the Ranking Member, Mr. Allen.

[The prepared statement of Chairman DeSaulnier follows:]

STATEMENT OF HON. MARK DESAULNIER, CHAIRMAN,
SUBCOMMITTEE ON HEALTH, EMPLOYMENT, LABOR, AND PENSIONS

Thank you, Chair Bonamici, thank you so much for this hearing. And thank you to all of our witnesses, really terrific for your words here and your work.

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I am now happy to recognize my friend, Ranking Member, Mr. Allen.

Chairwoman BONAMICI. Mr. Allen, you are recognized for five minutes for your opening statement.

Mr. ALLEN. Can you hear me OK?

Chairwoman BONAMICI. We can hear you.

Mr. ALLEN. OK. Thank you, Mr. Chairman and Madam Chairman.

You know, as I look back, our Nation's pre-pandemic economy was the best in the world. Unemployment, particularly for minority groups, was an all-time low. Wages increased for more than 19 straight months and grew faster for the bottom 10 percent of income earners than it did for the top 10 percent of income earners.

Business owners and workers are eager to get back to this unprecedented period of economic growth and prosperity, but President Biden is either incapable of or unwilling to lead our economy and our Nation forward. There are currently over 8.4 million unemployed Americans and 10.9 million job openings, a gap that is due, in part, to the Biden administration's absurd policies that are keeping would-be workers out of the workforce. For minority groups, the unemployment rate is as high as 8.8 percent.

At gas pumps and grocery stores, workers are spending more due to President Biden's inflation crisis. To put it simply, inflation is a tax on the middle class and the Biden administration is forcing already cash-strapped families to tighten their belts to pay for Democrats' outlandish taxpayer-funded spending sprees.

It is truly astonishing to watch an administration trade long-term economic prosperity for short-term liberal special interests. The worst part is that there is little evidence that government-mandated lockdowns did much to reduce COVID–19 transmissions. As we successfully demonstrated in my home State of Georgia, our economy can and should safely reopen.

Effective lifesaving vaccines are readily available to those who make an informed decision, based on their physician's advice. Schools and employers have received far more government funding than necessary to weather the pandemic-induced economic disruption. More top-down mandates from Washington will not alleviate the financial suffering this President's policies have inflicted on this Nation.

As Members of Congress, we must lead by example. It is imperative that this Committee meet in person as a signal to job creators that it is safe for them to do so as well. Without strong leadership from our President, it is equally as important that we continue to bolster State and local efforts to balance public health with economic prosperity and uphold individual freedoms. The Federal Government does not have all the answers, which is why I look forward to a discussion with our witnesses about how our economy can regain its footing without burdening business owners and restricting individual freedoms.

And, with that, I yield back.

[The prepared statement of Mr. Allen follows:]

STATEMENT OF HON. RICK ALLEN, RANKING MEMBER,
SUBCOMMITTEE ON HEALTH, EMPLOYMENT, LABOR, AND PENSIONS

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The Federal Government does not have all the answers, which is why I look forward to a discussion with our witnesses about how our economy can regain its footing without burdening business owners and restricting individual freedoms.

Chairwoman BONAMICI. Thank you very much, Ranking Member Allen.

And now I will introduce our witnesses. Dr. Leana Wen is a Professor and Distinguished Fellow at the Fitzhugh Mullan Institute for Health Workforce Equity at The George Washington University Milken Institute School of Public Health in Washington, DC.

Welcome, Dr. Wen.

Dr. Viviana Martinez-Bianchi is the Director of Health Equity and is an Associate Professor for the Department of Family Medicine and Community Health at Duke University School of Medicine in Durham, North Carolina.

Welcome, Dr. Martinez-Bianchi.

Mr. Avik Roy is the President of the Foundation for Research on Equal Opportunity in Washington, DC.

Welcome, Mr. Roy.

And Dr. Chris Pernell is the Chief Strategic Integration and Health Equity Officer at University Hospital in Newark, New Jersey.

Welcome, Dr. Pernell.

We appreciate the witnesses for participating today and we look forward to your testimony. Please note that your written statements will appear in full in the hearing record; and you are asked to limit your oral presentation to a five-minute summary; and, after your presentations, we will move to Member questions.

I know the witnesses are aware of their responsibility to provide accurate information to this joint Subcommittee, and, therefore, we will proceed with their testimony.

I will first recognize Dr. Wen for five minutes for your testimony.

STATEMENT OF LEANA WEN, PROFESSOR & DISTINGUISHED FELLOW, FITZHUGH MULLAN INSTITUTE OF HEALTH WORKFORCE EQUITY, THE GEORGE WASHINGTON UNIVERSITY MILKEN INSTITUTE SCHOOL OF PUBLIC HEALTH

Dr. WEN. Thank you very much, Chairwoman Bonamici, Chairman DeSaulnier, Ranking Member Spartz and Allen and Chairman Scott, Ranking Member Foxx, and the distinguished Members of the Subcommittees on Civil Rights and Human Services and Health, Education, Labor, and Pensions. Thank you for convening this important conversation to address the urgent actions that must be taken to protect our communities.

There is no question that COVID–19 has unveiled rampant health disparities and that people of color, families with low income, who already bear the brunt of disparities, have suffered the most. We must go beyond admiring the problem, and, in my testimony I want to emphasize six actions that Congress must take to reduce the disproportionate impact of the pandemic on vulnerable communities:

No. 1, take every available measure to protect our children. Now is the most dangerous time in the pandemic when it comes to kids too young to be vaccinated. The CDC has provided extensive evidence-based guidance for what should be done in schools. Congress should stand behind the CDC's recommendations to keep schools open safely.

No. 2, increase availability of rapid testing. Testing is a crucial layer of protection that the U.S. has not utilized to its full potential. Imagine if every student can take a rapid test before going to school and every worker can test before going to work, and if extended families can all take tests before seeing one another.

A rapid antigen test is not 100 percent effective, but even if it is 80 percent effective it will identify 80 percent of those who otherwise could have infected others. The U.K. has made free tests available to everyone so that all residents can be tested twice a week. Canada is providing free rapid tests to businesses.

The Biden administration has said that they will purchase 280 million tests for around $7 each, but this is far too little for far too much. Congress should urge the administration to make free tests available for everyone so that all Americans can be tested at least twice a week.

No. 3, improve vaccination rates. Only about 55 percent of Americans are fully vaccinated, which is far too low to stem the surge of coronavirus. It is unacceptable that about 2,000 Americans are still dying every day. Members of Congress should use your extensive platforms to support all efforts to increase vaccine uptake, including scaling up education and outreach, combating misinformation and disinformation, and increasing accessibility of vaccines.

Baltimore is among the cities that utilized mobile vaccine vans that travel to people's homes. This was particularly necessary for older residents, homebound individuals, people with disabilities and others whose barrier to vaccination is mainly about access.

New York City is also a standout in making vaccines available in transportation hubs and in schools. These efforts to reach people where they are continues to be so important because nearly half of the unvaccinated are in the unvaccinated-but-willing category. They can be reached through ongoing outreach, and vaccine requirements will help as well.

No. 4, ensure workplace protections. Congress should urge the administration to make high-quality N95 and KN9five masks available to every worker free of charge. While COVID–19 cases are surging, indoor masking should be required at workplaces unless there is universal vaccination and a robust testing regimen.

No. 5, increase data collection and improve oversight. There should be a real-time dashboard coordinated by the Federal Government with data uploaded by State and local health departments that provide on-the-ground information about primary vaccinations, booster uptake, breakthrough infections, testing rates, among other metrics. This provides transparency and accountability and allows for targeted interventions. Federal funding can be tied to the availability of this data, adding a strong incentive for compliance.

And, No. 6, support safety net public health systems. It is excellent that there is new funding to address COVID–19, but we must not forget that public health is not only about infection control. There were other issues that were crises prior to COVID and have gotten worse, like the opioid epidemic, the crisis of maternal health, and the lack of food and housing access. Congress should allocate resources to address these other public health issues too, and Congress should also allow maximal flexibility for local jurisdictions that are closest to the ground and that can best serve their communities.

Thank you for considering these six specific steps to combat COVID–19, reduce disparities, and in so doing improve health for all and strengthen our communities.

[The prepared statement of Dr. Wen follows:]

Prepared Statement of Dr. Leanna Wen

U.S House of Representatives Education & Labor Committee
Joint Subcommittees on Civil Rights and Human Services
And Health, Employment, Labor, and Pension

"How to Save a Life: Successful Models for Protecting Communities"
Tuesday, September 28th 2021

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Chairwoman Bonamici and Chairman DeSaulnier, Ranking Members Fulcher and Allen, and distinguished members of the Subcommittees on Civil Rights and Human Services and Health, Employment, Labor and Pensions: Thank you for convening this important conversation to address the continuing and rampant health disparities unveiled during the COVID-19 pandemic and the urgent actions that must be taken to protect our communities.

Since the beginning of the pandemic, we have seen the unequal and devastating impact of COVID-19 on African-Americans, Latino-Americans, Native Americans, and other communities of color. According to data from the Centers for Disease Control and Prevention, Black and Hispanic people are at least twice as likely to die of COVID-19 as White people and nearly three times more likely to be hospitalized.[1] More than 21% of COVID-19 cases in the United States are in African-Americans and nearly 34% in Latino-Americans, despite these groups making up only 13% and 18% of the population, respectively.[2]

A recent analysis from the Johns Hopkins University revealed persistent disparities in testing and vaccinations in these groups hit hardest by the pandemic.[1] According to data from 37 states that track infections and vaccinations by ethnicity, Hispanic people represent a smaller proportion of vaccinations than they do infections in all but four states. Of the 39 states that track by race, Black people represent a smaller share of vaccinations than they do infections in all but six states. Only eight states track the same numbers for testing, but among these eight states, a similar trend can be seen for disproportionately low testing in these communities.

Tragically, the disparities seen in adults are mirrored in children. Compared to White children, as reported by the Kaiser Family Foundation, Black, Hispanic, and Asian children reported lower

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[1] McPhillips, D. C. (2021, September 14). *Black, Hispanic people miss out on Covid-19 testing and vaccinations*. CNN. https://edition.cnn.com/2021/09/14/health/jhu-covid-data-disparities/index.html

[2] Tai, D. B. G., Shah, A., Doubeni, C. A., Sia, I. G., & Wieland, M. L. (2020). The Disproportionate Impact of COVID-19 on Racial and Ethnic Minorities in the United States. *Clinical Infectious Diseases*, *72*(4), 703–706. https://doi.org/10.1093/cid/ciaa815

rates of testing but were more likely to be infected with COVID-19.[3] Black and Hispanic children have higher rates of hospitalization, including from multisystem inflammatory syndrome in children, a rare but serious manifestation that could lead to multiorgan failure and death. American Indian and Alaska Native children have 3.5 times the death rate compared to White children; Black children also have a 2.7 times higher death rate compared to White children.

In this testimony, I emphasize six actions that Congress can take now to reduce the disproportionate impact of the pandemic on vulnerable communities—and, in so doing, improve health for all.

#1: Take every available to measure to protect children. The United States is now entering what is almost certainly the most dangerous time for kids during the pandemic. During the two week period of late August-early September 2021, nearly half a million children tested positive for COVID-19. According to the American Academy of Pediatrics, children now constitute 29 percent of all new COVID-19 infections. Against the backdrop of the most contagious variant yet, the delta variant, and with very high rates of transmission in most parts of the country, schools are reopening for in-person instruction.

The CDC has provided extensive, evidence-based guidance on how to reopen schools safely. A layered mitigation strategy can result in schools having even less transmission than the surrounding community. These measures include: vaccinating teachers, staff, and adolescents 12 and older; making at least weekly testing available; improving ventilation; keeping students in cohorts or pods; ensuring that children do not come to school while symptomatic; continuing rigorous contact tracing and quarantine procedures; and, importantly, mandating masks indoors.

Unfortunately, many schools are not implementing these protocols. Some are in states that have explicitly forbidden measures like mandatory masking. This has resulted in an environment that is needlessly higher risk for children. While kids overall tend to fare well if they contract the coronavirus, some do become hospitalized, and some, tragically, will die. Kids can also spread COVID-19 to members of their family, and onward transmission can occur throughout the community. Given that children in minority and low-income communities are disproportionately affected by the coronavirus, ensuring that mitigation measures are followed will be essential to safeguarding everyone's health—and preventing further exacerbation of unacceptable health disparities.

Members of Congress can help by standing behind the CDC's strong recommendations for school COVID-19 safety. They should consider tying funding to implementation of these measures. While the coronavirus surges among our young, it is unconscionable not to do everything to protect our children—while keeping schools open for in-person instruction.

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[3] *Racial Disparities in COVID-19 Impacts and Vaccinations for Children*. (2021, September 22). KFF. https://www.kff.org/racial-equity-and-health-policy/issue-brief/racial-disparities-in-covid-19-impacts-and-vaccinations-for-children/

Congress should also keep the pressure on the Food and Drug Administration to expeditiously authorize a vaccine for children under 12. It is critical that the studies are done and that regulators ensure such a vaccine is safe and effective, but red tape cannot and should not get in the way of this urgent health priority.

#2: Increase availability of rapid testing. Testing is a crucial layer of protection that the United States has not utilized to its full potential. It can be a preventive measure that quickly identifies individuals who may be asymptomatic carriers and stops further chains of transmission.

PCR tests are the gold-standard test, but results often are not available for days. On the other hand, rapid antigen tests can provide results in under half an hour—often in just 15 minutes.

Imagine if every student can take a rapid test in the morning before they go to school, or every worker can do the same before heading to the office. A rapid test is not 100 percent effective—but even if it's 80 percent effective, it will identify 80 percent of those who otherwise would have been in contact with others to potentially infect.

This is not the reality in the United States, but it is in other countries. In some European countries, rapid tests can be purchased in retail stores for less than a dollar each. In some Asian countries, they are available in vending machines. Japan has 4.1 million such vending machines alone.[4] The United Kingdom has made free tests available to all their residents so that everyone can be tested twice a week.[5] Canada is providing free rapid tests to businesses.[6]

The Biden administration has announced multiple efforts to scale up testing, but it's not nearly enough. Over-the-counter tests in the U.S. run from $25 to $50 each, which is out of range for most families.[7] The most recent administration push is to purchase 280 million rapid tests at a cost of around $7 each. As Daniel Oran and Eric Topol wrote in a STAT news op-ed, "This is far too few for far too much."[8]

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[4] Sakai, H. R. S. (2021, March 8). *In Japan, vending machines help ease access to COVID-19 tests*. U.S. https://www.reuters.com/article/us-health-coronavirus-japan-vending-mach/in-japan-vending-machines-help-ease-access-to-covid-19-tests-idUSKBN2B00WO

[5] Sakai, H. R. S. (2021, March 8). *In Japan, vending machines help ease access to COVID-19 tests*. U.S. https://www.reuters.com/article/us-health-coronavirus-japan-vending-mach/in-japan-vending-machines-help-ease-access-to-covid-19-tests-idUSKBN2B00WO

[6] Public Health Agency of Canada. (2021). *COVID-19 rapid testing and screening in workplaces: Get free rapid antigen tests - Canada.ca*. Government of Canada. https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19/testing-screening-contact-tracing/rapid-tests-employees.html

[7] Haseltine, W. A. (2021, April 8). *Rapid Home Testing: If The UK Can Do It, Why Can't We?* Forbes. https://www.forbes.com/sites/williamhaseltine/2021/04/08/rapid-home-testing-if-the-uk-can-do-it-why-cant-we/?sh=5dfce1b2d926

[8] Topol, E. J., Hassan, A., Kollins, S., & Cohrs, R. (2021, September 16). *Beyond "vaccinopia": Employ rapid tests to fight Covid-19*. STAT. https://www.statnews.com/2021/09/16/beyond-vaccinopia-larger-role-rapid-tests-fighting-covid/

Congress should urge the administration to make free tests available so that every American be tested at least twice a week. Rapid tests should be part of every school and every employer's in-person protocols. They should also be made available whenever people want them so that individuals can take them before seeing extended family or getting together with friends. Many people are already purchasing rapid tests for these uses. Congress can help to level the playing field and make rapid testing—and therefore early detection of infection and prevention of spread—available to all, regardless of ability to pay.

#3: Improve vaccination rates. Many public health experts agree that our best and only way out of the pandemic is through a much higher proportion of the population having immune protection from COVID-19. Vaccination is the best path there—the cost of gaining immunity from illness and recovery is just too high.

Only about 54 percent of Americans are fully vaccinated. This is far below the threshold needed in order to stem the surge of coronavirus cases. Without dramatic increases in vaccination rates, there will be more infections, hospitalizations, and deaths, with vulnerable communities once again bearing the brunt of preventable illness and suffering.

Members of Congress should use their extensive platforms to support all efforts to increase vaccine uptake. That includes continuing education and outreach; combating disinformation and misinformation; and increasing accessibility of vaccines.

There have been many successful community vaccination efforts from which we can draw lessons. Baltimore is among the cities that utilized mobile vaccine vans that traveled to people's homes. This was particularly necessary for older residents, home-bound individuals, people with disabilities, and others whose barrier to vaccination is primarily about access.

New York City has also had this mobile vaccination efforts. Additional access points, including to make vaccines available in transportation hubs and in schools, are also key too. The choice to get the vaccine should become the default one, and we need to recognize that ease of access is a main barrier.

As cited recently in the *Washington Post*, nearly half of the unvaccinated are in the "unvaccinated but willing" category.[9] These are individuals who can be moved to become vaccinated if community outreach efforts continue.

Congress should continue to support and encourage these vaccination efforts. There are many Americans who are only partially vaccinated. Others are fully vaccinated but will soon be recommended to get boosters. Access to vaccination should not be a barrier, and every effort to bring vaccines directly to the most vulnerable.

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[9] Kornfield, M. (2021, September 23). *Nearly half of the unvaccinated say they're willing to get a coronavirus shot. The challenge is trying to get it to them.* Washington Post. https://www.washingtonpost.com/health/2021/09/23/covid-unvaccinated-but-willing/

Members of Congress can also help to speak about the COVID-19 vaccines the same as we do all other vaccinates. All 50 states require childhood immunizations. Vaccines are routinely required for employment in healthcare institutions and other occupations. The COVID-19 vaccines should be regarded no differently.

#4: Ensure workplace protections. Since the beginning of the pandemic, essential workers on the frontlines have been disproportionately exposed to COVID-19 risk. While access to masks and other personal protective equipment (PPE) has improved, workers still do not have universal, free access to the highest-quality masks (N95 or KN95).

Congress should urge the administration to make these masks available to every worker, free of charge. While COVID-19 cases are surging, indoor masking should also be required at workplaces, unless there is universal vaccination and a robust testing regimen.

Recently, the Biden administration has announced efforts to mandate vaccines for the federal workforce and to require either vaccination or testing for larger employers. I hope that Congress will support these efforts and see them as being essential to stem the surge of COVID-19—and to protect workers and their families.

#5: Increase data collection and improving oversight. Though data collection around racial and ethnic disparities has improved since the beginning of the pandemic, there are still major lapses. Important areas include testing rates (including with at-home antigen tests), test positivity, hospitalization, infection, death, and by racial and ethnic group and geography. Breakthrough infections, both mild and severe, should also be tracked.[10]

Many of us in public health championed a dashboard that is updated in real-time, and that's coordinated by the federal government with data uploaded by state and local officials. This provides important, on the ground information and also offers the transparency and accountability needed to ensure that communities most in need are receiving the resources they require. Federal funding can be tied to the availability of these data, adding a strong incentive for compliance.

With the upcoming authorization of booster shots, such real-time tracking will be more important than ever. The vaccine rollout had vast inequities that only got addressed when the problems of rampant disparities became revealed. Distribution a third booster dose will run into the same problems of access.

This is not to advocate for perfect being the enemy of the good—I strongly believe that we need to have booster shots, and if there are some who want to be first in line to get them, it's fine to allow them to do so.[11] But we need to be aware if there are demographic divides in booster

[10] Holtgrave, D. R., Vermund, S. H., & Wen, L. S. (2021). Potential Benefits of Expanded COVID-19 Surveillance in the US. *JAMA*, *326*(5), 381. https://doi.org/10.1001/jama.2021.11211

[11] Wen, L. (2021, September 21). *The CDC should let Americans decide for themselves if their risk warrants getting a booster shot*. Washington Post. https://www.washingtonpost.com/opinions/2021/09/21/fda-limits-booster-shots-at-risk-americans/

uptake, and then seek to understand and ameliorate the disparities. Real-time, on the ground tracking is crucial to targeting interventions that aim for equity.

#6: Support safety-net public health systems. Primary care and community-based healthcare organizations have suffered substantially during the COVID-19 crisis. Home visitation and other community outreach programs have also had to curtail their work. Efforts must be made to support these community-based programs that serve as the safety net for many. There is an urgent need to strengthen local public health infrastructure not only to ensure a robust response to COVID-19 and future crises, but also so that those interventions do not come at the cost of health and well-being and thus further perpetuate racial disparities.

It's understandable that many other public health priorities have been put on hold because of the emergency, ongoing crisis that is COVID-19. At the same time, infection control is not the only function of public health. Communities that were vulnerable and under-resourced prior to the pandemic are likely in even greater need now.

It's excellent that there is new funding to address COVID-19, but we must not forget the resources for the broader social determinants of health. Disparities in health outcomes are inextricably linked to housing instability, food deserts, and lack of transportation access. These are all issues that contribute to poor health broadly and to disparities associated with COVID-19 specifically.

Congress should allow maximal flexibility for local jurisdictions that are closest the ground and that can best serve their communities. As it relates to the aftermath of COVID-19, resources provided in the wake of the pandemic should also be specifically targeted to areas of greatest need.

Conclusion
There is no question that the pandemic has unveiled rampant health disparities and decimated many communities around the country. While systemic, long-term reform is needed, there are six specific steps that policymakers can take now in order to reduce disparities, strengthen communities, and, in so doing, improve health for all.

Chairwoman BONAMICI. Thank you very much for your testimony, Dr. Wen.

Next we are going to hear from Dr. Martinez-Bianchi.

You are recognized for five minutes for your testimony.

STATEMENT OF VIVIANA MARTINEZ-BIANCHI, DIRECTOR OF HEALTH EQUITY AND ASSOCIATE PROFESSOR, DEPARTMENT OF FAMILY MEDICINE AND COMMUNITY HEALTH, DUKE UNIVERSITY SCHOOL OF MEDICINE

Dr. MARTINEZ-BIANCHI. Thanks, Chairwoman Bonamici and Chairman DeSaulnier, Ranking Members and Members of the subcommittees, for inviting my testimony. I offer this testimony in my personal capacity and as a representative of LATIN–19. My views do not necessarily represent the views of my employer, Duke University.

I am pleased to be here today not only as someone who has been on the front lines of the COVID–19 pandemic as a family doctor but also on the front lines in our LatinX community, as cofounder of LATIN–19, the LatinX Advocacy Team and Interdisciplinary Network for COVID–19. LATIN–19 is a multisector coalition including over 700 people, representing a broad range of organizations and the Hispanic community across Durham and in North Carolina.

LATIN–19 was launched in March 2020 in anticipation of the expected impact of COVID–19, and it has been meeting every Wednesday at noon via Zoom with simultaneous interpretation. We provide a critical shared space for Members of the community—Latina, multisector leaders, and allies—to create collaborative and interdisciplinary solutions in a trusting and committed environment.

At our weekly meetings, entities discuss challenges, needs, and opportunities facing the Latina community and propose changes in programs, systems, and policies for improvement of health and the promotion of health equity. LATIN–19 meetings consider the myriad of social and health conditions that are driving the increased risk and disproportionate burden of COVID–19 among the LatinX community. For example, LatinX employees are overrepresented in frontline essential jobs. They are more likely to live in densely populated areas and in multigenerational, multifamily households.

Another key reason has been the systematic exclusion from access to health services, health information networks, and health insurance, even when eligible. It is ironic, disappointing, and unacceptable that the Hispanic community lacks access to healthcare, given their significant contribution to the labor force and to the economy of the country.

Throughout 2020 and 2021, LATIN–19 has engaged in broad dissemination of information on COVID–19 prevention and services by developing and sharing culturally appropriate essential information in Spanish and English to multiple networks, including local and national news outlets. In addition, the electronic patient portal of Duke Medical Center is being made available in Spanish to facilitate connection with the health system.

In July 2020, Hispanics comprised almost half of the COVID–19 cases in the entire State of North Carolina, where they were only 10 percent of the State's population. Since July 2020, LATIN–19 has been at the forefront of COVID–19 testing, and since January we have been involved in vaccination efforts to reach the LatinX communities. These efforts have contributed to lowering COVID–19 case rates and in increasing COVID–19 vaccination.

Currently, the proportion of Hispanic residents vaccinated in Durham County is the same as non-Hispanic residents, and we have reached another important milestone. At 59 percent, the proportion of vaccinated Hispanic residents in Durham County is now higher than the proportion of all people vaccinated for the whole State.

As other entities might be considering a LATIN–19 type model, I recommend these best practices: No. 1, building trust is vital, but it can take time, and it takes being a presence, being a Member of the community, being curious, listening to the questions and the diversity of voices, exhibiting our own humility and vulnerability when we are trying to come to solutions together with community Members.

No. 2, build and maintain strong channels of communication with leaders in government, public and private health systems, and the business sector to translate current needs, missed opportunities, and successes for the LatinX community.

No. 3, connect, communicate, and empower. As part of LATIN–19, we have learned that how and from whom people get their information is key.

No. 4, direct community care, including mobile primary healthcare to address community needs and diminish barriers to access. Community health workers, or promotoras, are integral to the successful deployment of healthcare in the community.

No. 5, engage the LatinX community to participate and have a voice in clinical and community-based research.

And, No. 6, education. By providing learners the opportunity to engage in community-based experiences and work closely with educators and leaders in advocacy healthcare disparities and in the intersection between primary care and public health, LATIN–19 impacts the training of the next generation of healthcare professionals and the recruitment of a diverse workforce representative of the communities we serve. Si se puede, if we can, if we engage our community.

I want to thank you for this opportunity to offer testimony on this critical issue. The LATIN–19 Network and I stand ready to be a resource for the Subcommittee's efforts, and we will be glad to provide any additional detail, data, and recommendations at your request.

[The prepared statement of Dr. Martinez-Bianchi follows:]

Prepared statement of Viviana Martinez-Bianchi, MD

Testimony of Viviana Martinez-Bianchi, MD
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Associate Professor, Director for Health Equity,
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On behalf of myself
Before the U.S. House of Representatives
House Committee on Education and Labor Committee
Joint Hearing of the Civil Rights and Human Services Subcommittee; and Health, Employment, Labor, and Pensions Subcommittee
"How to Save a Life: Successful Models for Protecting Communities from COVID-19."

Chairwoman Bonamici and Chairman DeSaulnier, Ranking Members Fulcher and Allen, and Members of the Subcommittee on Civil Rights and Human Services and the Subcommittee of Health, Employment, Labor and Pensions: Thank you for the opportunity to appear before the subcommittees today to discuss some of the important lessons we have learned from COVID-19, and the success of our Latinx Advocacy Team & Interdisciplinary Network for COVID-19 (LATIN-19) to protect our Latinx community during COVID-19. Many of the examples I will be highlighting today are also discussed in our paper "Health and Wellness for Our Latina Community: The Work of the Latinx Advocacy Team & Interdisciplinary Network for COVID-19 (LATIN-19)", which I will submit for the record as an addendum to my testimony.

I offer this testimony in my personal capacity and as a representative of LATIN-19. My views do not represent the views of my employer, Duke University, where I serve as Associate Professor and Director of Health Equity in the Duke University School of Medicine. I am pleased to be here today not only as someone who has been on the frontlines of the COVID-19 pandemic, but also on the frontlines in our Latinx communities as co-founder of LATIN-19. We are an interdisciplinary, multi-sector coalition that works to address health disparities within the Latina community. We provide a critical space for leaders and allies of the Latina community in North Carolina to create collaborative and interdisciplinary solutions in a trusting and committed environment. At our weekly meeting, members discuss challenges, needs, and opportunities facing the Latina community, and propose changes in systems and policies for the improvement of health and the promotion of health equity, We are a group of over 700 people representing academic institutions, healthcare systems, public health departments, public school systems, community-based organizations, government, faith communities, Duke University schools and centers, and others. The original mission of LATIN-19 was to reduce the negative impact of COVID-19 on the physical, mental, and social health of Latinx communities, and it has expanded to ensure the health and wellness of diverse Latinx communities both now and going forward, post-pandemic, based on lessons learned throughout the COVID-19 response. I will talk later in my remarks about how we achieve this goal and have made a significant positive impact in our communities.

Overview
Latinos have been disproportionately affected by the COVID-19 pandemic. As of September 9, 2021. Hispanic persons, Latinx or Latinos (terms used interchangeably in this testimony) were almost twice more likely to test positive for COVID-19, almost three times more likely to be hospitalized and over twice times more likely to die from complications of COVID-19 compared to White, Non-Hispanic persons. [1](CDC 2021). Latinos currently comprise 27.5% of COVID-19 cases in the United States, second only to Whites (50.9%), according to CDC data published Sept. 10, 2021. Race/ethnicity data is currently only available for 64% of the nation's cases.

These disparities in health outcomes arise from differences in exposures, including a higher risk for exposure to SARS-CoV-2 and a higher risk for severe COVID-19 disease (due to increased prevalence of underlying medical conditions such as diabetes and obesity), differences in access to healthcare, differences in the quality of healthcare received, differences in job and educational opportunities, and in language barriers. Driving factors for vulnerability include poverty, lower income, jobs that increase exposure, education, housing, transportation, air quality, and access to healthy food, green spaces, and access to health care.

Effect of COVID-19 Health Inequities and the Hispanic population
The COVID-19 pandemic highlighted the ways that systemic and long-term structural inequities create cumulative disadvantages for African American, Hispanic, American Indian, and other historically marginalized populations.

The 2020 novel SARS-CoV-2 coronavirus (COVID-19) pandemic unveiled patterns of systemic and historical exclusion of communities from access to health services in many countries around the world, including the United States (U.S). During the initial months of the pandemic response, Health Systems and local healthcare institutions implemented pandemic response services within existing health service infrastructure and networks that exclude Black, Hispanic/Latinx, and other communities of color. Healthcare institutions did not initially prioritize funding and human resources to improve access to care for communities with known barriers, and for months did not provide adequate information in Spanish or information for underinsured or uninsured individuals to ensure access to pandemic response resources.

Testing resources for COVID-19 followed existing clinic locations and thus testing sites were initially implemented in affluent and predominantly non-Hispanic, White neighborhoods, away from predominantly Hispanic/Latinx and Black communities. And even when institutions utilized federal funding to offer COVID-19 testing free for anyone regardless of insurance or immigration status, many people with the greatest need remained disconnected from the local healthcare system and these resources went underutilized. For many Hispanic/Latinx long-time Durham residents sick with COVID-19, their hospitalization was their first interaction with the health system, indicating decades of disconnect from the health system at the community level.

[1] CDC report. Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity. Updated Sep 9, 2021 https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html

Hispanic/Latinx individuals make up 14 percent of Durham County's population, yet they constituted 78 percent of the county's COVID-19 cases for those for whom ethnicity was known, (and 61 % overall) and 48 percent of all deaths due to COVID-19 in the summer of 2020. Hispanic/Latinx individuals tested positive at a rate thirteen times that of non-Hispanic white individuals. From May to July 2020, as infection rates in other racial and ethnic groups decreased, the intensive care unit at DUHS filled with Spanish-speaking patients sick with COVID-19. At this time over 30 percent of hospital admissions to COVID units were Latinx patients, a higher proportion of them were children, and those admitted to intensive care were disproportionately younger than those of other racial/ethnic groups. Grassroots community organizations and coalitions called vocally for community-based testing and early medical assessment, yet the local health institutions continued to offer testing and services at the same locations, hours of operation, and within the same community networks. Several months into the pandemic, many Hispanic/Latinx individuals diagnosed with COVID-19 in the hospital had little to no prior knowledge about the virus or the pandemic, and much of what people did know was inaccurate.

National data reported by the CDC shows that Hispanics were almost twice (1.9 times) more likely to test (+) for COVID-19, almost three times (2.8 times) more likely to be hospitalized and 2.3 times more likely to die from complications of COVID-19 compared to Non-Hispanic, White persons. Disparities have been pronounced in the Southern United States, for example, in North Carolina, Hispanics comprise 18 % of cases when they are 10 % of the population, and 15,931 out of 100,000 Latinos in the state has been diagnosed with COVID-19 in comparison to 7,874 out of every 100,000 non-Hispanic persons of any race. [2]

There is a myriad of social conditions that are driving the increased risk and disproportionate burden of COVID-19 and its consequences among the Latinx community. Latinx employees are overrepresented in the front-line essential jobs, with 45% of Hispanic adults working at jobs that required them to work outside the home since February 2020 while many others had the opportunity to work from home. Moreover, early on, some employers did not provide adequate personal protective equipment to employees in these industries.[3] Latinx individuals are also more likely to live in densely populated and multi-generational/multifamily households, making social distancing protocols difficult to implement.

Furthermore, low insurance coverage and fears related to immigration and deportation often prevent access to needed health and social services that mitigate COVID-19 risks. In fact, a recent report identified the Latinx community as the group with the greatest decline in life expectancy in the last two years, with a decline of 3.85 years compared to 3.25 among non-

[2] North Carolina Department of Health and Human Services. Case Demographics Data: March 2020-September, 12, 2021. NCDHHS website. https://covid19.ncdhhs.gov/dashboard/cases-demographics. Accessed September 21, 2021.

[3] Marcano K. Esential But Disposable: Latino Workers Bear Brunt of Labor Inequality During Pandemic. [Online article]. 2020; https://centerforcooperativemedia.org/essential-but-disposable-latino-workers-bear-brunt-of-labor-inequality-during-pandemic/

Latino Blacks and 1.36 among non-Latinx Whites. There are gaps in access to and delivery of health care for the Latinx population, as well as in how Latinx individuals are engaged in community and population health initiatives and research. For example, Latinx have the highest uninsured rates in the United States (26 %) compared to any other racial/ethnic group. Among the uninsured Hispanics, 49 % are non-citizens, 9 % are Naturalized Citizens, and 42% are US born citizens. The lack of access to insurance is felt more broadly in states that have not expanded Medicaid, with rates almost twice as high as rates in expansion states -for non-elderly individuals. For example, 15% of Hispanic children in non-expansion states are uninsured, compared to 6% of Hispanic children in expansion states, 35 % of Hispanics ages 19 to 64 are uninsured, compared to 20% in expansion states. Half of the Hispanic nonelderly uninsured people are less likely to be eligible for ACA coverage than their White counterparts due to their immigration status.[4]

It is ironic, that the Hispanic community lacks access to healthcare, given their significant contribution to the labor force and to the economy of the country. Latinx residents work in a range of sectors including agriculture, food service, construction, business, health care, technology, education, and environmental services. In addition, they are more likely to start their own businesses than the non-Hispanic US population[5]. According to the US Bureau of Labor Statistics, 2019 data on employment[6], Hispanic men 20 years and older had the highest proportion of the population that is employed among adult men, with an employment-population ratio of 77.4 %, in comparison to their counterparts Black adult men 64%, Asian 73% and White adult males at 69.6%. Latinos of all ages, as an ethnic group have the second highest population ratio, with 63.9% of the Hispanic population employed, second only to 66.2 % for Native Hawaiians and Other Pacific Islanders. Nine percent of all Hispanic workers in the US were employed in food preparation and service (compared to 6% overall), 9 % in building and grounds- cleaning and maintenance occupations (compared to 3% all others) and Latina women at 10 % of leisure and hospitality industry workers. Recent estimates by the American Business Immigration Coalition project that the spending power of immigrants in the Carolinas is up to $28.8 billion annually, and that they contribute to $10 billion in federal and state taxes. In the Carolinas, 800,000 immigrants comprise half of the construction workers, painting and maintenance workers, half of agricultural workers, 40 % service employees providing personal care, 18% of workers in science, technology, engineering, or mathematics, and 10 % of North Carolina nurses (Source www.ABIC.US). At the same time, country demographic data show concerning disparities that limit this population's potential to thrive. Notably, Hispanics accounted for 18.8 % of the total population and 27.9% of the people in poverty, with foreign born and non-naturalized citizens, being the most likely to live in poverty, with 20 % Hispanics living on less than 25,000 per year compared to 15% of white non-Hispanics).

[4] Artiga, S, Hill, L, Orgera, K, Damico, A. Health Coverage by Race and Ethnicity, 2010-2019. Kaiser Family Foundation Report July 16, 2021

[5] Huertas G, Funk Kirkegaard J. The Economic Benefits of Latino Immigration: How the Migrant Hispanic Population's Demographic Characteristics Contribute to US Growth.

[6] U.S. Bureau of Labor Statistics, "Labor force characteristics by race and ethnicity, 2019: Employed people by occupation, gender, race, and Hispanic or Latino ethnicity, 2019 annual averages".

Six in ten Hispanic adults (59%) report loss of a job or income in their household as a result of the pandemic, compared to about four in ten White adults (39%), and about half of Hispanic adults reported they have had trouble paying for basic living expenses, or had fallen behind on payments; in a February poll conducted by KFF.[7] The January 2021 report from the U.S. Bureau of Labor Statistics confirmed that Hispanic or Latino Americans represented 8.6 % rate of those unemployed compared to 5.7 % of white counterparts. [8] As many Latinos are employed in industries that involve entertainment, recreation, restaurants and hotels, the drop in consumer spending in these areas because of the pandemic adversely affects the Latinx community.

Half of Latinos reported that they or someone close to them had faced or financial hardship during the pandemic. The most common financial challenges experienced by Latinos during the pandemic were trouble paying bills (35%) and having to get food from a food bank or charitable organization (31%). With 25% saying they had problems paying their rent or mortgage and 23% saying they had received government food assistance. Latino immigrants without a green card were more likely to report having trouble paying bills (48%) when compared with naturalized U.S. citizens (26%). Job and wage losses in Latino households were similar for those born in another country as those born in the U.S., but 58% of those without citizenship or green card were more likely to report job losses. [9](Pew Research Center 2021)

Family connectedness, large extended families and friends are factors of resilience for the Latinx community, however, during the pandemic, this usual source of strength proved to be a factor that increased the numbers of people falling ill with coronavirus. Half of Latinos interviewed for the Pew report responded someone close to them was hospitalized or died, and the number increased to 64 % knew someone who had died of was hospitalized among those who had tested positive for coronavirus. During any challenges, Hispanics lean into family ties and friendships for childcare, help during illnesses, lending money or offering a place to stay. 58% of Hispanics reported helping relatives or close friends– by delivering groceries, running errands or caring for their children (39%), sending or loaning money to family or friends in another country (28%), or in the U.S. (26%). At the same time, two thirds of those who helped family of friends, reported they have had someone close to them fall seriously ill due to COVID-19.

Two-thirds (65%) of Hispanic parents with at least one child younger than 12 living in their home say handling child care responsibilities was difficult for both those working from and away from home. Latino parents have been concerned that the pandemic disrupted their children's progress in school, with the majority concerned that their children had fallen behind in school due to disruptions caused by the coronavirus outbreak.

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[7] Lopes L, Kearney A, Kirzinger A, Hamel L, Brodie M KFF Health Tracking Poll: Economic Hardship, Health Coverage, And The ACA, Kaiser Family Foundation report published March 3, 2021.
[8] U.S. Bureau of Labor Statistics, "The Employment Situation — January 2021," Press release, February 5, 2021, available at https://www.bls.gov/news.release/archives/empsit_02052021.htm
[9] Noe-Bustamante L, Krogstad JM, Lopez MH For U.S. Latinos, COVID-19 Has Taken a Personal and Financial Toll. Pew Research Center Report. Published July 15, 2021

Addressing Challenges and Breaking Down Barriers: The creation of The Latinx Advocacy Team & Interdisciplinary Network for COVID-19 (LATIN-19) and its impact [10]

A key reason for the dramatic COVID-19 infection disparities affecting Latinx communities in Durham County was the systematic exclusion from access to health services, health information networks and public health insurance, even when eligible. Despite efforts to disseminate information by the local government and health institutions, and despite expanded testing and services at existing clinic and hospital locations, pre-existing barriers prevented these communities from accessing the help they needed until it was, for many, too late. These pre-existing barriers are structural, economic, political, and geographical. Durham County is heavily segregated between and within neighborhoods, and existing healthcare and service infrastructure leaves much of the Hispanic/Latinx population isolated without easy physical access. Other structural community-level barriers exist as well, with some of the Hispanic/Latinx communities with highest needs existing in close proximity to downtown and the Duke hospitals and clinics. These communities have been isolated by lack of resources in Spanish, fear of deportation, prohibitive cost of services and burdensome processes to access insurance, misinformation and discrimination from health and social service workers and institutions. Notably, without systematic change, these barriers that have resulted in disproportionate outcomes during the pandemic will continue in a post-pandemic era.

Given the health inequities that existed before COVID-19, and in anticipation of the health disparities that would emerge for the Latinx community during the COVID-19 pandemic, in March of 2020, a group of Duke University clinicians with extensive experience and knowledge working and advocating for the Latina Community started to convene weekly meetings of multisector stakeholders interested in addressing the comunidad latina's anticipated needs, guiding ideas and programmatic changes. Swift action was vital--According to the North Carolina Department of Health and Human Services by June 2020, Latinx people in North Carolina accounted for more than 40 percent of the state's cases, despite comprising just 10 percent of the population.

The Latinx Advocacy Team and Interdisciplinary Network for COVID 19 was then created. Leaders from the Duke Schools of Nursing and Medicine, along with other academic, community, and governmental leaders, collaborated in this initiative. LATIN-19 quickly became an interdisciplinary, multi-sector group of over 700 people representing academic institutions, healthcare systems, public health departments, public school systems, community-based organizations, government, faith communities, other Duke University schools and centers, and others. The original mission of LATIN-19 was to reduce the negative impact of COVID-19 on the physical, mental, and social health of Latinx communities. That mission has now expanded to ensure the health and wellness of diverse Latinx communities both now and going forward, post-pandemic, based on lessons learned throughout the COVID-19 response. To do so, LATIN-19 leverages the strength of pre-existing community partnerships as well as fosters new collaborations that emerged in response to COVID-19.

[10] Martinez-Bianchi V, et al. Health and Wellness for Our Latina Community: The Work of the Latinx Advocacy Team & Interdisciplinary Network for COVID-19 (LATIN-19). N C Med J. 2021 Jul-Aug;82(4):278-281.

LATIN-19 strives to amplify the voice of the community. To achieve this goal, the weekly meeting agenda is strategically organized to allow invited guests to speak last. This allows them to listen to community concerns first. By listening to the community first, academic, government, and community leaders have gained a much-needed perspective of the ongoing challenges faced by its members. Participants also find in this forum the opportunity to share valuable information and urgent calls to action with all members of the coalition. This approach has proven to be of significant impact.

As the COVID-19 pandemic progressed LATIN-19 worked together to address the barriers that were creating poor and often deadly outcomes for the Latinx community in Durham and North Carolina. For example, early on getting information in Spanish was very difficult. So we facilitated meetings allowing for speakers both from within the formal health system and from the community to present topics in English and Spanish with simultaneous interpretation provided.

As the pandemic worsened, participation in the network grew and meetings became a conduit for breaking down barriers and addressing community needs. For example, during one meeting we learned that due to the fear of being separated from their babies if testing positive for COVID-19, Latina moms had started to avoid delivering their babies at the hospital. In particular, the fear of family separation during admission to the hospital was heightened for this community, especially because restrictions on who could accompany or visit the patient resembled to some the horrific experience of children being separated from their parents at the United States border with Mexico. To address this obstacle, we partnered with our colleagues in obstetrics and gynecology to make sure Latinas knew that coming to deliver at the hospital was safe. During another LATIN-19 virtual meeting, an internal medicine resident listened to a community member talk about people's experiences during admission to the intensive care unit (ICU). Family members began to describe those admitted to the ICU as "the disappeared" (in Spanish, desaparecidos) because they were not allowed to accompany them in the hospital due to social distancing procedures. Together with a LATIN-19 subcommittee, the internal medicine resident worked to raise awareness about this phenomenon and created guidelines for the appropriate use of interpreters and communication with family members to positively impact care provided during the admission.

Testing Sites: Seeing a Need

Early in the pandemic, LATIN-19 noted that there were no COVID-19 testing sites in the parts of Durham where the majority of cases were occurring. In fact, testing sites were only in White, affluent neighborhoods (e.g., West Durham), and not accessible to members of the Hispanic/Latinx and Black communities who were overrepresented in COVID-19 cases. Advocacy efforts by members of LATIN-19 and other organizations resulted in the implementation of a testing site at the Holton Clinic in East Durham, run by Lincoln Community Health Center and Duke Family Medicine and Community Health with direct referrals from the Durham Department of Public Health, at a time when the area was a testing desert. Advocacy from LATIN-19 also contributed to the inclusion of new organizations created by the Latina

community in a state-funded program that provided PPE and boxes of food to families to sustain them at home for the 10-14 days needed for isolation or quarantine. One of LATIN-19's founders, Viviana Martinez-Bianchi, became a co-leader for the Testing Team of the North Carolina Department of Health and Human Services (NCDHHS) Historically Marginalized Populations (HMP) Workgroup in September 2020, helping with the deployment of multiple sites in Durham and around the state to increase the number of tests administered to these populations. Starting in July 2021, we trained local CHWs to administer the tests, instructing people how to self-swab, doing point of care rapid antigen testing and PCR testing with kits provided for free by NCDHHS. CHWs also provide guidance on how to obtain an email address and sign-up for test results for tests not done at the point of care.

Vaccination Events to mitigate disparities

Similarly to what we saw in access to COVID-19 information and testing at the beginning of the pandemic, we identified similar barriers in access to vaccines, with an excessive reliance on pre-existing established healthcare systems access, requirements to register via electronic means, or via a patient chart, and minimal information in Spanish. LATIN-19 physicians, nurses and community members then filled airwaves with information in Spanish, from acting as role-models in getting their own vaccines to mitigating fears with culturally relevant information in Spanish, to participating in multiple social media events to answer the community's questions.

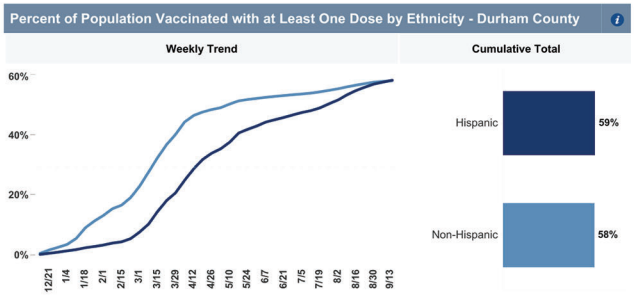
LATIN-19 then collaborated with hospital systems; health departments; community and faith-based organizations; and businesses to host vaccination events targeting the Latina community and to allow community health workers to directly register people at established vaccination clinics led by the Duke Health System, later on LATIN-19 advocated for direct access via walk-up, and community health workers canvassed neighborhoods to inform them of the open sites. Events are tailored to the unique needs and preferences of this diverse community and hosted in places trusted by the community, such as churches or trusted businesses, with all members of the team, including vaccinators, being bilingual or seated next to an interpreter. These events also include a welcoming cultural feel, such as the inclusion of Latin American music by a DJ.

At some events, community organizations provide bags of masks and sanitizing solutions and boxes of food containing vegetables, eggs, dairy, and frozen meats. LATIN-19 has collaborated with the communications departments of NCDHHS and Duke Health to create name tags and signage to identify resources in Spanish and facilitate the presence of Spanish-speaking volunteers at vaccination events. At each site we ensure there is a sign that reminds the public that identification is not needed to receive a vaccine.

As of mid-May, LATIN-19 had coordinated the provision of more than 10,000 vaccinations through facilitation of registration at established vaccination sites and special vaccination clinics. On April 17, LATIN-19 co-led a mass vaccination event in collaboration with the Catholic Diocese of Raleigh, WakeMed, St. Joseph Primary Care, Wake County Department of Public Health, Duke Health, UNC Rex Hospital, Urban Ministries, City Pharmacy, Alignment Health, and the Cooperativa Latina Credit Union in Raleigh to provide 2075 vaccinations to the Latina

community as a "catch-up" strategy addressing the underrepresentation of Hispanic/Latinx residents in vaccination coverage. At the follow-up event for the second vaccine, other primary preventive services were also deployed, such as fecal occult blood kits; cholesterol, diabetes, and hypertension checks; and oral and vision screenings.

As of September, Durham County has achieved an amazing milestone, the proportion of Hispanic residents vaccinated, is the same as non-Hispanic residents, and higher than the 48% percent of population vaccinated for the whole state. We are seeing that our communication and community engagement efforts are having a positive result. (Below, photo from NC DHHS Vaccination Dashboard)



Development of Spanish Educational Materials, Public Safety Announcements, and Training
Early in the pandemic LATIN-19 leaders identified a dearth of accurate and timely communication of information about COVID-19 in Spanish language, lack of culturally relevant messaging, such as how to mitigate risk in multigenerational homes and how to stay safe as essential workers, and lack of information about rates of infections by race and ethnicity. [11]

Throughout 2020 and 2021, LATIN-19 has engaged in broad dissemination of information on COVID-19 prevention and services by developing and sharing culturally appropriate, essential information in Spanish and English to community networks through the weekly meeting space, physical handouts, email, social media, and local and national news outlets. During the early days of the pandemic, members of LATIN-19 developed videos and posters to encourage community members to continue to seek health care as appropriate (e.g., maternity care) and to follow prevention guidelines as laid out by the NCDHHS's "3 Ws" campaign (wear, wait,

[11] Bouloubasis V, Patiño Contreras A. "The heroes of the pandemic: 'When the world is burning, I must put out the fire'" Univision and Enlace Latino, published 9/25/2020 https://enlacelatinonc.org/heroes-of-the-pandemic-when-the-world-is-burning-i-feel-i-must-help-put-out-the-fire/

wash), known as the "3 Ms" campaign in Spanish (mascarilla, mantener distancia, y manos). The videos and posters also addressed issues of mistrust and encouraged testing and, more recently, vaccination. These were disseminated rapidly to the community by local health departments and community-based organizations. LATIN-19 leaders participated in the direct training of community health workers (CHWs) in the appropriate use of personal protective equipment (PPE), including donning (putting on) and doffing (taking off) equipment when visiting the homes of people ill with COVID-19. They also led multiple education sessions about COVID-19 prevention, diagnosis, and care, and advocated for the prompt vaccination of CHWs.

Strengthening Cultural Competency Training and Awareness
During the summer of 2020, LATIN-19 was receiving reports of Latinx community members at Duke Hospital who had "disappeared." As a result of absent or inadequate communication, in Spanish, from the medical teams with family members, many people worried their loved ones had died or disappeared. This occurred during the peak of COVID-19 cases among Latinx in Durham County, when the majority of patients in the Duke Medical Intensive Care Unit (MICU) were Latinx. In partnership with leaders of the Duke MICU and Duke International Patient Services, LATIN-19 worked to provide cultural competency training and awareness for the hospital staff, and the care for Spanish-speaking patients quickly changed after LATIN-19's advocacy in this area.

LATIN-19 has also capitalized on the importance of using trusted messengers to effectively reach the Latinx community. For example, many members of this community have concerns about receiving the COVID-19 vaccine, including whether the place that provides them is safe and welcoming. LATIN-19 partnered with known community organizations so that they would both be the ones who did the outreach to sign people up for vaccination and also be present at the vaccination event. Additionally, LATIN-19 worked closely with Duke Health, Durham County Department of Public Health (DCDPH), and NCDHHS to make sure there were Spanish-speaking staff available on site and that no identification would be requested at the time of vaccination.

Policy Change
LATIN-19 has influenced changes in policies and practices at the organizational, local community, and state levels. Several members of LATIN-19 serve in local and state work groups and task forces, and policy makers participate in the LATIN-19 calls. What is learned during the LATIN-19 calls is translated to advocacy efforts that impact policy. Early in the pandemic, advocacy efforts by LATIN-19 helped ensure that COVID-19 ethnicity data were collected and published by the local and state health departments. LATIN-19 also informed revision to hospital visitation policies that were keeping Hispanic/Latinx residents from seeking health care in fear of family separation, medical bills, and deportation. Duke MyChart electronic medical record software is being made available in Spanish through the leadership of LATIN-19 to allow monolingual members of the Latina community to more seamlessly participate in the health care system. At the state level, LATIN-19 members have helped inform policies and design programs that promote equity, including those that ensure access to culturally and linguistically educational materials disseminated by the state, promote better protections for meatpacking and poultry plant workers, increase the number of testing sites in critical areas of need, ensure

that identification is not required for vaccinations, and fund state strategies that have helped address disparities in the Latina community such as support for community health workers and a health equity initiative.

LATIN-19 influenced direct referrals from the DCDPH's Spanish-speaking contact tracers to respiratory centers for people who, at the time of the contact by the tracers, were heard struggling to breathe on the phone. Many of these patients did not have an established primary care clinician or trusted source of health care, and the direct referral avoided delays in access to needed care.

Research
LATIN-19 has supported and led research initiatives aligned with its mission and principles of community-engaged research. The research subcommittee includes clinicians, researchers, and community members who identify research priorities; provide guidance on relevant research projects; vet research proposals; and explore strategic opportunities for research funding. Research projects supported or led by LATIN-19 include National Institutes of Health proposals addressing COVID-19 disparities in acquisition, testing, and vaccination; partnerships with schools and health care systems to address the social needs of Hispanic/Latinx children; and multiple student-engaged projects addressing the political climate, food insecurity, testing, and vaccinations.

Looking forward: LATIN-19 As a Successful Model for Protecting Communities
Participation in the network has grown, and presently an average of 90 people attend each weekly virtual meeting. LATIN-19's mission is to improve the health and wellness of diverse Hispanic/Latinx communities and to bring sustainable solutions through collective leadership and the formation of trusting collaborative partnerships and alliances. The weekly meetings are open to the public, promote a platform that honors all voices, and engage members of a community that has historically been marginalized to share their knowledge and perceptions of multiple aspects of life and health during the pandemic

Conversations often touch on the mechanisms that disconnect and exclude the Latina community from the health care system and other critical resources. In our meetings we have heard personal accounts and research results about language barriers; challenges associated with lack of insurance; problems with food insecurity, concerns about the immigration implications of accessing health care services, specifically public charge rules that were quite prevalent in the period between 2016 and 2020; fear of deportation; and fear of separation from loved ones at the time of entering the hospital.

LATIN-19 has become a powerful source of influence and action. The work of LATIN-19 has been highly innovative, breaking down silos among existing organizations, allowing amplification of their work. LATIN-19 quickly became a trusted name in the Latinx community. This social capital has allowed the organization to act as a powerful connector between the Latinx community and large organizations, like health care systems, which they often previously

viewed with skepticism. LATIN-19 is actively working to break down years of mistrust, stigma, and discrimination.

The cornerstone of LATIN-19's work is the weekly virtual convening. The agile and dynamic structure of these meetings, with follow-up from the leadership team, creates a nimble pathway for quick and effective communication between the community and leaders in larger systems like Duke Health, the NCDHHS, and local schools and public health departments. This process leads to important changes in real-time.

LATIN-19 Lessons Learned for Community Models

The COVID-19 pandemic has highlighted many disparities that already existed for the Latinx community and the urgency of addressing them cannot be ignored. Cross-sectoral synergy towards health equity goals has been an ongoing challenge in North Carolina and LATIN-19 is uniquely positioned to be a leader in this space. LATIN-19 believes that tackling health disparities is much more than working to minimize systematic differences in the health status of diverse population groups. The LATIN-19 experience has shown that ignoring these inherent disparities has significant social and economic costs, both to individuals and societies.

As other entities might be considering a LATIN-19 type model I recommend these best practices:

1. Building trust is vital, but it can take time, and it takes being a presence, being a member of the community, being curious, listening to the questions and the diversity of voices, exhibiting our own humility and vulnerability when we are trying to come to solutions together with community members. Walking the talk with the community. "Se hace camino al andar. We make the path by walking".
2. Building and maintaining robust channels of communication with leaders in government as well as public and private health systems to translate current needs, missed opportunities, and successes for the Latinx community. LATIN-19 leaders listen to community members and relay critical information to decision-makers and policy makers so they can better meet the needs of the entire community. Often, policy makers themselves participate in the meetings.
3. Be a trusted organization in the community. It is important to continue to have members connect and communicate with the community via traditional mediums like broadcast media, as well as social media and web-based methods like Facebook Live events, you tube, etc. As part of LATIN-19, we have learned that *how* and *from whom* people get their information is key.
4. Direct Community Care is important to provide health care services to address community needs, especially for Spanish-speaking individuals who face additional barriers to access. Services include COVID-19 vaccination and testing sites, as well as training for community health workers (promotoras). This workforce serves as a bridge between the community and the health system by delivering a range of health

promotion programs and facilitating support groups. Going forward, LATIN-19 hopes to utilize a mobile health unit to provide critical primary health care and prevention services for local neighborhoods and rural and farmworker communities who may not have access to health providers.

5. It is important that the Latinx community participate and have a voice in clinical and community-based research. LATIN-19 serves as a powerful connector among active research groups, community groups and leaders, and others in the local community, providing a bridge for engaging Latinx individuals to participate in research studies and also taking an active approach in setting a research agenda that is responsive to the expressed priorities, needs, and resources of the Latinx community.
6. Education – LATIN-19's work has a great influence on the training of the next generation of health care professionals by providing learners the opportunity to engage in community-based experiences and work closely with educators and leaders in advocacy, health care disparities, health care, and in the intersection between clinical care and public health. Further, LATIN-19 members include an array of educators that expand from elementary schools to graduate-level education. Our active participation in education and mentorship allows us to serve as role models that play a critical role in the future of health care with the ultimate goal to diversify the healthcare professions' workforce and be more representative of the communities we serve.

Thank you for this opportunity to offer testimony on this critical issue. The LATIN-19 network and I stand ready to be a resource for the subcommittee's efforts, and I will be glad to provide any additional detail, data, and recommendations at your request.

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INVITED COMMENTARY

Health and Wellness for Our Latina Community: The Work of the Latinx Advocacy Team & Interdisciplinary Network for COVID-19 (LATIN-19)

Viviana Martinez-Bianchi, Gabriela M. Maradiaga Panayotti, Leonor Corsino, Irene C. Felsman, Rosa M. Gonzalez-Guarda, Gabriela A. Nagy, Alejandro Peña

The Latinx Advocacy Team & Interdisciplinary Network for COVID-19 (LATIN-19), a multisector coalition, was formed to support the Latina community during the COVID-19 pandemic. Achievements include influencing local and state policies and coordination of efforts by community organizations. The success of this volunteer organization serves as a model for collaboration.

Introduction

The Latina community[a] has been disproportionately affected by the 2019 novel coronavirus disease (COVID-19). National data reported by the Centers for Disease Control and Prevention (CDC) show that Hispanic or Latinx individuals (used herein interchangeably) are 1.3 times more likely to become infected, 3.1 times more likely to be hospitalized, and 2.3 times more likely to die as a consequence of COVID-19 in comparisons to their non-Hispanic, White counterparts [1]. Disparities in COVID-19 for the Latina community have been more notable in the Southern United States. For example, in North Carolina, the Latina community represents 9.6% of the population, yet accounts for 21% of the positive COVID-19 cases for which patient ethnicity is known; this is thought to be a conservative estimate [2]. To date, Hispanic/Latinx individuals comprise 12,000 cases per 100,000 residents in North Carolina, in comparison to 5052 cases per 100,000 non-Hispanic residents, making them approximately three times more likely to be infected with the disease [2]. At the initial peak of the pandemic in June 2020, Hispanic/Latinx individuals represented 57% of cases for which patient race and ethnicity was known at the state level [2]. In Durham County, where the Latina community comprises 14% of the population, it represented 75% of cases during this time period [2].

In March 2020, as the first cases of COVID-19 were diagnosed at Duke University Health System, and severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19, was declared a pandemic by the World Health Organization [3], two clinicians—Drs. Gabriela Maradiaga Panayotti and Viviana Martinez-Bianchi at Duke University School of Medicine—with extensive experience and knowledge working and advocating for the Latina Community convened weekly meetings of multisector stakeholders interested in addressing the community's anticipated needs. The group first met on March 18, 2020. On March 24, Mr. Pablo Friedmann from Durham Public Schools and Ms. Jenice Ramirez, executive director of the Immersion for Spanish Language Acquisition school, invited Drs. Maradiaga Panayotti and Martinez-Bianchi to answer live questions posted on Facebook by the community about COVID-19. The group soon grew to include multiple partners in the community, including public health organizations and the Duke School of Nursing. A few weeks later, the Latinx Advocacy Team & Interdisciplinary Network for COVID-19 (LATIN-19) was formally named and established.

LATIN-19 today is a multisector group of over 770 registered participants representing health and behavioral health professionals, lawyers, and educators in academic institutions; representatives of health care systems, public health departments, public school systems, community-based organizations, government, and faith communities; and researchers, students, professionals, community activists, and unaffiliated individuals. Facilitated meetings allow for speakers both from within the formal health system and from the community to present topics in English and Spanish with simultaneous interpretation provided. Decision makers can hear concerns and stories directly from community members—data are shared, policies are explained, regulations

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[a] English for la comunidad Latina. This is how the local community chooses to identify.

are unpacked, and legal wording is clarified. Participation in the network has grown, and presently an average of 90 people attend each weekly meeting. LATIN-19's mission is to improve the health and wellness of diverse Hispanic/Latinx communities and to bring sustainable solutions through collective leadership and the formation of trusting collaborative partnerships and alliances. The weekly meetings are open to the public, promote a platform that honors all voices, and engage members of a community that has historically been marginalized to share their knowledge and perceptions of multiple aspects of life and health during the pandemic. LATIN-19 strives to amplify the voice of the community. To achieve this goal, the weekly meeting agenda is strategically organized to allow invited guests to speak last. This allows them to listen to community concerns first. By listening to the community first, academic, government, and community leaders have gained a much-needed perspective of the ongoing challenges faced by its members. Participants also find in this forum the opportunity to share valuable information and urgent calls to action with all members of the coalition. This approach has proven to be of significant impact.

Conversations often touch on the mechanisms that disconnect and exclude the Latina community from the health care system and other critical resources. In our meetings we have heard personal accounts and research results about language barriers; challenges associated with lack of insurance; concerns about the immigration implications of accessing health care services, specifically public charge rules that were quite prevalent in the period between 2016 and 2020; fear of deportation; and fear of separation from loved ones at the time of entering the hospital.

During one meeting we learned that due to the fear of being separated from their babies if testing positive for COVID-19, Latina moms had started to avoid delivering their babies at the hospital, and for many these experiences led to significant fear and trauma. In particular, the fear of family separation during admission to the hospital was heightened for this community, especially because restrictions on who could accompany or visit the patient resembled to some the horrific experience of children being separated from their parents at the United States border with Mexico. To address this obstacle, we partnered with our colleagues in obstetrics and gynecology to make sure Latinas knew that coming to deliver at the hospital was safe.

During another LATIN-19 virtual meeting, an internal medicine resident listened to a community member talk about people's experiences during admission to the intensive care unit (ICU). Family members began to describe those admitted to the ICU as "the disappeared" (in Spanish, *desaparecidos*) because they were not allowed to accompany them in the hospital due to social distancing procedures. Together with a LATIN-19 subcommittee, the internal medicine resident worked to raise awareness about this phenomenon and created guidelines for the appropriate use of interpreters to positively impact care provided at the time of admission. This resident subsequently worked on raising awareness about this phenomenon. Together with a LATIN-19 subcommittee, she created guidelines, including the appropriate use of interpreters to positively impact the care provided at the time of admission.

Initiatives That Emerged From LATIN-19

Development of Spanish Educational Materials, Public Safety Announcements, and Training

Throughout 2020 and 2021, LATIN-19 has engaged in broad dissemination of information on COVID-19 prevention and services by developing and sharing culturally appropriate, essential information in Spanish and English to community networks through the weekly meeting space, physical handouts, email, social media, and local and national news outlets. During the early days of the pandemic, members of LATIN-19 developed videos and posters to encourage community members to continue to seek health care as appropriate (e.g., maternity care) and to follow prevention guidelines as laid out by the North Carolina Department of Health and Human Services (NCDHHS)'s "3 Ws" campaign (wear, wait, wash), known as the "3 Ms" campaign in Spanish (*mascarilla, mantener distancia, y manos*). The videos and posters also addressed issues of mistrust and encouraged testing and, more recently, vaccination. These were disseminated rapidly to the community by local health departments and community-based organizations. LATIN-19 leaders participated in the direct training of community health workers (CHWs) in the appropriate use of personal protective equipment (PPE), including donning (putting on) and doffing (taking off) equipment when visiting the homes of people ill with COVID-19. They also led multiple education sessions about COVID-19 prevention, diagnosis, and care, and advocated for the prompt vaccination of CHWs.

Testing Sites: Seeing a Need

Early in the pandemic, LATIN-19 noted that there were no COVID-19 testing sites in the parts of Durham where the majority of cases were occurring. In fact, testing sites were only in White, affluent neighborhoods (e.g., West Durham), and not accessible to members of the Hispanic/Latinx and Black communities who were overrepresented in COVID-19 cases. Advocacy efforts by members of LATIN-19 and other organizations resulted in the implementation of a testing site at the Holton Clinic in East Durham, run by Lincoln Community Health Center and Duke Family Medicine and Community Health with direct referrals from the Durham Department of Public Health, at a time when the area was a testing desert. Advocacy from LATIN-19 also contributed to the inclusion of new organizations created by the Latina community in a state-funded program that provided PPE and boxes of food to families to sustain them at home for the 10-14 days needed for isolation or quarantine. One of LATIN-19's founders became a co-leader for the Testing Team of the NCDHHS Historically Marginalized Populations

(HMP) Workgroup in September 2020, helping with the deployment of multiple sites in Durham and around the state to increase the number of tests administered to these populations.

Policy Change

LATIN-19 has influenced changes in policies and practices at the organizational, local community, and state levels. Several members of LATIN-19 serve in local and state work groups and task forces, and policy makers participate in the LATIN-19 calls. What is learned during the LATIN-19 calls is translated to advocacy efforts that impact policy. Early in the pandemic, advocacy efforts by LATIN-19 helped ensure that COVID-19 data were collected and published by the local and state health departments. LATIN-19 also informed revision to hospital visitation policies that were keeping Hispanic/Latinx residents from seeking health care in fear of family separation, medical bills, and deportation. Duke MyChart electronic medical record software was also made available in Spanish during this period through the leadership of LATIN-19 to allow monolingual members of the Latina community to more seamlessly participate in the health care system. At the state level, LATIN-19 members have helped inform policies and design programs that promote equity, including those that ensure access to culturally and linguistically educational materials disseminated by the state, promote better protections for meatpacking and poultry plant workers, increase the number of testing sites in critical areas of need, ensure that identification is not required for vaccinations, and fund state strategies that have helped address disparities in the Latina community such as support for community health workers and a health equity initiative.

LATIN-19 influenced direct referrals from the Durham Health Department's Spanish-speaking contact tracers to respiratory centers for people who, at the time of the contact by the tracers, were heard struggling to breathe on the phone. Many of these patients did not have an established primary care clinician or trusted source of health care, and the direct referral avoided delays in access to needed care.

Vaccination Events

LATIN-19 has collaborated with hospital systems; health departments; community and faith-based organizations; and businesses to host vaccination events targeting the Latina community and to allow community health workers to directly register people at established vaccination clinics. Events are tailored to the unique needs and preferences of this diverse community and hosted in places trusted by the community, such as churches or trusted businesses, with all members of the team, including vaccinators, being bilingual or seated next to an interpreter. These events also include a welcoming cultural feel, such as the inclusion of Latin American music by a DJ.

At some events, community organizations provide bags of masks and sanitizing solutions and boxes of food containing vegetables, eggs, dairy, and frozen meats. LATIN-19 has collaborated with the communications departments of NCDHHS and Duke Health to create name tags and signage to identify resources in Spanish and facilitate the presence of Spanish-speaking volunteers at vaccination events. At each site we ensure there is a sign that reminds the public that identification is not needed to receive a vaccine.

As of mid-May, LATIN-19 had coordinated the provision of more than 10,000 vaccinations through facilitation of registration at established vaccination sites and special vaccination clinics. On April 17, LATIN-19 co-led a mass vaccination event in collaboration with the Catholic Diocese of Raleigh, WakeMed, St. Joseph Primary Care, Wake County Department of Public Health, Duke Health, UNC Rex Hospital, Urban Ministries, City Pharmacy, Alignment Health, and the Cooperativa Latina Credit Union in Raleigh to provide 2075 vaccinations to the Latina community as a "catch-up" strategy addressing the underrepresentation of Hispanic/Latinx residents in vaccination coverage. At the follow-up event for the second vaccine, other primary preventive services were also deployed, such as fecal occult blood kits; cholesterol, diabetes, and hypertension checks; and oral and vision screenings.

Research

LATIN-19 has supported and led research initiatives aligned with its mission and principles of community-engaged research [4]. The research subcommittee includes clinicians, researchers, and community members who identify research priorities; provide guidance on relevant research projects; vet research proposals; and explore strategic opportunities for research funding. Research projects supported or led by LATIN-19 include National Institutes of Health proposals addressing COVID-19 disparities in acquisition, testing, and vaccination; partnerships with schools and health care systems to address the social needs of Hispanic/Latinx children; and multiple student-engaged projects addressing the political climate, food insecurity, testing, and vaccinations.

Our Impact

Since March 2020, LATIN-19 has served a critical role in advising and promoting the interests of the community in task forces and on committees focused on COVID-19 response, health equity, and needs of immigrant and refugee communities. We have collaborated with a variety of organizations including the Duke Pandemic Response Network; NCDHHS (including the HMP Workgroup and the North Carolina COVID-19 Vaccine Advisory Committee); the Andrea Harris Social, Economic, Environmental, and Health Equity Task Force; the Durham Recovery & Renewal Task Force; the Duke Health Quality of Care Committee; the Duke Vaccine Equity Advisory Committee; Resilient American Communities; and the African American COVID-19 Taskforce (AACT+). Local and state leaders have recognized the important role

LATIN-19 played in decreasing the rates of COVID-19 in the Latina community and increasing vaccination rates as well.

Conclusion

LATIN-19 grew out of a collective passion for bringing together key stakeholders and organizations in the Latina community to address the deep inequities facing this population that have been exacerbated by the COVID-19 pandemic. Despite starting as a pandemic response team, LATIN-19 has evolved to be more than that. There is now wider recognition across the state of the structural factors that initially led to inequities affecting vulnerable communities, and we continue to see initiatives to target those inequities. We hope LATIN-19 can serve as a model for other teams with similar missions, with the overarching goal of reaching health equity in North Carolina and across the globe. NCMJ

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We would like to thank the members of LATIN-19 for their contributions and participation. All authors are members of the LATIN-19 Executive Board.

The work of LATIN-19 has received recognition on the local, regional, national, and international stage from a variety of organizations and media outlets. In 2020, LATIN-19 received the 2020 NC Latino Diamante Health and Science Community Award. In 2021, LATIN-19 was honored by a Duke University Presidential Award for exemplary leadership. In 2020, Univision and Enlace Latino NC featured LATIN-19 in a mini documentary and LATIN-19 was recognized in more than 40 news media articles.

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Chairwoman BONAMICI. Thank you for your testimony, Dr. Martinez-Bianchi.

Next, we are going to recognize Mr. Roy for five minutes for your testimony.

STATEMENT OF AVIK ROY, PRESIDENT, THE FOUNDATION FOR RESEARCH ON EQUAL OPPORTUNITY

Mr. ROY. Chairs Bonamici and DeSaulnier, Mrs. Spartz, Mr. Allen, Members of the subcommittees, it is good to see many of you again. Thanks for inviting me hero today.

The Foundation for Research on Equal Opportunity, or FREOPP for short, is a nonpartisan think tank that focuses exclusively on ideas that can help improve the lives of Americans on the bottom half of the economic ladder. I welcome the opportunity to discuss how we can do better to protect communities from COVID–19.

A year ago in The New Yorker, Alec MacGillis wrote about a 12-year-old from east Baltimore named Shemar. Despite a difficult home life with a mother who suffered from drug addiction, Shemar had a special talent for math and loved school. But Shemar's school didn't love him back. Contrary to all evidence regarding low transmission and risk of the coronavirus in young children, Maryland kept its schools closed. MacGillis saw the enthusiasm for education evaporate from Shemar as his education was replaced by Zoom links that didn't work for classes taught by teachers who didn't show up.

Those who endorsed the closure of schools have argued that it was worth it in order to save lives from COVID–19, but we didn't save lives by shutting down schools, we diminished them. How many permanent dropouts have we created with COVID-related

school closures? On average, Americans without a high school diploma live 10 to 13 years shorter than those with a college degree.

COVID-related school closures have disproportionately affected lower income and minority students. By last summer, two-thirds of White fourth-graders were enjoying fully in-person schools, compared to only 45 percent of Hispanic, 41 percent of Black, and 27 percent of Asians.

As we at FREOPP detailed last summer, nearly all European countries kept their schools open in 2020 and suffered no greater risk of COVID transmission or illness as a result. Here in America, those places that have reopened schools have seen similar outcomes.

Too often, the Federal and State governments have acted as if all Americans are at equal risk of illness and death from COVID–19 when from the very beginning it was clear that the elderly were far more at risk than young children. On April 17, 2020, 78 percent of U.S. COVID deaths were in individuals older than 65. Today, it is 77 percent. By contrast, only 389 Americans under the age of 15 have died of COVID, fewer than the number of deaths from influenza in an average year.

We were not nearly aggressive enough last year in protecting elderly Americans from COVID, especially those who live in nursing homes and assisted living facilities. In 2020, nearly 40 percent of all U.S. deaths from COVID took place in long-term care facilities housing 0.6 percent of the U.S. population. And yet, as late as last June, 11 States weren't bothering to track how many of their deaths were taking place in nursing homes. Infamously, New York, New Jersey, Michigan, and other states forced nursing homes to accept elderly individuals being discharged from hospitals with active SARS–CoV–2 infections, contributing to the spread and lethality of the virus. Notably, nursing home residents are disproportionately low-income recipients of Medicaid.

Now that we know mRNA vaccines work, it is important to approve their use in children aged 5 to 12 and accelerate development and authorization of new vaccines that can further protect against variants of concern. The FDA needs to get out of the mentality of treating COVID vaccines like cholesterol drugs.

We are in a public health emergency and authorization of new vaccines should take that into account, especially for mRNA vaccines, which can be rapidly adapted to novel variants. Moderna's first vaccine was designed in January 2020, 2 days after the SARS–Cov–2 sequence had been published by a Chinese scientist. Now that we know that these vaccines work, we shouldn't have to wait 11 months for the next generation.

As I discuss in my written testimony, I have concerns about OSHA's employer vaccine mandate, but the Biden administration is right to require that nursing home staffers receive the vaccine unless they have a medical reason not to. Infected staffers played a significant role in spreading the virus among nursing homes in 2020, and we must avoid a repeat of this problem in 2021.

The problem is Federal agencies and many local governments continue to act as if everyone is at the same risk of dying of COVID–19; for example, by recommending or requiring that young schoolchildren wear masks despite their limited benefit in that set-

ting, since children are at very low risk and teachers can receive the vaccine.

Of the 180 million Americans fully vaccinated, only 19,136 have been hospitalized, a rate of 0.01 percent. Of those, 86 percent of deaths and 69 percent of nonfatal hospitalizations have occurred in people over the age of 65. When governments act as if everyone is at equal risk of illness or death from COVID, irrespective of vaccination status, previous infection or age, it can be no wonder that hesitant Americans see little benefit in receiving the vaccine. If we want to overcome that hesitation, we have to act like vaccines save lives, which they absolutely do. Thank you.

[The prepared statement of Mr. Roy follows:]

PREPARED STATEMENT OF AVIK ROY

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The Foundation *for* Research *on* Equal Opportunity

TESTIMONY BEFORE THE UNITED STATES CONGRESS

House Education & Labor Committee
Subcommittee on Civil Rights & Human Services
Subcommittee on Health, Employment, Labor, & Pensions

HOW TO SAVE A LIFE

Successful Models for Protecting Communities from COVID-19

AVIK S. A. ROY

President, The Foundation for Research on Equal Opportunity

September 28, 2021

The Foundation for Research on Equal Opportunity (FREOPP) is a non-partisan, non-profit, 501(c)(3) organization dedicated to expanding economic opportunity to those who least have it. FREOPP does not take institutional positions on any issues. The views expressed in this testimony are solely those of the author.

INTRODUCTION

The United States has made many mistakes in its response to the COVID-19 pandemic. But the most significant mistake of all has been the *inability to properly assess risks*.

The most important example of this problem is *demographic risk*. American policymakers, journalists, and even public health experts have struggled to objectively assess the scientific evidence regarding how the novel coronavirus affects different people by age, residential status, and comorbidities, among other factors. This failure directly led to tragedy; for example, in 2020, nearly 40% of all deaths from COVID-19 took place in nursing homes and assisted living facilities housing 0.6% of the U.S. population.[1]

Another key element of this problem is *social risk*. Prior to 2020, it was well understood in public health circles that non-pharmaceutical interventions like economic lockdowns and school closures have serious health, economic, and social costs, and that the risks of SARS-CoV-2 transmission should be carefully weighed against those costs. During the COVID-19 pandemic, this empirically rigorous approach was discarded by policymaking and public health elites, and poorly understood by journalists.

A third problem is *expertise risk*. The novel coronavirus is by definition novel. Our scientific understanding of the virus has evolved over time, and yet repeatedly, policymakers, public health experts, and journalists have asserted scientific certainty where it was not warranted. Social media platforms like YouTube and Twitter actively censored legitimate scientific debate about managing COVID-19 and reducing transmission, citing assertions by academic specialists of inconsistent quality. The scientific method, in its truest form, expresses humility and skepticism toward conventional hypotheses. Restriction of open debate by tech platforms and policymakers has only deepened public mistrust of authorities.

A fourth problem that has come to the fore in recent months is *immunologic risk*. Thanks to the remarkable success of Operation Warp Speed, COVID-19 vaccines are safe and highly effective at protecting vaccinated individuals from serious illness and death, and at reducing SARS-CoV-2 transmission. Despite these facts, policymakers have made inconsistent and unscientific pronouncements about vaccines; for example, giving Americans the false impression that vaccination does not reduce transmission. Policymakers have been reluctant to account for evidence that recovery from prior infection can be as powerful, if not more so, than vaccination in protecting individuals from future illness.

Many of the policy problems we are wrestling with today—including prolonged school closures, labor shortages, and vaccine hesitancy—are a direct result of these failures in risk assessment. In this written testimony, I will focus on demographic, social, and immunologic risk, and identify state governments where data-driven policymaking has worked to save both lives and livelihoods.

DEMOGRAPHIC RISK

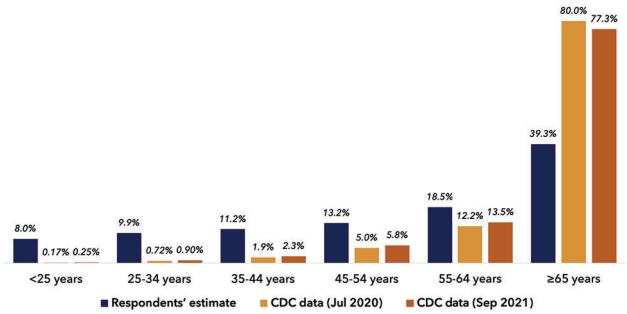
It was clear as early as April 2020 that morbidity and mortality from COVID-19 were heavily concentrated in the elderly. According to CDC data as of April 17, 2020, of the 13,130 U.S. deaths associated with COVID-19, 78% were in individuals over 65 years of age. In the most recent CDC data set, from September 22, 2021, of 672,021 U.S. deaths associated with COVID, 77% were in individuals over 65.

[1] G. Girvan and A. Roy, Nursing Homes & Assisted Living Facilities Account for 38% of COVID-19 deaths. The Foundation for Research on Equal Opportunity. 2021 Jan 30: https://freopp.org/the-covid-19-nursing-home-crisis-by-the-numbers-3a47433c3f70; accessed September 24, 2021.

By contrast, the risk of death from COVID in children has remained extremely low. In April 2020, 0.023% of COVID deaths had occurred in individuals younger than 15. In September 2021, 0.047% had. Younger adults aged 25-44 represented 3.1% of COVID deaths in April 2020, and 3.2% in September 2021.

Put simply: the age distribution of serious illness and death from COVID-19 has remained remarkably stable over time. And yet our policy response to the pandemic has inconsistently taken this evidence into account, and press coverage of the epidemic has left Americans largely unaware of demographic risks.

Figure 1. Americans' Perception of the Risk of Death from COVID-19 by Age
(July 2020 vs. actual CDC data from July 2020 & September 2021)



In 2020, Americans vastly overestimated the risk of COVID-19 to younger individuals, and underestimated the risk to older individuals. While Americans appreciated some difference in the relative risk of COVID death by age, they significantly underestimated the degree. *(Source: Centers for Disease Control and Prevention; Franklin Templeton-Gallup Economics of Recovery Study)*

In July 2020, Gallup conducted a survey for Franklin Templeton of 10,014 adults, finding that Americans were unaware of the significance of the differential risk of COVID-19 illness and death by age.[2] "Americans overestimate the risk of death from COVID-19 for people aged 24 and younger by a factor of 50," wrote Sonal Desai, Chief Investment Officer of Franklin Templeton Fixed Income, in an analysis of the survey. "They think the risk for

[2] S. Desai, On My Mind: They Blinded Us From Science. Franklin Templeton. 2020 Jul 29: https://www.franklintempletonnordic.com/investor/article?contentPath=html/ftthinks/common/cio-views/on-my-mind-they-blinded-us-from-science.html; accessed September 24, 2021.

people aged 65 and older is half of what it actually is." She found the discrepancies "staggering."

"Americans still misperceive the risks of death from COVID-19 for different age cohorts—to a shocking extent," concluded Desai. Based on the Gallup data, "the misperception is greater for those who identify as Democrats, and for those who rely more on social media for information."

This misperception had real effects on the policy response to the pandemic. As noted above, nearly 40% of deaths from COVID-19 in 2020 occurred in long-term care facilities housing just 0.6% of the U.S. population. Infamously, New York, New Jersey, Michigan, and other states forced nursing homes to accept elderly individuals being discharged from hospitals with active SARS-CoV-2 infections, contributing to the spread and lethality of the virus. Until the Centers for Medicare and Medicaid Services began mandating the reporting of nursing home fatalities from COVID, several states were simply not measuring COVID deaths in long-term care facilities.[3] An investigation by New York Attorney General Letitia James found that the state had deliberately undercounted nursing home deaths due to COVID by as much as 50%.[4]

In addition, the decision by many state and local governments to close primary and secondary schools was disconnected from the actual data on both risks to children from COVID-19 and also the risks of transmission of SARS-CoV-2 from children to adults.[5] In Europe, where schools largely stayed open in 2020, especially for children under the age of 12, there were no COVID-19 outbreaks in classroom settings. U.S. states that have reopened schools have encountered few problems with COVID outbreaks, which raises the question of why so many schools were closed.

Obesity is a risk factor for severe illness and death from COVID-19, one that policymakers and public health officials have been understandably uncomfortable with highlighting. A CDC study found that severely obese individuals—those with a Body Mass Index greater or equal to 45—were 33% more likely to require hospitalization from COVID, and twice as likely to require mechanical ventilation, relative to those at a healthy weight (BMI between 18.5 and 25). Greater awareness of these higher risks could have encouraged overweight Americans to take greater precautions.[6]

SOCIAL RISK

In 2020, during a Senate hearing, when asked to consider the tradeoffs inherent in shutting down the economy to slow down the transmission of SARS-CoV-2, presidential COVID adviser Anthony Fauci freely admitted that he had no expertise on the topic. "There are a number of other people who…give advice…about the need to get the country back open again, and economically. I don't give advice about economic things," he said. The

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[3] A. Roy, The Most Important Coronavirus Statistic: 42% Of U.S. Deaths Are From 0.6% Of The Population. *Forbes*. 2020 May 26: https://www.forbes.com/sites/theapothecary/2020/05/26/nursing-homes-assisted-living-facilities-0-6-of-the-u-s-population-43-of-u-s-covid-19-deaths/?sh=568ebeea74cd; accessed September 24, 2021.

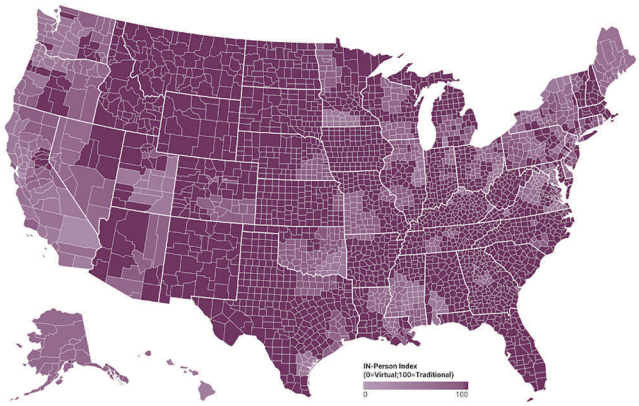
[4] L. James, Nursing Home Response to COVID-19 Pandemic. New York State Office of the Attorney General. 2021 Jan 30: https://ag.ny.gov/sites/default/files/2021-nursinghomesreport.pdf; accessed September 24, 2021.

[5] D. Lips et al., Reopening America's Schools and Colleges During COVID-19. The Foundation for Research on Equal Opportunity. 2020 Jul 1: https://freopp.org/reopening-americas-schools-and-colleges-during-covid-19-bdb35e3e32c4; accessed September 24, 2021.

[6] L. Kompaniyets et al., Body Mass Index and Risk for COVID-19-Related Hospitalization, Intensive Care Unit Admission, Invasive Mechanical Ventilation, and Death–United States, March–December 2020. 12 Mar 2021: CDC Morbidity and Mortality Weekly Report. https://www.cdc.gov/mmwr/volumes/70/wr/mm7010e4.htm; accessed September 24, 2021.

indifference of Fauci and many other policymakers to the tradeoffs inherent in economic and social restrictions contributed greatly to mistrust of public health authorities, and has done little to protect lives.

Figure 2. In-Person Learning at K-12 Schools (As of June 29, 2021)



In June 2021, K-12 schools remained partially or fully closed for in-person instruction in major population centers, despite overwhelming evidence that reopening schools was safe. Burbio's In-Person Index weights virtual instruction at 0%, 2-3 days per week of in-person instruction at 50%, and 5 days per week of in-person instruction at 100%. *(Source: Burbio School Opening Tracker)*

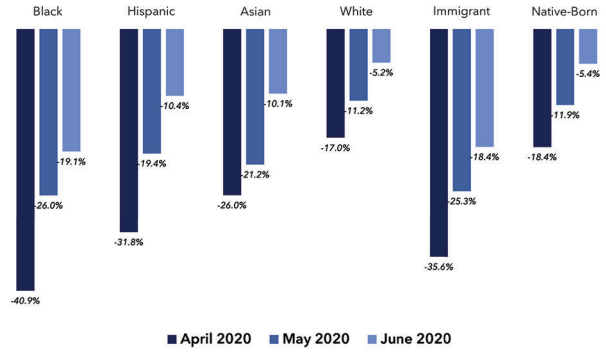
Take school closures. The evidence is overwhelming that school closures are harmful to children, especially those whose parents lack broadband internet or the resources to send their children to private schools. In May 2021, 66% of White fourth-graders were attending fully in-person schools, compared to 41% of Black, 45% of Hispanic, and 27% of Asian fourth-graders. 57% of white eighth-graders were fully in-person, compared to 37% of Black and Hispanic children, and 20% of Asians.[7]

[7] Institute of Education Sciences, Monthly School Survey Dashboard. https://ies.ed.gov/schoolsurvey/; accessed September 24, 2021.

McKinsey & Co. has estimated that the annual impact of 2020-21 school closures "could amount to $128 billion to $188 billion every year as this cohort enters the workforce."[8] School closures might have been justified, if there had been any scientific evidence that school closures reduce SARS-CoV-2 transmission, but there has been none.

Economic restrictions disproportionately affected minority and immigrant households. In April 2020, the first month of widespread lockdowns, Black-owned small businesses saw a 41% reduction in activity, compared to 17% for White businesses. Immigrant-owned businesses saw a 36% drop in activity, relative to an 18% drop for small businesses owned by native-born Americans.[9]

Figure 3. Reduction in Small Business Activity, by Ownership (vs. February 2020)



Black, Hispanic, and immigrant-owned businesses were most adversely affected by economic lockdowns. All groups improved business activity in states that reopened their economies. *(Source: R. Fairlie, Journal of Economics & Management Strategy)*

[8] E. Dorn et al., COVID-19 and education: The lingering effects of unfinished learning. McKinsey & Company. 27 Jul 2021: https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning; accessed September 24, 2021.

[9] R. Fairlie, The impact of COVID-19 on small business owners: Evidence from the first three months after widespread social-distancing restrictions. *Journal of Economics & Management Strategy*. 27 Aug 2020: https://onlinelibrary.wiley.com/doi/full/10.1111/jems.12400; accessed September 24, 2021.

Thankfully, these percentages improved as some states lifted their economic restrictions. But, broadly speaking, vulnerable communities were most harmed by lockdowns. And, importantly, there is little evidence that lockdowns did much to reduce COVID transmission. In 2020, California, Texas, and Florida all had similar per-capita case and fatality figures, despite severe restrictions in California and relatively limited ones in Texas and Florida.

IMMUNOLOGIC RISK

However, in 2021, Texas and Florida have lagged behind California, in part due to lower vaccination rates. 71% of Californians have received at least one COVID-19 vaccine dose, compared to 67% in Florida and 60% in Texas. 59% of Californians are fully vaccinated, compared to 57% in Florida and 51% in Texas. Skepticism and mistrust about vaccines is considerable, especially in minority populations and rural regions.[10]

Vaccine skepticism has a long history in the U.S., and presents a challenging problem for public health officials. Unfortunately, policymakers have done a number of things to undermine confidence in COVID-19 vaccines, despite their remarkable safety and efficacy via the Operation Warp Speed program.

In 2020, partisan opposition to the Trump administration undermined efforts to accelerate approval of mRNA vaccines. At the vice presidential debate in October 2020, then-Sen. Kamala Harris said, "If Donald Trump tells us that we should take it, I'm not taking it." Then-New York Gov. Andrew Cuomo added, "I think it's going to be a very skeptical public about taking the vaccine, and they should be." Notably, Cuomo at the time was being hailed as "America's Governor" by journalists who supported his COVID-19 policies. Even though there was ample evidence in the fall of 2020 supporting the emergency use of mRNA vaccines in high-risk populations, FDA authorization was delayed until after the election for political reasons. This series of events may have cost tens of thousands of lives.

Most importantly, in response to a July 2021 COVID-19 outbreak among vaccinated individuals in Provincetown, Massachusetts, CDC officials recommended "universal masking in indoor public settings" irrespective of vaccination status. Leaked press reports implied that vaccination does not reduce viral transmission, and that COVID-19 was still highly dangerous to recently vaccinated individuals. The CDC's insistence on universal masking—even in schools for young children—also implied that vaccination does not significantly protect people from COVID-19.

While the CDC's *recommendations* imply that the delta variant is highly dangerous to vaccinated individuals and young children, its *data* tell the opposite story. As of September 20, 2021, more than 180 million people have been fully vaccinated in the U.S. During that timeframe, the CDC has received reports of 19,136 individuals who were vaccinated, tested positive for COVID-19, and were hospitalized (with or without COVID-19 symptoms): a hospitalization rate of 0.01%, and a mortality rate of 0.002%.[11] 86% of deaths and 69% of non-fatal hospitalizations occurred in people over 65.

Importantly, the evidence is strong that vaccines do result in reduced transmission of SARS-CoV-2. While viral loads can appear similar in unvaccinated individuals and vaccinated individuals with breakthrough infections, viral loads decrease faster in vaccinated

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[10] S. Sgaier, Meet the Four Kinds of People Holding Us Back From Full Vaccination. *The New York Times*, May 18, 2021. https://www.nytimes.com/interactive/2021/05/18/opinion/covid-19-vaccine-hesitancy.html; accessed September 24, 2021.

[11] Centers for Disease Control and Prevention. Hospitalized or fatal COVID-19 vaccine breakthrough cases reported to CDC as of September 20, 2021. https://www.cdc.gov/vaccines/covid-19/health-departments/breakthrough-cases.html; accessed September 24, 2021.

individuals, as one would expect, leading to less transmission, even with a highly infective variant like Delta.[12]

NEAR-TERM POLICY RECOMMENDATIONS

There are several key steps that Congress can take to protect both lives and livelihoods in the next six months.

First, Congress and the White House should use their oversight and executive roles to ensure that funds directed to K-12 schools are being used to fully restore in-person learning. Congress should redirect CARES Act and follow-on funding to parents' Education Savings Accounts with which they can educate their children, especially in districts where schools remain closed for in-person education.[13]

Second, the Biden administration should reexamine its effort to impose a federal vaccine mandate on private businesses with more than 100 employees. Vaccine mandates for nursing homes funded by Medicare, and for federal workers, are a different matter, and the case for requiring nursing home staff to receive a COVID-19 vaccine is compelling, especially for individuals who have not successfully recovered from a SARS-CoV-2 infection and/or have clinical contraindications for the vaccine, given what we have discussed regarding the disproportionate risk of severe COVID-19 illness and death among nursing home residents, even if vaccinated.

However, the broader private-sector vaccine mandate, which will be enforced through an Emergency Temporary Standard issued by the Occupational Safety and Health Administration, raises many questions of legality, enforcement, and practicality. As FREOPP scholar Gregg Girvan writes, "What will constitute noncompliance, how will employers verify compliance among their workers" [in a HIPAA-compliant manner] "and what will trigger the penalties that the administration has said will be $14,000 per violation?...There is also a question as to whether the testing requirement, which kicks in should an employee refuse vaccination, would be legally too burdensome for employers since the administration has said businesses or employers will be expected to shoulder the cost."[14]

While no U.S. community has been spared from the damage caused by COVID-19, those that have fared best are those that have prudently limited their imposition of economic and social restrictions, as in Texas and Florida, while also encouraging widespread vaccine adoption. It will be essential, as we go forward, to objectively interrogate the efficacy of non-pharmaceutical interventions in 2020 and 2021.

Most important will be the rapid expansion of FDA approvals for vaccines to the pediatric population, and the approval of new vaccines tailored to Delta and other novel variants. Now that we know that mRNA vaccines can be used safely and effectively in hundreds of millions of people, the FDA should provide Emergency Use Authorization to new mRNA vaccines after phase II or even phase Ib studies of vaccines for novel SARS-CoV-2 variants whose manufacturers are already marketing Alpha variant vaccines.

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[12] P.Y. Chia et al., Virological and serological kinetics of SARS-CoV-2 Delta variant vaccine-breakthrough infections: a multi-center cohort study. medRxiv. 31 Jul 2021: https://www.medrxiv.org/content/10.1101/2021.07.28.21261295v1; accessed September 24, 2021.

[13] D. Lips, $143 Billion in Emergency K-12 Education Funding Remains Unspent. The Foundation for Research on Equal Opportunity. 2 Aug 2021: https://freopp.org/143-billion-in-emergency-k-12-education-funding-remains-unspent-bfb8bdc87a1; accessed September 24, 2021.

[14] G. Girvan, A Tale of Two Vaccine Mandates. The Dispatch. 24 Sep 2021: https://thedispatch.com/p/a-tale-of-two-vaccine-mandates; accessed September 24, 2021.

Moderna's vaccine, mRNA-1273, was designed on January 13, 2020: two days after the SARS-CoV-2 sequence had been published by a Chinese scientist, well before the West knew that the virus could be transmitted among humans.[15] mRNA sequences are effectively a form of genetic software; now that Moderna and BioNTech have proven the concept, it would make eminent sense for Operation Warp Speed to accelerate the development of vaccines for novel variants of concern.

We are incredibly lucky that an innovative public-private partnership brought us vaccines against SARS-CoV-2 far faster than we had any right to expect. Let us not squander that victory by preventing patients from receiving the next generation of coronavirus vaccines.

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[15] D. Wallace-Wells, We Had the Vaccine the Whole Time. *New York*. 7 Dec 2020: https://nymag.com/intelligencer/2020/12/moderna-covid-19-vaccine-design.html; accessed September 24, 2021.

Chairwoman BONAMICI. Thank you for your testimony.

And, finally, we are going to hear from Dr. Pernell.

Dr. Pernell, you are recognized for five minutes for your testimony.

STATEMENT OF CHRIS T. PERNELL, CHIEF STRATEGIC INTEGRATION AND HEALTH EQUITY OFFICER, UNIVERSITY HOSPITAL

Dr. PERNELL. Thank you, Chairwoman Bonamici, Chairman DeSaulnier, Ranking Members Spartz and Allen and Members of the Subcommittee, for the opportunity to share my institution's approach to health equity and our experiences during the COVID–19 crisis.

My name is Dr. Chris T. Pernell, Chief Strategic Integration and Health Equity Officer at University Hospital in Newark, New Jersey. I am the daughter of Timothy L. Pernell, Sr., who lost his life to COVID on April 13, 2020. On the day U.S. Army reservists arrived to help us save lives, my father died in another hospital 4 miles away, a brave man who overcame the Jim Crow South and worked at the famous Bell Labs, he couldn't survive this pandemic. I am the sister of Kim Maria, a breast cancer survivor and now a long COVID survivor too. I also invoke the lives of two cousins and 13 university hospital heroes who passed from this virus.

While COVID's toll on all Americans is seismic, the collision of systemic racism and COVID–19 has led to earthquakes of devastation in Black and Brown communities like ours, where my hospital provides critical care as the state's public hospital, a level one trauma center, and a principal teaching hospital for the Rutgers Biomedical and Health Sciences.

In New Jersey, there have been nearly 1 million confirmed cases, leading to more than 27,000 deaths. Newark, the most populous city, has felt COVID's brutal grip, with over 40,000 cases and 1,052 deaths.

It is known that racism unfairly disadvantages some individuals and groups, unfairly advantages other individuals and groups, and saps the strength of the whole society. Albeit racism operates as a preexisting American condition.

Drivers of COVID mortality in Black and Brown populations likely include increased COVID exposure due to poverty, residential crowding, frontline occupation and public transportation, higher rates of known comorbidity not effectively treated, and a higher burden of unrecognized disease from the lack of access to or trust in care.

To solve disparities, we must enact an antiracism agenda in healthcare and society more broadly. Health equity must be central to care, and the integration of clinical medicine, and public health must be seen as key to preparedness.

The first priority: Strengthen primary care through community health centers, community health workers, and fully funded safety net institutions, and expand insurance coverage in order to provide robust access to care for all.

As a safety net, University Hospital reengaged persons lost to care during the pandemic and connected them to primary care and prevention, administered more than 47,000 vaccine doses, coordinated the State's vaccination vans, providing 2,840 shots to 10 low-

income and low-vaccinated communities across 76 days and is building a Prevention Army.

The second priority: Healthcare must deliver high-quality care and practice accountability from a historical, authentic, and transparent place to build trust. It matters who the providers are, which trusted messengers are amplified, and how we share power to ensure socially and culturally fluent and competent care systems.

University Hospital developed a multiformat, multilingual engagement strategy, completed its first 360 Cultural Competency Assessment, mobilized a Community Advisory Council, and collaborated with city stakeholders to perform the most robust community health needs assessment in our history.

Third priority: Deploy a social determinant of health strategy to tackle differences in exposures and life opportunities. For instance, UH is incentivizing our suppliers to drive economic empowerment among local and regional and minority-and women-owned businesses.

Our partners at the State have made policy decisions through a health equity lens. Beyond their 1,500 vaccination sites, the State has mandated reporting of race and ethnicity data, activated a COVID Community Corps, and created a Vulnerable Populations Plan.

Finding ourselves in the eye of the storm, no one in our community has been spared. Yet, with programs designed to share and process our collective grief and trauma, we battle both pandemics alongside all those impacted in the human circle and vow to save lives by all means necessary.

I thank you for this opportunity to share.

[The prepared statement of Dr. Pernell follows:]

PREPARED STATEMENT OF CHRIS T. PERNELL, MD, MPH, FACPM

Testimony of
Chris T. Pernell, MD, MPH, FACPM
Chief Strategic Integration & Health Equity Officer

How to Save a Life: Successful Models for Protecting Communities from COVID-19

House Education & Labor Joint Subcommittee Hearing
Civil Rights and Human Services Subcommittee
&
Health, Employment, Labor, and Pensions Subcommittee

September 28, 2021

Thank you, Chairwoman Bonamici and Chairman DeSaulnier, Ranking Members Fulcher and Allen, and Members of the Subcommittee on Civil Rights and Human Services and the Subcommittee of Health, Employment, Labor and Pensions for the opportunity to speak with you today and offer insights into my institution's approach to health equity and our experiences during the COVID-19 public health crisis.

My name is Dr. Chris T. Pernell, Chief Strategic Integration and Health Equity Officer at University Hospital in Newark, New Jersey.

I am also the daughter of my beloved father, Timothy L. Pernell Sr., who lost his life to COVID-19 on April 13, 2020. On the day United States Army reservists arrived at my hospital to help shore up our efforts to save lives and keep our institution upright and afloat, my father was dying in another community hospital nearly four miles away. A man who taught me so much and personified perseverance and excellence, who overcame mountains of struggle—including the Jim Crow South—and who led a distinguished career at the famous Bells Labs, couldn't survive this pandemic. I am also the sister to a woman, Kim Maria, who is a breast cancer survivor and a worker on the frontlines of our economy who has endured coronavirus infection, herself a long COVID survivor. Moreover, I invoke the lives of my two cousins and 13 staff members who served in various roles at our hospital who have passed from this virus.

University Hospital is New Jersey's only public academic health center and the level 1 trauma center for the densely populated northern New Jersey region. We are the principal teaching hospital for Rutgers Biomedical and Health Sciences (RBHS) – a training ground for the next generation of the region's healthcare heroes.

Last year, we had more than 83,000 emergency room visits, admitted some 15,600 patients, and treated nearly 200,000 people as outpatients. As one of New Jersey's safety net hospitals, we serve as a critical healthcare provider for a large population of low-income and Black and Brown residents.

On January 20, 2020, the United States (US) had its first laboratory-confirmed diagnosis of coronavirus disease 2019, commonly known as COVID-19.[1] In particular, University Hospital was the first hospital and medical campus in New Jersey to handle COVID-19 and was the first hospital in the state to administer the

[1]Holshue, Michelle L., et al. "First Case of 2019 Novel Coronavirus in the United States: NEJM." *New England Journal of Medicine*, 7 May 2020, www.nejm.org/doi/full/10.1056/NEJMoa2001191.

COVID-19 vaccine. Nearly two years later, this novel infectious agent has traveled the globe leaving an unprecedented wake of death, morbidity, social disruption, and economic upheaval.

In New Jersey, as of mid-September, there have been more than 990,000 lab-confirmed cases (PCR) of COVID-19 and nearly 150,000 probable cases, leading to more than 27,000 deaths in the Garden State. These numbers, while growing at a lower rate than the height of the pandemic, are still rising. Deaths by ethnicity are 4.82% Asian, 16.41% Black, 18.68% Hispanic, and 55.35% White.[2] Hospitalizations are down almost 75% percent from their peak last winter of approximately 4,000 and from their highest of more than 6,000 during the height of the pandemic's first wave. As of late September, active hospitalizations number just over 1,000, with just over 100 on ventilators and approximately 250 hospitalized in the Intensive Care Unit (ICU) at acute care hospitals across the state.[2]

Newark, the largest municipality in New Jersey, has likewise seen COVID's devastating impact with 40,9991 total cases and 1,052 total deaths. Of those who have died, 54.9% have been identified as Black or African American, 31.4% have been identified as Hispanic or Latino, 8.6% have been identified as White, and 1% have been identified as Asian.[3]

Scholars have examined the salient factors driving documented inequities across the nation. It has been argued that "Race and ethnicity are risk markers for other underlying conditions that affect health including socioeconomic status, access to health care, and exposure to the virus related to occupation, e.g., frontline, essential, and critical infrastructure workers."[4] Rather, it is more precise to argue that racism – "a system of structuring opportunity and assigning value based on the social interpretation of how one looks (which we call "race") that:

- **Unfairly disadvantages some individuals and communities**
- **Unfairly advantages other individuals and communities**

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[2] New Jersey State Department of Health. New Jersey COVID-19 Dashboard. Retrieved from https://www.nj.gov/health/cd/topics/covid2019_dashboard.shtml on September 22, 2021.
[3] City of Newark. Real-time Data Dashboard of COVID-19 Impact by Gender, Race, and Ward. Retrieved from Newark COVID-19 Help (newarkcovid19.com) on September 23, 2021.
[4] Centers for Disease Control and Prevention. Risks for COVID-19 Infection, Hospitalization, and Death by Race/Ethnicity. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html on September 22, 2021.

- **Saps the strength of the whole society through the waste of human resources**"[5]

– in its pervasive and oppressive nature across every sector of American life – drives the catastrophic outcomes seen in communities of color and not race or ethnicity. Albeit *racism operates as a pre-existing American condition*. As Barber and Jones and decades of literature affirm, these "interlocking systems of racism,"[6] rooted in white supremacist power and ideology, have shaped health care, racial residential segregation, and wealth and income inequalities,[6] among other structural determinants of health, and effect the distribution of resources, the distribution of populations in relation to those resources, and the distribution of risks, i.e., how these factors converge to impact life exposures and experiences which are sourced in where a person is born, lives, works, and plays.[7]

Golestenah et al. in their August 2020 publication, "The association of race and COVID-19 mortality" suggest multiple potential drivers of the disproportionate COVID mortality in the Black population, including three categories: **(1) increased COVID exposure** due to poverty, residential crowding, frontline occupation, and public transportation; **(2) higher burden of recognized comorbidity not effectively treated** because of system failure and patient distrust; and **(3) higher burden of unrecognized comorbidity** stemming from lack of access to healthcare and lack of patient expectation that engagement would be meaningful.[8]

Case-in-point, University Hospital is in Newark, New Jersey, the city center of Essex County. Per the NJ State Department of Health COVID-19 Dashboard, Essex County had the largest number of COVID-19 deaths (2,802 as of September 9, 2021) in New Jersey.[9] Having the largest population share in the county, Newark drives these rates. Newark has a slightly younger population with 24.6% under 18 years of age and only 10.5% aged 65 and older. Approximately 50% of residents are Black, 36% are Hispanic or Latino, and 29% are White. Additionally, almost

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[5] Jones, Camara. American Public Health Association. What is Racism? Retrieved from https://www.apha.org/topics-and-issues/health-equity/racism-and-health on September 22, 2021.
[6] Barber, Sharrelle. "Death by racism: The Lancet." *The Lancet Infectious Diseases,* Volume 20, Issue 9, 2020, Page 903, https://doi.org/10.1016/S1473-3099(20)30567-3.
[7] Jones, Camara. Confronting Institutionalized Racism. *Phylon.* 2003; 50(1-2):7-22.
[8]Golestaneh L, Neugarten J, Fisher M, Billett HH, Gil MR, Johns T, Yunes M, Mokrzycki MH, Coco M, Norris KC, Perez HR, Scott S, Kim RS, Bellin E. The association of race and COVID-19 mortality. EClinicalMedicine. 2020 Aug;25:100455. doi: 10.1016/j.eclinm.2020.100455. Epub 2020 Jul 15. PMID: 32838233; PMCID: PMC7361093.
[9] New Jersey State Department of Health. New Jersey COVID-19 Dashboard. Retrieved from https://www.nj.gov/health/cd/topics/covid2019_dashboard.shtml on September 22, 2021.

one third of the population is foreign-born.[10] Such diversity contributes to Newark's cultural vibrancy and makes it a sociocultural gem.

Whereas the county's median household income is $61,510, Newark's median income is 42.7% less at $35,199. Furthermore, the poverty rate of 27.4% is practically twice that of the county's rate of 13.8%. In addition to having socioeconomic challenges, Newark is also densely populated at a rate of 11,458 persons per square mile. Essex County is almost 50% less densely populated at 6,211 people per square mile.[10] Residents living in densely populated urban centers like Newark, especially those in low-income jobs where they don't have the option to work remotely and encounter the public daily, therefore, live and work in conditions that put them at heightened risk for exposure to COVID. Factors such these combined with poorer health outcomes equate to Essex County being ranked among the least healthy in the state.[11]

To solve disparities along the coronavirus continuum, there must be the moral and political will to enact an antiracism agenda in health care and society more broadly (i.e., a systems approach), and to design and execute multi-pronged racial and health equity solutions based on need to achieve health and racial justice. With much study available, there must be several priorities:

The first priority is to provide robust access to care in order **to solve disparities caused by "differential access."** [7,12]

- Strengthen primary care networks by investing in community-integrated care models including community health centers, community health worker programs, and fully funded safety-net institutions.
- Expand insurance coverage, especially among marginalized groups.

To this end, University Hospital, as a safety net hospital has undertaken several new initiatives to help close the equity gap.

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[10] US Census Facts. https://www.census.gov/quickfacts/fact/table/newarkcitynewjersey,US/PST045219. Retrieved August 18, 2021.

[11] Robert Wood Johnson Foundation. "County Health Rankings & Roadmaps: Building a Culture of Health, County by County. New Jersey. 2020 County Health Rankings Report." Retrieved from https://www.countyhealthrankings.org/reports/2020-county-health-rankings-key-findings-report on September 22, 2021

[12] Lopez L, Hart LH, Katz MH. Racial and Ethnic Health Disparities Related to COVID-19. JAMA. 2021;325(8):719–720. doi:10.1001/jama.2020.26443

- University Hospital has painstakingly audited the medical records of over 200,000 patients to identify those who were lost to care or who had missed important clinical preventive screenings during the first and second waves of the pandemic. The Hospital launched a dedicated Care Recovery Team to perform extensive outreach to re-engage these patients and close any gaps in care, with specific attention to patients with diabetes, COPD and CHF, patients who had experienced symptomatic COVID, and patients who had been recommended for various cancer screenings among other clinical screening protocols. 2,701 patients were identified and about 500 have been reached so far as part of this effort.

- University Hospital (UH) formally launched a Persons Under Investigation (PUI) for COVID Clinic in June 2020. Over 12,000 outpatient tests were performed to evaluate for coronavirus diagnosis. As part of outreach activities, clinic staff contacted 800 confirmed positive patients to connect them to primary care services. Fifty-five percent of those persons indicated a willingness to establish a relationship with a primary care physician at UH and 46% have completed visits.

- Prior to March 2020, the Hospital did not offer E-health visits in its ambulatory practices. However, given the coronavirus crisis, our outpatient care teams launched an aggressive telehealth enterprise by the end of March and conducted 434 electronic visits in that month. In the month of May 2020, we reached a high of 8,749 E-health visits across all outpatient practices. Since the launch, we have provided a total of 49,030 telehealth visits with a current baseline of over 1,000 E-health visits a month.

- **Through an on-site vaccination clinic at the hospital**, as well as the support of community and corporate vaccination sites across the City of Newark and greater environs, University Hospital has administered over 47,000 vaccine doses resulting in the full vaccination of more than 24,000 of our regional neighbors. These vaccinations have occurred in the convenience of their own homes or at central locations in their neighborhoods. In addition, our EMS team staffed and serviced a total of 596 events in the City of Newark where the municipality and FEMA had stationed vaccination sites.

In New Jersey, of the more than 5.8 million people who are fully vaccinated, 47% are White, 16% are Hispanic/Latinx, 8% are Black, 10% are Asian, and 10% and 8% are categorized as Other or Unknown.[13] In Newark, as of September 14, 2021, 60% of Newark residents ages 12 and higher are fully vaccinated and 72% have received at least one dose. Sixty-two percent of Newark residents 18 years-old and higher are fully vaccinated and 73% have received at least one shot. Two percent of the Newark vaccination population are Asian; 31% are African American or Black; 40% are Hispanic/Latino; 8% are categorized as Other and 10% are Unknown or race/ethnicity demographic data is missing.[14]

- **University Hospital partnered with the New Jersey Department of Health to coordinate vaccinations through the State of New Jersey's vaccination van fleet.** With three regional vans, vaccinations are brought directly into the community, especially in areas that have shown low rates of vaccination statewide – Atlantic City, Bridgeton, Camden, East Orange, Irvington, Millville, New Brunswick, Newark, Orange, and Trenton. In total, the vans have provided 2,635 shots in 10 communities across 71 days. The vaccination van efforts have been focused in vulnerable communities across the state with low vaccination rates. Of those vaccinated, 50% are Hispanic and 33% Black; 38% between the ages of 30-49, 27% between 50-69, 16% between 12-19; and 51% have received the Pfizer vaccination and 31% Moderna.

- **The Hospital is looking to increase the involvement of community health workers (CHWs)** in connecting patients and community members to care and resources in community around their complex social, medical, behavior and life needs. CHWs provide critical screening, referral, and care navigation services. UH currently uses CHWs within the Hospital-Based Violence Intervention Programs (HVIP) and community healthcare chaplains through our Familiar Faces and Horizon Neighbors in Health programs to address the Social Determinants of Health (SDOH) and the resulting population health programming.

  CHWs are people who have a strong understanding of the community they serve and share similar life experiences as the patients with whom they

[13] New Jersey State Department of Health. New Jersey COVID-19 Dashboard. Retrieved from https://www.nj.gov/health/cd/topics/covid2019_dashboard.shtml .

[14] From the New Jersey Department of Health reported by the Newark Department of Health and Community Wellness.

work. They have overcome various life challenges and they have been trained to connect people to needed resources. CHWs develop trusting relationships with patients and become a bridge to better outcomes. Their services have been vital during the height of the pandemic and throughout, as they work closely with some of the most vulnerable patients who are navigating job loss, homelessness, loss of transportation, sickness and other mental and socioeconomic barriers exacerbated by the pandemic.

- **University Hospital is in the process of building a "prevention army"** through funding from PSEG Corporations, the parent company of New Jersey's largest gas and electric utility. Currently, the Hospital offers pop-up programs and wellness events in the community to monitor health and connect residents to primary care. Efforts are underway to expand funding sources to grow these pop-ups into a "prevention army" for Newark and surrounding communities. The Prevention Army will work in the community to provide health screenings, monitoring, health education, and address social determinants of health (food, housing, income, and transportation insecurity).

  UH envisions a Prevention Army comprised of several prevention pods embedded within community, partnering with community-based organizations, houses of worship, community centers, and housing developments to provide this critical program to residents. One pod comprises a Registered Nurse (RN), an Ambulatory Care Tech (ACT), and a Community Health Worker (CHW). Each pod will recruit and enroll 100 patients annually into a community wellness program. Collectively, the team will bolster access, connectivity, and continuity of care to stem the tide of those not seeking care because of fear, anxiety, or the inability to access or afford healthcare.

The second priority is to ensure socially and culturally fluent and competent care systems that will solve "differential care within the health care system." [7,12]

- Encourage high-quality care interactions and positive health-seeking behaviors by increasing the pipeline for racially/ethnically diverse and inclusive provider communities.
- Mandate and design bias-free and antiracist health care environments through provider training on implicit bias and micro/macroaggressions and how to practice from a place of cultural humility.

- Ensure culturally competent, multi-lingual and universally accessible health communication strategies across multiple platforms and modalities.
- Elevate and amplify trusted community messengers as partners in care and leverage community assets to help solve gaps in health outcomes and social conditions (i.e., community oversight and community participatory models).

University Hospital is making great strides in its efforts to make our own healthcare environment more socially and culturally fluent, and to resolve any potential care disparities within our operations. Among these initiatives are:

- ***Connecting With the Community*****,** which launched in March 2020, as a weekly hour-long show on Facebook Live. Moderated by Dr. Shereef Elnahal, President and CEO of University Hospital, *Connecting with the Community* provided information and resources about COVID-19 and other health issues from trusted stakeholders and medical professionals to the general community. With an average of 4,000 viewers, we hosted 47 shows in 52 weeks. We also collaborated with community-based organizations to serve as content panelists on 20 plus zoom calls in several languages.

- University Hospital's emergency room and EMS services noticed a concerning reduction in the number of visits for chest pain, stroke symptoms, and severe abdominal pain during the height of the pandemic. These symptoms could indicate significant problems that need emergent medical attention, so the Hospital launched a multi-lingual multi-media format community campaign called **Care Around the Clock.** This program rolled out in Spring 2020 and included email communications to over 9,000 patients, sending mailers to targeted senior residents, connecting with high-risk patients by phone, and creating novel video content. The campaign embodied the hospital's continued commitment to support its patients and the Greater Newark community during COVID-19 and beyond. Care Around the Clock was designed to remind individuals and families that University Hospital is open 24/7, providing quality care and services, and to stress the importance of continued access to healthcare for non-COVID-19 concerns.

- As a key pillar, University Hospital is developing a comprehensive health equity strategy, which focuses on five strategic priorities, and is based on a 10-point plan which outlines specific objectives and goals/measures to

ensure we are providing equitable, safe, high-quality care to our community, spurring the local and diverse economy, and designing an inclusive workplace environment.

- The U.S. Census Bureau projects that by 2050, non-Hispanic Whites will be in the numerical minority. This rapid diversification requires healthcare organizations to pay closer attention to cross-cultural issues if they are to meet the healthcare needs of the nation and continue to maintain a high standard of care. **University Hospital recently completed its first 360° Cultural Competency Organizational Assessment or the COA360, an instrument designed to appraise a healthcare organization's cultural competence.** ***942 staff, 681 patients and 137 community partners and vendors completed the assessment.*** The Office of Minority Health and the Joint Commission have each developed standards for measuring the cultural competency of organizations. The COA360 assesses adherence to both sets of standards. The COA360 is a valuable tool not only for assessing a healthcare organization's cultural readiness, but also for benchmarking its progress in addressing cultural and diversity issues.

- University Hospital is near completion of its **first Workforce Data Assessment** to understand employee lifecycle data (i.e., hiring, retention, promotion, and development data). With a clear understanding of various facets and elements of our workforce, the Hospital can ensure that it is meeting its diversity and equity goals, while ensuring the delivery of quality care to all patients who seek our services. An understanding of the human experience is vested in the awareness that patients and their families, communities, and workers are intimately interconnected, interdependent, and interrelated.

- **University Hospital will be launching mandatory structural racism and implicit bias training** for all managerial staff in this fiscal year with plans to spread this work throughout the organization in subsequent years.

- In collaboration with the Hospital, the Community Oversight Board **has launched a Community Advisory Council (CAC),** which consists of a diverse cross-section of residents and community leaders in our service area. The CAC provides a lens on community-based health issues and needs and partners in solutioning to address needs through a community asset-based

approach. It represents bidirectional communication and power sharing with community.

- In 2021, University Hospital (UH) collaborated with the City of Newark Department of Health and Community Wellness and other community stakeholders to complete **a more robust Community Health Needs Assessment (CHNA)**. The CHNA demonstrates UH's commitment as a community anchor to measure the pulse of the Greater Newark area and ensure that UH provides programming reflective of those needs. Still in production, the written report will include analysis of primary and secondary data, with primary data consisting of community conversations. These conversations took place over several months during the pandemic and include focus groups and key informant interviews. **20 focus groups with well over 300 participants have been held at community centers, residential buildings, community-based organizations, and houses of worship. Ten key informant interviews were held with professionals who work with those with disabilities and substance abuse issues, parents, the undocumented, members of the LGBTQIA community, and the unhoused.** The community conversations centered on economic stability, educational access and quality, healthcare access and quality, neighborhood and built environment, and social and community context. Additionally, a participant demographic survey details the diversity of those who attended a community conversation. UH took diligent steps to ensure the inclusivity of otherwise marginalized voices (women, people of color, and LGBTQIA). Next steps are to share those findings and draft a community implementation plan. The goal of the CHNA is not just to hear the voice of the community, but to make sure UH is working toward meeting healthcare needs and partnering to address socioeconomic challenges.

The third and final priority must be to launch a social determinants of health (SDOH) strategy that **will tackle "differences in exposures and life opportunities by race."** [7,12]

  - Provide SDOH screens for all patients to connect/refer persons to appropriate community resources (e.g., linkages to services for homelessness and housing instability, food scarcity/insecurity, job/workforce development, and legal assistance for justice-involved populations).
  - Operate through a health-in-all policies approach across multiple sectors and develop an intentional antiracism strategy to

dismantle/disrupt how racism may be operating within a specific sector or system.
- Practice restorative justice.

University Hospital is actively working on SDOH initiatives, as we do our part to create health equity within the City of Newark and surrounding communities. Our current initiatives include:

- **The expansion of our use of SDOH screenings has allowed us to create a community asset map** to inform referrals to community-based organizations that can meet defined/known social needs among the most vulnerable members of our patient populations.

- **University Hospital actively participates in the Newark Alliance and its Newark Anchor Collaborative program**. The Newark Alliance is a community- based, city-driven organization aimed at improving the business and economy of the City of Newark. The Newark Anchor Collaborative (NAC), an anchor initiative of the Newark Alliance, serves as a community of practice among Newark-based institutions dedicated to the city's economic revitalization. It operates as an action-oriented think tank comprised of private and public institutional leaders from multiple fields and industries. Together, NAC anchors are spearheading initiatives that promote a vibrant and inclusive Newark economy.

- **The institution is carefully reviewing product and service suppliers to the Hospital, at all levels to drive economic empowerment among minority and women-owned businesses and at the local level** from a diverse team of organizations that are representative of the cultural diversity of the people who call our community home. Our goal is to support the economic vitality of our community in the most equitable way possible.

- **Our Hospital-Based Violence Intervention Programs (HVIP) program has distinguished itself across the state and has now expanded to exploring medical-legal aid for the justice involved population.** HVIP works in collaboration with community stakeholders—Newark Community Street Team (NCST), Newark Community Solutions (NCS), The City of Newark's Office of Violence Prevention and Trauma Recovery, and other community-based organizations—to serve victims of crime who reside in the Greater Newark Area. Program participants include men and women between 18 and 60 who have suffered from gunshot wounds, stabbings, or

physical assaults. Community Health Workers (CHWs) walk with these patients in their healing journey and connect them to services and resources to redirect their lives in hopes of better decisions and outcomes.

- **Victims of Crime may also require therapy or group sessions at pivotal points in their lives. The Trauma Recovery Center (TRC)** was initiated to serve survivors of crime with therapeutic case management, trauma-informed individual and group therapy, peer mentorship, advocacy support, employment support, job training, legal/ housing advocacy, socialization via community-based activities, linkage to resources in the community as well as medication management by a licensed psychiatrist. Without this added step of intervention, individuals may not receive the assistance needed to navigate available resources.

In addition to our work at University Hospital, since this pandemic began, our partners at the State of New Jersey have worked tirelessly to ensure every policy decision that Governor Phil Murphy and Health Commissioner Judith Persichilli have made has been through a health equity lens, all with the intent of reducing barriers and increasing access to vaccination.

Throughout the implementation of the largest vaccination program in the history of our state and nation, the Murphy Administration focused every day on bringing vaccine to underserved communities. They recognized that the same long-standing inequities that have contributed to health disparities affecting racial and ethnic groups also put them at increased risk of getting COVID-19 and dying from it.

Early in the pandemic, the Department of Health mandated race/ethnicity data collection, conducted a geo-spatial analysis to ensure that areas with a high Social Vulnerability Index were prioritized for vaccine access. The State engaged Federally Qualified Health Centers (FQHCs), which serve as medical homes in many underserved communities of color. *They stood up more than 1,500 vaccination sites statewide and launched a COVID Community Corp that conducted outreach in communities with lower vaccination rates.*

Among these initiatives, *the State's Vulnerable Populations Plan directly addressed access by partnering with religious and community leaders, schools, and FEMA, which operated a large vaccination site in Newark. They collaborated with churches, mayors, and community groups to bring vaccine closer to where people are*—especially to communities of color—through mobile units and pop-up

clinics in places of worship, senior centers, community leaders and local health agencies.

The State also hosted and participated in virtual towns halls and stakeholder calls to address the concerns of the vaccine hesitant, especially those with mistrust of government due to long standing, historical and contemporary inequities in care and past government medical abuses. This concern and lack of confidence stem from disturbing cases of medical mistreatment such as the US Public Health Service (USPHS) Syphilis Study at Tuskegee between 1932 and 1972 and other documented atrocities involving surgical experimentation on enslaved Black women and the Henrietta Lacks legacy.

As part of the state's efforts to continue vaccinating as many people as possible, *Commissioner Persichilli, this summer, dispatched key staff as COVID-19 vaccination ambassadors to work with 11 high-risk counties to improve their vaccination rates.* In particular, the State continues to work closely with the Newark Health Department, FQHCs, nonprofit organizations, faith leaders and pharmacies and have supported nearly 100 vaccination events in the area since mid-summer of 2021. Since the County Ambassadors began their work in mid-June, adult vaccination rates in the targeted counties have increased by an average of approximately 14%. They are 91.3% of the way to the goal of vaccinating 70% of adults, over the age of 18, in these counties.

The Department's COVID-19 Community Corp has also been active in Newark on a weekly basis, providing outreach and education. Spanish speaking vaccination providers, for example, were available at the city's Puerto Rican Day festival and other recent events.

With the increase of COVID-19 variants and efforts to reach vaccine-eligible students before they go back to school, the role of the ambassadors was to build upon existing state, county and local infrastructure and partnerships. The State conducted a special campaign throughout the summer to increase vaccination among young people between the ages of 12-17. In the state capital in Trenton, the Department of Health hosted vaccine clinics in our employee parking lot, partnered with churches, and worked with the city's mayor, school and health officials to sponsor a series of free COVID-19 testing and vaccination in 15 city schools. The result has been a steady increase – to 66 percent so far – in the percentage of students between the ages of 12 and 17 years old who are vaccinated — now exceeding the state average of 60 percent.

All these efforts have resulted in nearly 5.8 million individuals who are fully vaccinated, including a gradual but steadily increasing number of vaccinated members of African American and Latino community.

In closing, as an acute care medical institution located at the epicenter of an unprecedented public health crisis, our frontline heroes have been deeply impacted by COVID-19. To demonstrate the resiliency in our institution and to make progress on our healing journey, we have launched several emotional first aid initiatives including a peer supporter network and regular virtual and in-person opportunities to share and process our collective grief, loss, and trauma we have experienced. We continue to battle the virus and to help our patients and community battle through this pandemic as we move *forward* in our mission and vision *to improve health for generations to come.*

Chairwoman BONAMICI. Dr. Pernell, thank you for sharing your expertise, but also for sharing your personal story, and I know everyone here shares condolences on your personal loss of your father and family Members.

Now, we are going to move on to questions but before we do that I wanted to add on the written statements, without objection, all Members who wish to insert written statements into the record may do so by submitting them to the Committee electronically in Microsoft Word format by 5 p.m. on October 11, 2021.

So now, under Committee Rule 9(a), we will question the witnesses under the five-minute rule. As this is a joint Subcommittee hearing, after the Chairs and Ranking Members, I will be recognizing Subcommittee Members based on seniority order on the full Committee.

I will wait for the bells to stop here for just a minute.

As Chair, I now recognize myself for five minutes.

So, thank you again to the witnesses for your testimony. You have highlighted some good examples of where you had success in overcoming the many obstacles that health professionals and community groups face in their efforts to help people get vaccinated and win the fight against COVID–19.

So, in the district I am proud to represent in northwest Oregon, Washington County, Oregon, recently became the first county in the State to cross the threshold of vaccinating 80 percent of adults. And, also in Oregon, the Oregon Pacific Islander Coalition has been working successfully, with State and local partners, to vaccinate more than 90 percent of Oregonians who identify as Native Hawaiian or Pacific Islander.

They are meeting people where they are, such as a local food market or favorite neighborhood restaurant. They often pair this outreach with additional support, maybe a meal or fresh produce or groceries that can be used to make culturally traditional recipes. And these sites, importantly, are run by trusted community groups, staffed by people who speak the same language as community Members, and held in familiar locations where people feel comfortable and safe. And it has made a difference.

So, I am going to start with Dr. Martinez-Bianchi. As we approach the end of the second year of the pandemic, what are the most effective ways to build community trust, and how can local providers continue strengthening their engagement with underserved communities to address language barriers and provide culturally appropriate healthcare and services?

Dr. MARTINEZ-BIANCHI. In our experience, the most important way of building that trust is being a presence, listening, like I said before, being humble in our approach.

When we work together, when we are listening to our community, what we saw at the very beginning of the pandemic, it was that because there were no health networks, there was not enough information, the community had started doing it themselves. They were addressing food insecurity. They were canvassing their own neighborhoods, trying to understand how much of an impact COVID–19 was having in the community.

So, we got together with the community to understand the impact of what was happening. We started seeing the numbers before there were numbers from the CDC or in the State tracking, right?

Connecting, being there, and also making sure, that we are, as health professionals in academic institutions, that we understand that the community knows where the problems are occurring, the community knows where there are barriers, and they actually have wonderful ideas on how to diminish and improve access. So——

Chairwoman BONAMICI. I don't mean to cut you off, but I just want to get another question in before my time runs out. Thank you.

Dr. Wen, you mentioned this in your testimony. According to recent data from Kaiser Family Foundation, about 25 percent of unvaccinated adults do plan to get a vaccine by the end of the year, but conflicting medical opinions, inaccurate information, especially on the internet, related to COVID–19 have created some serious challenges to reaching population immunity through vaccination.

So, when communicating with people who are ambivalent or skeptical, what effective strategies have healthcare providers and public health educators used to increase uptake, address concerns, and also debunk misinformation?

Dr. WEN. I really appreciate the question because I do think we need to recognize that there are a lot of people who actually are in that middle ground. There are definitely some people who are really dug in and will not get the vaccine. There are other people who are strong proponents of the vaccine, but there are a lot of people who need a little bit more of a push.

And so, everything that was said earlier about the trusted messenger, reaching people where they are, all those are very important. But to your question, I think it is really important to approach people individually with compassion, not with judgment, to understand why it is that they have not yet gotten vaccinated. Many people are not trying to be purveyors of misinformation or disinformation, but they may have heard something, and, actually that disinformation is harming their health. It is preventing them from protecting their families in the way that they should.

I also do think that vaccine requirements, including in the workplace, can also push people to get vaccinated. United Airlines, for example, after instituting their vaccine requirements already is at 97 percent compliance. And I think that, in combination with a robust education campaign, is essential.

Chairwoman BONAMICI. Thank you. That is important.

In my final time, Dr. Wen, again, I am really concerned about seniors over the age of 65 who may be eligible for a booster or are eligible for a booster if they had Pfizer.

So, what systems need to be in place to effectively deliver those booster shots to seniors who are outside of a long-term care setting where they may have somebody come in to provide them, but seniors outside of the long-term care system? In the 3 seconds I have left.

Dr. WEN. Things are a lot better now than they were at the very beginning of the vaccination campaign. Seniors should be able to get vaccines in their pharmacies, in their grocery stores, in their doctors' offices. Those community vaccination sites are absolutely

essential. And I think we also need to do even more outreach to bring vaccines to where people are, including in churches and schools.

Chairwoman BONAMICI. Absolutely. And I don't want to run over. I want to set a good example for the rest of the Committee.

So, I am going to yield back and recognize Ranking Member Spartz for five minutes for your questions.

Mrs. SPARTZ. Thank you, Madam Chair.

Mr. Roy, in your testimony, you said that the most significant mistake that the government has made is its inability to properly assess risk. As you know very well, government has never been known for its extraordinary ability to assess risk or strategically plan or be efficient or effective or even its extraordinary ability of common sense too. It is inherently political.

So, if you look at this, what do you believe we could do to have a better mechanism to deal with the pandemic, engage better with private enterprise, and have a more effective way to do it and have more risk-based, not politics-based, approach to deal with the pandemic? Do you have any suggestions?

Mr. ROY. Well, it is a great question, Mrs. Spartz, because, as you say, this is a very challenging problem. And public health is one of those roles or functions that government needs to be involved in. So, it is not something you can just say, well, the private sector should just handle it. Right? There needs to be a better approach to risk management from the government.

I would say two things: One, we need a much better CDC. The CDC from beginning to end has had a lot of problems, both in terms of suppressing private sector efforts to test, develop tests for COVID, to their ability to collect timely data, that basically the Trump administration had to create a completely different data architecture using private sector companies to help in order to compensate for the problems that the CDC had in terms of providing real-time data to the government and to providers.

And I would say the last thing is it is incredibly important that we have an open debate about the risks and benefits of various interventions when it comes to public health. We did a lot in the last 12 to 18 months to suppress honest scientific debate about how best to approach this problem, and that created more skepticism, that created more mistrust, and actually also prevented us from identifying the best solutions where they were appropriate.

Mrs. SPARTZ. Thank you. If you look at that, I mean, we do have a challenge with open debate. This should be, you know, a democracy where debate is encouraged, but we don't have that. You know, we have a very politicized problem right now.

So, what are the things you would think could help us to have that debate, how we can build the transparency, have better data for people and, actually, you know, have people trust in us a little bit more, because, to tell you the truth, the level of trust on the ground from both sides is very low to our government? Any particular tools you can suggest?

You know, I read through your testimony. You bring a lot of very comprehensive risk assessment, looks at what are societal risks, what are long-term risks, what are short-term risks. What are the other things maybe you can mention additionally to have an open

debate and have reform of CDC and better maybe oversight of CDC by Congress?

Mr. ROY. Right. Well, absolutely, look, I mean, risk assessment is a challenge for human beings in general. So, we can't overestimate our ability to solve this problem through public policy. Having said that, I think the tech platforms in particular have a lot of responsibility for suppressing—they have egged on and encouraged by important government officials and policymakers. That is a serious problem we need to revisit.

I testified last year in a hearing about this problem of the CDC and information gathering—I am happy to share that testimony with the committee—where, again, the CDC, and the HHS tried to solve this problem, and they were accused of being political. They were accused because they were trying to solve a problem the CDC failed to solve. It was the people who were trying to fix the problem that were accused of being political, and it was the other way around. The CDC was the problem, and the administration was trying to be responsible in fixing it.

So, I think we just need to tone down the partisanship on some level and just say, you know what, there are a lot of people who are trying in very challenging circumstances to solve these problems. And the temptation is always to be partisan in Washington, I know, but lowering the temperature and trying to find opportunities for good faith engagement with the other side, that probably would make a big difference.

Mrs. SPARTZ. I appreciate it. I appreciate it. Hopefully, we can have this deliberation and debate because, you know, in the recent polls, it shows that public trust in Joe Biden's administration is significantly going lower and lower, and we have less and less trust. And it is very unhealthy for people to have such a low trust for our government. So, we will be happy to work with you if you can share some information and provide it to this administration, to CDC, to have it better because we have to combat and deal with it better. So, thank you very much.

And I yield back.

Chairwoman BONAMICI. Thank you, Ranking Member Spartz.

I now recognize the Chair of the Subcommittee, Mr. DeSaulnier, for five minutes for your questions.

Chairman DESAULNIER. Thank you, Madam Chair.

And I would love to have that kind of conversation. I think we all would. A civil lively conversation and evidence-based.

So, Mr. Roy, I am going to reach out to you.

And, Congresswoman Spartz, I would love to have not so much a debate but a conversation.

I believe in evidence-based research. We have shown that in judicial reform, criminal justice reform. It would be good if we could do it for public health. I am a person who believes that there is a lot in human institutions—as you said, Mr. Roy, there are some struggles as we as humans.

And I don't think the private sector has a monopoly on transparency, honesty, or integrity either. And I don't need to go through a list of the corporations that have let us down. And I think there are a lot of good, amazing public employees and institutions.

And, in my district, the district I am so proud to represent, having come from local government, I am particularly proud of our public health department and the partnership it has with other providers. Kaiser was started in the East Bay in San Francisco, where they have a very strong partnership with them and other private health providers.

So, Dr. Pernell, one example we had was—and this is a long history we have in the East Bay in the Bay area. Richmond, California, is one of the poorest communities in a very wealthy area. And our public health department decided, based on a long history not with pandemics but with public health, to do mobile drive-through clinics. We know that people in poverty, people of color, whether they are trying to get to work, get a job, get their kids to school, they have more obstacles than other people. And doing things like this is obvious to me.

So, Dr. Pernell, to reach communities with limited access to reliable transportation, limited access to technologies, what strategies do you think can be used—and point to specific cases if you can—to increase COVID–19 vaccinations and booster shots and trust in the public health system?

Dr. PERNELL. Thank you. Very, very good question. I am going to start with, again, we cannot afford to practice healthcare or public health from an ahistorical or an inauthentic perspective. And it becomes inauthentic when we don't recognize the truth, the lived experiences, and the narratives of those lives in the public.

If you just look at our community here in Newark, a social, cultural gem, a very diverse community, what has led to increased vaccination rates is taking the vaccines to the people, whether that is partnerships with churches, partnerships with local government, partnership with institutions like my own, partnership with community-based organizations, leading in an asset-informed approach.

Too much of healthcare is from a deficit approach. And what the deficit approach is what a person or community lacks and a provider coming in to plug that gap. When there are assets and resources in communities, there are trusted messengers in communities. So, we have to find those trusted messengers. We have to partner with them and amplify their voices and share power with them.

So, for instance, we use a Prevention Army or a popup model. In our popup model, we are partnering with a CBO or we are partnering with a church that can bring people to the table who need particular services, and oftentimes that is vaccines in this climate.

So, whether it is through our partnership with the State, where we have Ambassadors that go out into communities to meet people where they are, knocking on doors, to provide vaccines through a mobile vaccine unit, or whether it is opening up a vaccination clinic in our own parking lot, or the State has done that in Trenton. Where communities can see institutions share power, communities are able to trust and to say: This care interaction will be meaningful, and this care interaction is done with me in mind.

Chairman DESAULNIER. Doctor, can we talk a little bit about, just to followup, community action agencies and nongovernmental agencies, this partnership. Many years ago, I remember doing out-

reach, again, in the Bay Area to low-income communities of color on air quality. And it was striking to me that our public agencies sent public information officers into those communities who look like me, and they were shocked that the community didn't embrace them.

So, we talked about cultural competency, but more than that, going to these nonprofits that are not just culturally competent but are from the community to engage.

Dr. PERNELL. Definitely. That is sharing power. That is what you are describing, Chairman. And we need to do more of that, especially with historically excluded and stigmatized groups. Share power by identifying assets or resources already in the community, already with a track record, already equipped with some currency or value or power that we can then marry our power with as an organization or institution, and that is how we begin to demonstrate accountability.

Chairman DESAULNIER. That is wonderful. As a White male, it is sort of funny in a way for me personally to go to those meetings and subsequent more and see how defensive the institutions were and people who weren't from that community that didn't have that life experience.

And then, however you are able to break through that, the power when everyone respects one another and understands they are coming from a distinctly different place. Thank you so much.

Thank you, Madam Chair, and I yield back.

Chairwoman BONAMICI. Thank you, Mr. Ranking Member.

And I am going to turn it over to Ranking Member Allen for five minutes for your questions.

I do want to note we have the Chairman of the full Committee, Congressman Bobby Scott, with us, as well as the Ranking Member, Representative Virginia Foxx. It is my understanding that the full Committee Chairman and Ranking Member would like to ask questions later. If that is not correct, wave or send me a note, and we will get you in sooner.

I will turn it over to Ranking Member Allen.

Mr. ALLEN. Thank you, Chairwoman.

And, Mr. Roy, you know, I always learn a lot from these hearings. And as I reflect back on the confusion through this whole process, I remember doing a press conference in February in my district with our public health officials. And, basically, the risk assessment then was that we probably would not be severely affected by this virus; we know it exists, but it is really not anything we should be concerned about. And then, all of a sudden in March, I go to a briefing and the experts say that we could lose as many as 3 million people; it would collapse our healthcare system and our economy.

You know, typically in a crisis, this Nation comes together. I have never seen us so divided in this process. And, again, I lay most of that right here at the feet of Congress and the White House and the Senate, because it is up to us to try to bring this Nation together.

But a lot of it is perception and also the fact that we have this disagreement between private medicine and public medicine. I mean, when the Trump administration said they were going to

produce these vaccines, the public medicine people and many folks on the other side of the aisle said: That is ridiculous; you can't do that.

So, the Trump administration had to go to the private sector to get this done. And everyone says what a miracle it was. But then, all of a sudden, there was this confusion about, well, you know, if the Trump administration produces a vaccine, we are not going to take that vaccine. And these are leaders of our country. So, some have embraced the COVID–19 precautions, and they have made it a part of their identity. They are now reluctant to return to normal life.

How do we, as a Nation, break through this new culture of fearmongering regarding COVID–19 and return to, you know, the greatest economy in the history of the world that we had? And we had, you know, the greatest income growth among low-income people in the world. How do we get over this?

Mr. ROY. Well, you know, in my last set of questions with Mrs. Spartz, we were talking about the issue of risk, right? And look, Americans are going to have different approaches in terms of their risk, their fear. We are not going to have a homogeneous reaction that way.

But I think where public health and policymaking leadership failed last year is in not making those distinctions between the risk of, say, children and the risks of people living in long-term care facilities.

As I detail in my written testimony, there was a huge gap between the actual evidence in that regard and Americans' perception of their risk. That was driven by a lot of factors. Journalism played a role in that as well. But, I mean, I think all we can do is just try to be more evidence-based, right? I mean, really just try to emphasize to everyone who has an ability to influence Americans' attitudes, let's be evidence-based. Let's make sure that—for example, when we closed everything but, quote/unquote, essential businesses. Well, there were lots of so-called nonessential businesses that were capable of operating safely, as we detailed in a very long report we published in April of last year. So, that was an example of where we were just not taking the risk into account and the evidence into account.

So, look, people—Americans are going to have a broad range of attitudes, but policymakers have a special responsibility to be evidence-based, and we didn't pass that test last year.

Mr. ALLEN. Well, you obviously were involved in, you know, the pre-pandemic levels of economic growth. I mean, we had record-low unemployment across the board, including Black, Hispanic, and Asian workers.

What significant policies and economic conditions resulted in the historically low rates that existed before the pandemic? I mean, what drove that?

Because there is a lot of discussion about, OK, where do we go from here? I like history. I like what works. Tell us what your experience was with that.

Mr. ROY. It is a great question, Mr. Allen, and to bring it back up—bring it again to previous testimony I have given to this Committee and to Congress, the record unemployment rates were

amazing in terms of the relative unemployment rates, not just low unemployment rates in general, but the disparity between White unemployment rates and non-White unemployment rates had reached record lows right before the pandemic, and then, of course, spiked up.

And so, the lockdowns were particularly tragic for lower and middle-income Americans because if you are a white-collar American who can work from your laptop, good for you. But for people who have jobs that require them to actually be in that physical workplace, that is a different matter.

Now, look, again, there was a public health role in you know, we have to be careful about sporting events, say, or bars maybe, but there were plenty of things that we could have done safely, and we needed to work harder to try to find those areas to reopen the economy.

Why is that important? Because of what we have talked about already—the issue of trust. Right? When you do things to lock down businesses and close schools that clearly have no relationship to the science, you can't then demand that people trust you about vaccines. Right? They are not going to.

Mr. ALLEN. Exactly.

Mr. ROY. And that is why there is so much mistrust right now, and that is tragic.

Mr. ALLEN. Yes. Thank you, and I yield back.

Chairwoman BONAMICI. Thank you, Ranking Member Allen.

Next we are going to Representative Courtney. Representative Courtney, you are recognized for five minutes for your questions.

Mr. COURTNEY. Thank you, Madam Chair.

Thank you to all the witnesses for being here today.

You know, I come from the State of Connecticut, which this morning, in terms of the latest data, we are at 80 percent vaccination as a State for population 18 and up. We have the lowest infection rate of any State in the country, 14 per 100,000.

So, you know, when I listen to some of the witnesses talk about how, you know, there was some, you know, structural sort of divide that was taking place, I come from a State where the Governor, public health experts at Yale, the State public health department, and our friends at Pfizer, who were very involved in terms of developing the vaccination—we have about 4,000 employees there that were part of this amazing effort that was there. In fact, the public-private collaboration is fantastic, and the results speak for themselves—this morning, the superintendent of the Coast Guard Academy in New London, Connecticut, met with a bunch of us: 99 percent vaccination rate on the campus.

The submarine base in Groton with 10,000 sailors, that is there is over 90 percent vaccination. That is why they haven't missed one submarine deployment throughout the entire pandemic. They followed strict rules, which were difficult, particularly in submarines, which you can't—social distancing is impossible.

But the fact of the matter is, is that for some of the testimony we are hearing today about how there was, you know, this confusion that was inherently driving suspicion and hesitancy, I would just say, coming from a State that has the lowest infection rate,

lowest hospitalization rate in the country, in fact, people working together in the private and public sector, in fact, succeeded.

And I would just note for some of the comments that were made that, you know, the vaccine was the result of private sector investment, I mean, you know, I kind of pinch myself. Back in March 2020 when we passed the CARES Act, there was a huge allocation in there to develop the vaccine through the NIH.

Moderna, in particular, you know, took advantage of those funds and was critical in terms of getting that drug approved by FDA and deployed out in the population.

So, the notion that this was, you know, one way or the other, is just, you know, it is just, if you look at the chronology, you look at the forensics of how we got to this place, in terms of a highly effective vaccine and that by just basically shedding all of the noise about, you know, disinformation about the vaccine, you can actually succeed.

And I am very proud of my State in terms of the fact that we have brought those infections down, we have brought those hospitalizations down.

However, last week, we did actually have, in the name of debate, a hearing at Hartford where some State legislators brought in various witnesses.

And, Dr. Wen, you talked about how it is really important for public officials to combat disinformation. One frequent talking point that took place in Hartford last week was when the conversation came up about full authorization by the FDA for the Pfizer vaccine, there were a number of legislators who actually made the point that there was, in fact, only authorization for the, quote/unquote, German vaccine, which presumably was BioNTech, which is where the research that was done that developed the vaccine, but not the American Pfizer vaccine.

And, you know, I see some smiles on people's faces, but that was repeated at a public event at the State capital a number of times. So, Dr. Wen, just for the record, can you clarify, is there any difference or any such thing as a German Pfizer vaccine versus an American Pfizer vaccine?

Dr. WEN. No, Congressman, there is not. So, there is a Pfizer BioNTech vaccine that is now given full approval by the Food and Drug Administration.

The Moderna vaccine and the Johnson & Johnson vaccine both have emergency use authorization. It is expected that they will also receive full approval as well.

And I think it is time for us to speak about the COVID vaccines as being no different than any of the other vaccines that our children, that we routinely receive, there really is not a difference, and we need to talk about COVID–19 as a disease like all other vaccine-preventable diseases.

And I think the statistics that you cite are so compelling that it is areas that have high vaccination rates that we are also seeing lower rates of infection, hospitalization, and death.

Mr. COURTNEY. Thank you. I yield back.

Chairwoman BONAMICI. Thank you, Representative Courtney.

And next I am going to recognize Representative Thompson. Representative Thompson, you are recognized for five minutes for your questions.

Mr. THOMPSON. Madam Chair, thank you so much.

I really appreciate this hearing. Thank you for all the witnesses. Specifically, Mr. Roy, thank you for being here today.

You know, before 2020, the U.S. economy and labor markets were strong. Real GDP increased 2.3 percent in 2019 and 2.9 percent in 2018.

The 3.5-percent unemployment rate in September 2019 was the lowest since 1969. However, due to COVID–19 and resulting State-mandated shutdowns, there has been a dramatic, negative impact on the economy, workers, and families.

Now, as we began to believe that this pandemic was in our rear-view mirror and vaccines began to be developed and distributed through Operation Warp Speed, we faced continued obstacles in getting our economy back on track.

Additional mask mandates and lockdowns, as well as increased scrutiny on vaccination efficacy, are keeping us from returning to the pre-pandemic output and ultimately will create lasting impacts on our country.

To make things worse, the even more—to make things even more complicated, on September 9, 2021, President Biden released a COVID–19 plan entitled, quote, "Path Out of the Pandemic," end quote, which includes the Director for the Occupational Safety and Health Administration to issue an emergency temporary standard on workplace COVID–19 vaccination.

This ETS will require all employers with 100 or more employees to ensure the workforce is fully vaccinated or require any workers who remain unvaccinated to produce a negative COVID–19 test result on at least a weekly basis before coming to work.

And the administration estimates that the mandate will impact more than 80 million workers in the private sector. I don't think they know that private sector very well, and I will get back to that.

Having spent nearly three decades in the healthcare industry, I encourage everyone to weigh the benefits to receiving a vaccination and consult with their healthcare professionals.

In fact, more than 445,000 people are fully vaccinated in the 14 counties that are all or partially in my congressional district.

Now, the universe is not probably 680,000. It is less than that when you figure individuals that are children, who are not eligible for vaccination.

So that is a significant number that I am very proud of, actually, and every week, every day, we see more and more people becoming vaccinated.

With that said, the pending ETS will likely cause many individuals to leave their jobs and create massive uncertainty, costs, and liabilities for many employers, particularly small businesses.

I had a conversation yesterday with Secretary Tom Vilsack, Secretary of Agriculture. I serve as the Ranking Member on Agriculture. And it was interesting. We talked about five different issues that were going on. I agreed with all five with the Secretary. We are trying to figure out what we can do about those issues, and one of them is the disruption of the food supply chain to our

schools. And that there are many schools, starting in large urban centers, that are starting to report difficulty getting reliable food in order to prepare the school meals, whether it is breakfast, lunch, or, in some districts, actually dinner as well.

And so, as I dug deeper into that and reached out to my school districts, I found that even small rural school districts are having challenges with certain commodities. And I dug deeper and reached out to the industry, the food distribution industry, that one of the prevailing issues I am hearing is workforce and the fact that these large companies with over a hundred employees are losing workforce, specifically CDL drivers to be able to transport those food products and people working in warehouses.

So, the President Biden vaccine mandate for large companies is causing, it looks like, a significant—I hope it will not be a significant impact, but somewhat of an impact on access to nutrition for our children in schools and certainly on our workforce, as people that are working for large companies, a hundred or more, are making a transition to smaller companies.

So, I apologize I went so long, Mr. Roy. Can you talk, with the time we have, about the impacts of COVID–19-related restrictions on the American workforce that you see and comment on the effects of those restrictions on small businesses versus large.

Mr. ROY. Well, I will be very—try to be brief. So, two things that I would highlight from your comments. The first is, you all know this, but the public may not appreciate how much nutrition flows through the school lunch program. So, when low-income students don't have in-person schooling, that is a big problem from a nutritional standpoint and a healthcare standpoint for a lot of those kids.

On the workforce piece, there is a lot of problems logistically and legally with the Federal Government dragooning private companies to enforce a vaccine mandate. If the Federal Government wants to try to have a vaccine mandate, that is one thing, but companies should do it on their own.

And I think there is a lot of problems with how those employers are going to be expected to enforce a mandate. What are they going to do, are they supposed to fire people or get fined $700,000 per violation? I mean, this is a real problem, and there needs to be a proper comment period for that ETS.

Mr. THOMPSON. Thank you, and I yield back.

Chairwoman BONAMICI. Thank you, Representative Thompson, and thank you, Mr. Roy, for acknowledging the importance of those healthy school meals. We talk about that a lot on this Committee.

Next I am going to recognize Representative Adams. You are recognized for five minutes for your questions.

Ms. ADAMS. Thank you, Madam Chair.

To also the Ranking Member, thank you as well.

And I want to, first of all, thank all the witnesses. You were all really great in your testimony. Your work in public health and in studying our communities as they continue to grapple with the pandemic is crucial to pursuing both public health-based and community-based solutions. So, thank you for what you do.

This hearing is a much needed one, particularly as we look ahead and continue to work on protecting our loved ones.

Dr. Martinez-Bianchi, I represent North Carolina's 12th District, which is in the Charlotte-Mecklenburg area. I appreciate the details that you offered today in your testimony underscoring the importance of cultural competency in the context of vaccines for North Carolina.

So, in your research and from your observations, have you noticed discrepancies between access to information about vaccines between men and women, and as a followup, could you please speak to potential solutions to more effectively disseminate information about vaccines?

Dr. MARTINEZ-BIANCHI. So, we are doing—yes, I have seen differences, and I have seen the importance of that aspect of community engagement, to listen to the community, to know what are their concerns. We have done a lot of work for many different groups in my—I am testifying more about the Latino health, but for every group, the idea of sitting together and listening and understanding what are the questions.

Initially, women had a lot of questions regarding the potential of vaccines affecting fertility. They had questions in regards to the potential of vaccines being problematic for a pregnancy, for example.

But we have good data—good data—to support that actually vaccinating is healthier on the long term for women who may become pregnant because pregnancy becomes a higher risk of a poor outcome.

So, yes, it is important to listen, to go on airwaves but also to go directly to speak to people.

Ms. ADAMS. Right.

Dr. MARTINEZ-BIANCHI. One of the approaches that we are doing is, you know, if we are doing a vaccination event, do it together with the school district, with the public school, and together with a job fair. You get a job. We are doing this together.

Ms. ADAMS. OK, OK, thank you very much. Let me move on, please. Thank you so much.

Dr. Wen, you talked about various recommendations related to vaccines. Could you explain the steps that employers can take to protect vulnerable employees at the workplace and also how employees can protect themselves at the workplace?

Dr. WEN. Thank you very much, Congressman Adams.

One, so, I think it is important for us to talk about this as layers of protection. In the same way that we talk about layers of protection in the school room, we also think about layers in the workplace.

So indoor masking, for example, is an important layer of protection. Improving ventilation is another layer of protection. Very importantly, vaccination is a layer of protection as well.

We note that vaccinated people are five times less likely to get infected with COVID compared to somebody who is unvaccinated. And so, I would much, if I had to be in a conference room with a whole bunch of people, I would feel a lot better being in a conference room with people who are all vaccinated than compared to if they are unvaccinated.

Also, at least weekly testing but ideally twice weekly testing would also help to filter out those who end up testing positive and

could be infecting others as well. And so, I think it is the combination of these approaches.

Right now, we are hearing from a lot of people who are from a vocal minority, if you will, who really oppose these types of measures. Maybe they oppose vaccine requirements or masking or something else.

But I think we also have to remember that there is a much larger majority of individuals who really support these measures, and I think it is the duty of the Federal Government, of Congress, to ensure that workers are being kept safe.

Ms. ADAMS. Thank you very much.

Dr. Pernell, how would equitable access to COVID–19 boosters protect the hard-fought gains in the COVID–19 increased vaccine rates that we have seen in communities of color? I have about 30 seconds.

Dr. PERNELL. Thank you, Congresswoman. I think I will point to specifically, we can't only focus on age, but we must look at the intersectionality of age and race. Right? So, we should be thinking about how historically excluded groups like Black elders and Latino elders, how they have access to care and specifically access to boosters. Do they understand that they are now eligible for boosters?

Are we partnering with churches, are we partnering with CBOs, are we partnering with civic organizations to make sure that information is culturally and socially fluent and that it is plain-spoken and they understand the importance of a booster, in particular, in that age group.

Ms. ADAMS. Great. Thank you very much.

And, Madam Chair, I am out of time. I am going to yield back.

Chairwoman BONAMICI. Thank you, Representative Adams.

And next I no longer see Mr. Walberg.

Mr. Banks, you are recognized for five minutes for your questions.

Mr. BANKS. Thank you, Madam Chair.

In their testimonies, both Dr. Martinez-Bianchi and Dr. Wen have advocated strongly for equity in vaccination rates among Hispanic and African American communities.

However, State governments have already attempted to address disparities in infection and vaccination rates among minority communities.

California has reserved 40 percent of its vaccines for its, quote, disadvantaged residents. Both Massachusetts and Connecticut have respectively reserved 20 percent and 10 percent of their vaccine supply for communities that rank high on the CDC's social vulnerability index.

Despite these outreach efforts, minority and disadvantaged populations still see lower vaccination rates than other communities.

Mr. Roy, can you explain why government-led, top-down approaches are ineffective in reaching these communities?

Mr. ROY. Well, first of all, I want to say that I think it is immoral for the government, on a racial basis, to say certain people are going to be eligible for the vaccines and others are not. It is arguably a violation of the Civil Rights Act of 1964.

And, when vaccines were scarce, that was a serious problem, and I hope there is litigation that comes out of that to address that principle.

Having said that, today vaccines fortunately are not scarce, and everybody who wants to get vaccinated can. And we have already heard some of the stories, success stories, of places where broad-based vaccination is happening.

As, you know, Mr. Banks, and as I think everyone on this Committee knows, there is a lot of mistrust in particular minority communities, particularly African Americans, because of a lot of checkered history that we have when it comes to public health and race.

And so, there is understandable hesitancy that, you know, that all we can do, as I think Dr. Martinez mentioned, is try to do more to reach out, meet people where they are, have people—trusted figures in the community address things that are not—that is not something, you know, the government can do as a mandate where that is something—you can't force people to overcome their trust. They have to do it on their own.

So, I think these are hard problems to solve. We can only overcome it one step at a time, but I think we got to start by just making sure that the vaccine is accessible and affordable to everyone.

Mr. BANKS. Thank you for that.

I know that Representative Allen touched on this a little bit already, but I want to dive a little bit deeper on this next subject. President Trump's Operation Warp Speed produced the COVID–19 vaccine in record time, delivering the first vaccines within 8 months of beginning the operation.

Despite his success, Democrats sowed doubt and confusion over its effectiveness. For example, Representative Ilhan Omar, who sits on this Committee, said, quote: We can't trust the President and take his word and take a vaccine that might cause harm to us, end quote.

Vice President Kamala Harris said during a televised debate, quote: If Trump tells us to take a vaccine, I won't take it, end quote.

President Joe Biden was also opposed to this vaccine prior to the election, stating, quote: If and when a vaccine comes, it is not likely to go through all the tests and the trials that are needed to be done. Who is going to be the first one to get in line and take it, he asked, end quote.

Mr. Roy, what effect did these statements have on minority communities who overwhelmingly look to Democrat politicians for guidance?

Mr. ROY. This was a tragic series of events, Mr. Banks, and the reason why it was tragic is that we could have gotten FDA authorization of the vaccine sooner had there not been this cloud of, well, if the FDA approves the vaccine sooner, that must be because Trump made the FDA do it, not because it was scientifically warranted.

And there are probably tens of thousands of Americans who would still be alive today if we had gotten that vaccine several weeks earlier than we actually did, for those particularly at-risk communities, the nursing home residents that we have talked about. So, that was super damaging.

How it affects vaccine hesitancy today, who knows, but clearly there must be some effect.

Mr. BANKS. That is a powerful answer. I appreciate those answers.

And, with that, Madam Chair, I will yield back.

Chairwoman BONAMICI. Next, I am going to recognize the Chairman of the full Committee.

Chairman Scott, you are recognized for five minutes for your questions.

Chairman SCOTT. Thank you. Thank you, Madam Chair.

First of all, I also serve on the Budget Committee and would like to get one thing on the record. The great economy that was in the first 3 years of the Trump administration, I think we need to put on the record the fact that not any of those 3 years produced as many jobs as any of the last 3 years of the Obama administration.

All of the last 3 years of the administration of Barack Obama produced more jobs than all of the jobs created in any of the first 3 years of President Trump.

They talk about a raging economy. I mean, that is just not the facts.

Dr. Pernell, what barriers exist, in the minority communities, to people deciding to accept the vaccine?

Dr. PERNELL. Thank you, sir, and I just want to say, first and foremost, thank you for representing the area where my beloved father was born. My father was born in Newport News. So, I wanted to say that and acknowledge him.

I got to say this and I got to make this clear: Race matters because racism exists. We have Black women dying disproportionately in maternal mortality. We have Black people who die prematurely on average of 200 a day.

We saw disparities in this pandemic that caused earthquakes of devastation in Black and Brown communities.

That history, that truth, we must start there. This is a conversation about equity. We must start there in order to build trust.

When you have conversations with communities and you minimize their experiences or you minimize their histories or you minimize their truths, they can't trust you.

Institutions, systems, hospitals, government, we must practice accountability and with that accountability must be authenticity. So, those barriers are historical. Those barriers are contemporary. Those barriers are rooted in access issues whether those are informational issues around access, whether those are convenience and time-based issues around access.

We have to show people that we are not ignorant of the truth of what they lived through and then design solutions. That is what you saw happening in Newark. Now, in Newark, currently there are 72 percent of Newark residents age 12 and older that have had at least one vaccine dose. There are 60 percent that are fully vaccinated.

That didn't happen by magic. That happened because of equity-based solutions to get to people who have been historically stigmatized and disadvantaged.

Chairman SCOTT. Well, thank you. I think Hampton University and Norfolk State and Eastern Virginia Medical School are doing some of the same things.

Dr. Wen, what is wrong with local control and personal choice on vaccinations, especially in the healthcare area?

Dr. WEN. I thank you for that question, Chairman Scott. I think that there has been this unfortunate narrative that vaccines are only a personal choice, just as choosing to eat unhealthy foods or smoking may be seen as a personal choice.

Here is the thing. You can choose to remain unvaccinated. The problem though is if you then choose to go out in public, you are potentially infecting others with a deadly disease that has already caused more than 675,000 lives here in America.

I have actually equated with my colleague, Sam Wang, a neuroscientist at Princeton, with the following analogy, that the choice to remain unvaccinated should be seen as being equivalent to drunk driving because you have a choice to be intoxicated, but once you get behind the wheel of that car and have the potential to impact other people, that no longer is seen as a personal choice.

And I think when you consider about the individuals who are going into work and are now going into conference rooms or other settings with unvaccinated, unmasked individuals, and then potentially bring that home to their family to elderly relatives, to young children who are too young to be vaccinated, that is a serious concern.

So, I want to say we really need to consider the health of our unvaccinated children as well. I very much disagree with Mr. Roy in this respect. As the mom of two very young kids, I am very concerned that 27 percent of new cases are in children.

The increase in the number of COVID cases in children is 26 percent now compared to earlier in June, and we have to do everything we can to protect our most vulnerable, including our children.

Chairman SCOTT. And can you say a word about the vaccinations in the healthcare industry?

Dr. WEN. We require vaccines for healthcare workers.

Chairman SCOTT. Madam Chair——

Dr. WEN. We have to take a flu vaccine every year. We have to take hepatitis, measles, mumps, rubella vaccines. The COVID vaccine should be required as all others are.

Chairman SCOTT. Thank you. Thank you, Madam Chair.

Chairwoman BONAMICI. Thank you, Chairman Scott.

I now recognize Mr. Walberg for five minutes for your questions.

Mr. WALBERG. I thank the Chairman.

And thanks to the panel for being here. Though I must admit I am just absolutely astounded by the unwillingness to deal with science and accept science and not make up statistics and disregard other statistics. It is just unbelievable.

And I have been vaccinated, and I have had COVID, so, I am not undermining the issue of believing in reality, but my gracious. Let me ask the questions. Thank you.

Mr. Roy, the Biden administration has decided the best way to get more people vaccinated is to impose a private sector vaccine mandate, enforced through an emergency temporary standard issued by Occupational Safety and Health Administration.

However, you note in your testimony that the Biden administration should reexamine its efforts to impose a Federal vaccine mandate on private businesses. Would you please elaborate further on that recommendation?

What challenges will such an order place on businesses both large and small, and what would you say is a better way to reach vaccine-hesitant communities rather than through a Federal mandate?

Mr. ROY. Well, we have talked a lot about how to reach vaccine-hesitant communities today. You know, in terms of the OSHA mandate specifically, there is a lot of problems with it.

Leaving aside the legal problems, which we addressed earlier, let me talk about just the practical and logistical and economic problems.

So, again, if you are an employer and you are now being told, "Well, you must vaccinate everyone or there will be a violation," exactly how does that work?

If somebody refused to get vaccinated, it is your fault as an employer for not forcing them to? How is that your role as an employer? That is a violation of all sorts of other laws.

What about previously infected people who have recovered from COVID? There is a lot of evidence—the Israeli study found that, after 6 months, people who have previously been infected and recovered from COVID have 13 times less likelihood of reinfection or breakthrough infection than people who are vaccinated who were never infected previously. So, why don't we take that into account, both in our official vaccination statistics and in the performance of employers?

Then there is the cost to these businesses. Right? What if you were in a business where labor shortage is a real problem? Now you are exacerbating those labor shortages by basically driving people out of the workforce. That is a big problem too.

So, you know, it would be one thing if we were talking about the nursing home facilities where they are funded by Medicare if we are talking about Federal workers. There, there is a clear legal authority for the government. Right?

When you talk about private employers, it is much dicier, and there I think focusing on high-risk occupations for COVID and working with those employers to help them vaccinate their workers would be a much better approach.

Mr. WALBERG. And believing the statistics.

Mr. Roy, the media often portray public health as being intentioned with reopenings and a return to normal activities as we deal with COVID–19. Do you see it that way, and how can public health policies and a recovering economy work together to improve the lives of all Americans?

Mr. ROY. Absolutely is the answer. And we wrote a lot about this at my think tank, FREOPP, last year. I testified, I think, eight times on this topic. You know, we spent a lot of time walking people through exactly, from an evidence-based standpoint, how you could reopen the economy safely while also making sure high-risk activities we were being more cautious, more prudent, more evidence-based.

So that absolutely was possible then. It is certainly possible now. States that have reopened have, broadly speaking, had a good experience with that. I talk about it in my written testimony, how California, which was excessively restricted, had basically the same rates of cases and deaths as Texas and Florida did.

It is a little different now because vaccination rates are playing a role in all these stats, but, last year, when we didn't have a vaccine, restrictions were not correlated at all to performance in terms of deaths and cases from COVID.

And so, we need to—first we need to have some humility. I think when policymakers say, "We are going to do X, we must do X, and if you disagree we are going to censor you," that is a real problem.

We have to have the humility where we say: You know what? We are going to look at evidence. We are going to revise our opinions based on the facts, and we are going to tolerate different approaches. It is good that we had 50 States trying different things so that we could optimize for reopening schools and reopening workplaces, and those who did so in a data-driven way have been very successful with it.

Mr. WALBERG. And, in schools, what an important area that is. And don't have much time to touch on it, but how can we relate that risk versus reward having kids in the classroom, having parents back to work, and still dealing with this pandemic?

Mr. ROY. Listen, I am a father of young children too, and my two children are in school, and I am so glad that they are because I can't imagine what the loss of the last 18 months would have been had they not had the opportunity to get educated at that tender age.

It is so important to their brain development, to their emotional health, to their social development, to their long-term economic and health outcomes. The evidence is overwhelming and not just in the United States but around the world.

We did a study last year. We looked at every major industrialized country and showed that there were no risks of additional outbreaks from COVID based on school reopenings or school closures. And that still holds true today.

Mr. WALBERG. Thanks. My time expired. I yield back.

Chairwoman BONAMICI. Thank you.

I now recognize Representative Wild. Representative Wild, you are recognized for five minutes for your questions.

Ms. WILD. Thank you so, so much, and this is directed to all of the witnesses. I want to talk about two of our most at-risk populations: the homeless and people with disabilities.

In many places, there was unequal access to vaccines, and vaccines for individuals in the disability community and our homeless population. The focus on center-based distribution has made it difficult for folks, at least in my district, who are home-bound or homeless to get testing or vaccines.

We have helped, my office, a number of individuals who wanted a vaccine but could not get an appointment. And I know that sounds almost incredulous given the widespread availability of vaccines, but again, at this point, it is a matter of getting them to the people who have trouble getting to these centers and that kind of thing.

So, I am just wondering what lessons have been learned that you have seen that we can apply to continue to fight the pandemic for our homeless and people with disabilities. And anybody that wants to take that.

Dr. PERNELL. Sure. So, if I may——

Dr. MARTINEZ-BIANCHI. Go ahead, Dr. Pernell.

Dr. PERNELL. Thank you. I will start with some of the things that we have been doing here at University Hospital even pre-pandemic. What we know is important is having those navigators in care who are socially and culturally fluent and aware of the different disparities that many groups face. And, on both experiencing homelessness, we have a program called Familiar Faces in our population health where we pair a community healthcare chaplain that checks in with persons, either going physically, pre-pandemic, to where they are, whether they are housed or unhoused, or a person who can walk you through the care process.

And I can't stress this enough: The prevention model is that you must bring care out of brick-and-mortar institutions and bring care to where people are, on the front lines of their lives, whether that life is underneath a bridge or that life is in a housing scenario that is more standard.

And if we have learned anything from this pandemic is that we cannot afford to practice care from this oblivious place that says that everybody needs care or should receive care in the same way.

The more we can specialize and customize, that is when we begin to have equitable approaches, and we will continue to do that. If we don't, we will continue to lose lives disparately.

Ms. WILD. I have been very impressed by communities that are doing essentially door-to-door vaccinations and that kind of thing.

And I will let anybody else who wants to respond to that previous question do so, but I also wanted to add to my question whether that is potentially a way of getting past what we are still calling vaccine hesitancy?

I don't know if that is the right term anymore, but if people are directly approached, are they any more likely to be willing to get the vaccination? And, again, I will open that up to anybody here who wants to answer.

Dr. MARTINEZ-BIANCHI. Well, what we are seeing both in our family healthcare offices and going door to door, when our community has workers that are going door-to-door canvassing, they are always asking, when you have somebody who is convinced and ready, this is the moment to get that vaccine.

And bringing the vaccine to the home of those who are homebound or to camp sites if there are homeless communities is key to be able to reach those communities.

And then the other issue is making sure that, as we are deploying, that we are planning and looking, where is it, who hasn't been involved, who hasn't been vaccinated, where are the groups, and having Members of the community, representative of those communities, being part of the teams that are doing that mobile healthcare type of access. It is key if we have representatives of the community guiding the effort.

Ms. WILD. Thank you.

Dr. WEN. May I add one more thing? Actually, two more things. One is that we have actually seen incredible stories from contact tracers, contact tracers who are talking to people about quarantining and isolation.

And they are also finding out about individuals' needs when it comes to food and housing, and even people who have concerns about domestic violence.

And I think that just really underscores the importance of care navigators more broadly in assisting with public health needs.

The other issue, though, to your direct question, Congresswoman Wild, I do think that it is really important to reach people where they are in their homes.

But, in many communities around the country, public health officials and public health workers on the ground have actually been assaulted or harassed or turned away because of the rampant misinformation and disinformation.

So, I hope that more will be done to protect those individuals who are just really trying to do their job and deliver care to the most vulnerable.

Ms. WILD. Thank you. And I think you are absolutely right about that.

And, Dr. Pernell, your comments about making sure that we are accompanying it with culturally competent individuals to deliver this care I think is really, really important.

With that, Madam Chair, I yield back. Thank you so much.

Chairwoman BONAMICI. Thank you.

I now recognize Representative McClain for five minutes for your questions.

Mrs. MCCLAIN. Thank you, Madam Chair. You know, as I sit here and I listen to everybody today, I think we all—or at least I think we all—are on the same page, that we want to do what is right for our children and the Americans, and we all want to work together.

We respect COVID, but I think at times we need to fear it a little less and have a little bit more faith in the American people and the doctors.

And I believe most people are good and not perfect, but I believe we have made tremendous strides and tremendous progress.

And I will lead with this, is one of the lessons my mom told me growing up, you catch a lot more bees with honey than you do vinegar. So, I mean, I think one of the biggest issues that I have seen in government is the American people want some truth, some transparency, and a heck of a lot more consistency.

And, if we can all come together on truth, transparency, and consistency, and truly follow the science, I think the American people would be a heck of a lot more apt to jump on board.

You know, I look at this, as during the campaign, Vice President Harris said over and over again that, you know, don't trust the vaccine developed under President Trump.

And now we have three vaccines under Trump's Operation Warp Speed, and the Biden administration has been begging people, now forcing people, to get vaccinated, with these very vaccines that he railed against for months.

So, you know, have a little empathy for the Americans who you can't say, "Oh my God, I would never get the vaccine," and then turn around and mandate it. A little consistency would go a long way.

And, Mr. Roy, I am asking you, how can the American people trust the administration's message on vaccines if we continue to talk out of both sides of our mouth?

Mr. ROY. You know what? In my written testimony, Mrs. McClain, I brought up the point about, you know, the CDC had this panic after the Provincetown outbreak and vaccinated—some of whom were vaccinated individuals, and all of a sudden it was like vaccines don't work anymore. Right? Oh, gosh, we have got to go back to locking down and hiding in your basement and wearing a mask outdoors because if you don't wear a mask outdoors and you are vaccinated, God forbid you might get COVID.

I mean, it was just insane. Right? And so how could you not—how could you be surprised that there is vaccine skepticism when you have the CDC saying wear a mask outdoors even if you are vaccinated? Right? So, that is a big problem.

And, you know, it goes back to things that happened last year. Dr. Fauci said: Don't wear a mask.

Then he said: Wear a mask.

And mandate it, right? The World Health Organization said the same.

And again, look, I can understand the evidence changes; you are going to revise your opinion. That is fine, but then have some humility as we go through the process, instead of saying, "Do what I am saying now, or you are this ignoramus," instead say: The evidence suggests we should do this. The evidence may change over time, but this is our best assessment of the evidence today. And our best assessment of the evidence today is that, if you are vaccinated and you are outdoors, you are almost certainly safe.

Mrs. MCCLAIN. Well, thank you. I do believe in the American parent as well. So, I believe actually the parents are probably most qualified to parent their children. And this is where I think we need to bring them inclusive into these conversations because I don't believe any parent would intentionally want to do harm to their child. And we need to begin to treat them that way.

But, Dr. Wen, this is for you. I am trying to get our Federal Government to finally provide some consistency and transparency with information regarding COVID. The administration says: Get vaccinated and wear a mask.

My constituents are receiving mixed messages because they interpret the message from the President, with that being the vaccines don't work, which I think we can show that the vaccines do work. Then why the mixed message on the masks?

Now, some school districts are mandating vaccines for students before they even return to the class.

My question is this. Who is better suited to make the calls for the health of their child—a school superintendent or the parent? See, I think we are missing this parents. We need to bring the parents closer.

Dr. WEN. Was that for me, Congresswoman?

Ms. WILD. Yes.

Dr. WEN. Apologize. Thank you. I am a parent also. I have two little kids, ages 1 and 4. My 4-year-old just started back in preschool in person. I am very thankful that my preschool requires many layers of mitigation. It requires indoor masking, and so I think it is a combination. I think that——

Mrs. MCCLAIN [continuing]. school superintendent to make the decision as opposed to you?

Dr. WEN. I think that we need to recognize what impacts my child is not just my decision. It is also the decisions of other parents——

Mrs. MCCLAIN [continuing]. if you prefer to defer that and make a community decision on what is best for your children, as opposed to the parent? I am OK with the answer. I am just trying to understand. Because the parents in my district believe that they are the best people to make the recommendations for their—parents. So, I appreciate that.

Would a child's doctor know what is best for their child, or would the school superintendent know what is better?

Chairwoman BONAMICI. Representative McClain, your time is expired. We have let you go over a bit, but I am going to——

Mrs. MCCLAIN. Thank you very much.

Chairwoman BONAMICI [continuing]. move on to—yes, of course—move on to Representative Hayes. You are recognized for five minutes for your questions.

Mrs. HAYES. Actually, I think Representative McBath is next.

Chairwoman BONAMICI. Oh. I apologize. You are absolutely right.

I recognize Representative McBath for five minutes for your questions.

Mrs. MCBATH. Thank you so much, Madam Chair.

And thank you to our guests who have joined us to talk about this really very pressing matter.

And, for the last year and a half now, this pandemic has just caused grief for many and financial difficulty for millions and, of course, drastic changes to the lives of every single American family.

Even recently hospitals in my home State of Georgia are so full of sick COVID patients that they have had to postpone elective surgeries, and I think we have seen that around the country.

And, you know, there is still so much work that remains to be done, and so, I thank you for taking the time to come to Congress and to share your expertise with us this morning.

I remain convinced that increasing the number of vaccinated individuals is absolutely the key to our recovery, both for our economy and for our health.

And, according to the recent data from Kaiser Family Foundation, only about 25 percent of unvaccinated adults plan to get a COVID–19 vaccine by the end of the year.

And we have also seen a growing increase in partisan polarization around the vaccine and negative feedback loops from different information ecosystems.

Dr. Wen, my question is for you. Emergency physicians, nurses, and other healthcare workers have persevered for nearly 2 years now on the front lines, and, with each departure, our Nation's healthcare workforce loses an invaluable resource.

And I believe that healthcare workers can also be a resource in improving our vaccination rate. How can we include more emergency physicians and first responders in community engagement efforts to share their experiences and to encourage COVID–19 vaccinations?

Dr. WEN. Thank you for that question, Congressman McBath. I very much agree with you, that there are so many frontline healthcare workers who are burnt out, who have been going through this and really see no end in sight.

And there are so many healthcare systems that continue to be overwhelmed, and so, I think there is a level of compassion fatigue that also exists.

However, of course, it is our duty to always take care of our patients no matter what choices they may or may not have made. I know that all my colleagues are united in continuing our education and outreach efforts because that is not a choice for us. When we see patients coming in, it is our choice—or it is our job, our responsibility, to assist them in every way.

I think that part of it is also all of us embracing our responsibility too because we are the most trusted messenger to someone. Doctors, nurses, pharmacists certainly are trusted messengers to their patients and to others. But we are also trusted messengers to somebody in our lives as well.

And there are individuals, many of whom may have changed their minds on the vaccines who I think we need to uplift their voices more. So many patients anecdotally that I have spoken to who said they changed their minds, it is because of an illness in a relative, or it is somebody that they knew who initially were not going to get vaccinated but now got vaccinated. Telling those stories of change also helps a lot too.

Mrs. MCBATH. Thank you. And also, too as policymakers, is there anything that you believe that we need to be doing more of to help create that kind of climate and environment across the Nation? Because, you know, we are doing as much as we possibly can to create the funding and the policy and put forth that effort, but is there anything that you believe that we have left out that we need to continue to do to make sure that everyone is cared for and everyone is healthy?

Dr. WEN. Well, I do think that we need to continue talking about the layers of mitigation. There was brought up earlier about, well, why is it that vaccinated people might still be wearing masks in some circumstances?

Well, it is because when we have this high level of transmission, we need multiple layers. And so, understanding that vaccines are a layer, testing is a layer, masking may be a layer. When the rate of transmission goes down, we can remove some of these layers. I think having that holistic approach is really important.

Mrs. MCBATH. Thank you. And one more question I will ask. If we are not to overcome being able to get that message through to individuals across the country, for whatever their reasons are, are not wanting to get vaccinated, what do you foresee for this Nation going forward from a healthcare perspective with COVID–19?

Dr. WEN. We have already seen it. I mean, 1 in 500 Americans have already died from COVID. Right now, we have 2,000 Ameri-

cans dying every day. That means that within a year, if we sustain this pace, which I don't think we will, but if we sustain this pace, that is 700,000 Americans dying.

I mean, I don't think any of us should find these numbers to be acceptable. We are seeing the Delta surge that was actually preventable because we didn't have high levels of vaccinations.

If you asked me last year, if you gave these numbers last year to me and said, "Well, what do you think about this," I would have said: Oh, that means that we never got a vaccine. But we have a safe and effective vaccine. This is really tragic that we still are seeing this level of preventable suffering.

Mrs. MCBATH. Well, thank you so much, and I am out of time.

Chairwoman BONAMICI. Thank you, Representative. I now recognize the Ranking Member of the full Committee. Ranking Member Foxx, you are recognized for five minutes.

Ms. FOXX. Thank you, Madam Chair. I appreciate that. I want to thank all of our witnesses for being here today, especially Mr. Roy.

Mr. Roy, you are, of course, asking for a lot when you ask for humility from elected officials. Most of the time you get hubris, which is what we are getting in terms of the mandates on so many things that are occurring in our culture these days.

Mr. Roy, I am concerned that our colleagues who claim to be advocates for vulnerable communities, have fought Republicans? efforts to ensure that all students have access to in-person learning, even though school closures have had a disproportionate impact on lower income communities and communities of color, the very people they pretend to care about. Can you speak to the effects of school closures on vulnerable communities?

Mr. ROY. Well, I discussed this a lot in my written testimony and I think in my oral testimony as well. Disproportionately, it is minority parents, minority children, who have been affected by school closures. A lot of that is geographic, but it has been a huge problem.

And that disparity, you know, it is interesting. Asian Americans are actually the group that has had the most disproportionately impacted by school closures. Next highest is African Americans, then Hispanics. Whites, two-thirds of White children are able to have in-person learning.

So there has been a massive racial disparity in the ability—the opportunity the children have had to have in-person learning.

And we all know that the virtual model at the elementary level, at the preschool level, the middle school level, is just not working, right, that hasn't worked. And so, you know, you have kids who are being promoted to the next grade having never actually attended school in the prior grade. How do you think they are going to do in the new grade having not learned what happened in the last grade?

These are kids we have effectively abandoned through the educational system. It is an incredible tragedy, and the untold losses, economically and on a human level, for those kids, I shudder to contemplate what the total damage is going to be. I am just grateful that more and more schools are opening now.

Ms. FOXX. Thank you. I was going to ask you a question about the mandates on employers, but you have done a very, very good job of acknowledging OSHA mandates and the challenge employers will face, and I don't think we can understate that.

Mr. Roy, there is currently also an enormous shortage of COVID–19 rapid tests in the U.S. What will be the impact of this shortage on the business owners and workers when the OSHA vaccine and testing national mandate is implemented in the coming weeks?

Mr. ROY. That is an important question, Ms. Foxx. I appreciate you raising it, because we have heard a lot today, and elsewhere, about, well, everyone should just have rapid tests all the time and then everything would be fine.

Well, we can't just snap our fingers and get the supply chain to expand by the multiples it would need to expand to deliver that quantity of tests, let alone for the OSHA mandates that are forthcoming.

So that is a real problem, and we are already seeing it. We are already seeing it. It used to be, just a couple of weeks ago, prior to the Biden executive order, if you wanted to order a Binax test (BinaxNOW COVID–19 test) on *Amazon.com*, you could do it. I have done it. I have a stack of them at home so for—when I need them and when our family needs them.

But you can't do that anymore. They are out because of the fact that this OSHA mandate has now led to the complete elimination of that extra supply. So, if you are going to mandate that everyone get tested when we don't have the supply of tests to address that mandate, that is just asking for a catastrophe.

Ms. FOXX. That is just one more irresponsible decision and mandate that this administration has made in a long line of irresponsible decisions.

We can remember, I think, Mr. Roy, the slogan "2 weeks to slow the spread" in a rather ironic sense given the prevalence of mask mandates and restrictions that continue in the U.S.

In the early days of the pandemic, the goal was to keep hospitals from being overwhelmed. Today community life continues to be impacted, if even one case is discovered.

At the start of the pandemic, Dr. Fauci said Americans needed 60 to 70 percent vaccination rate to reach herd immunity and return to normal. Yesterday, President Biden said our country needs to reach a 97 to 98 vaccination rate to return to normal. What do you think—why do you think the goalposts keep changing?

Mr. ROY. Well, we don't know what level of immunity, what percentage of immunity is required to achieve herd immunity with COVID. I think a lot of theories have proven to be inaccurate over time.

Having said that, it is extremely important that we not just look at vaccinated individuals but, as I have alluded to earlier, individuals who have successfully recovered from a prior COVID infection. That turns out to be significantly more protective than the vaccines. And that is not to encourage people to go out and get COVID, of course, but it does mean that people who have previous episodes of COVID infection, the SARS–CoV–2 infection, should be counted toward that immunity status. So, let's say we have 70 per-

cent who have been fully vaccinated, another 27 percent who have been previously infected, that would be 97 percent, right? So, include the previously infected in your totals, and then we can assess the situation.

Ms. FOXX. A little more—it is more hubris and less humility. Thank you.

I yield back, Madam Chair.

Chairwoman BONAMICI. Thank you, Dr. Foxx.

Now I recognize Representative Hayes for five minutes for your questions.

Mrs. HAYES. Thank you, Madam Chair.

And thank you to our witnesses for being here today.

A couple points I want to make before I begin my questioning is, first of all, I don't think that the CDC has been disingenuous or dishonest as the information has changed throughout this pandemic. I don't think that the goalpost is moving.

No one can endure this pandemic for 18 months and your position today be the same as it was a year and a half ago. As we learn new information, we evolve and we adapt and we respond to the information that we have right in front of us.

I have heard several Members quote President Biden or Dr. Fauci at different points, but let us not forget that the leader on vaccine skepticism was President Trump who, himself, said just a month ago: I encourage everyone to get vaccinated.

So, as people are learning new information, they are evolving with the information that they have in front of them. So, I just want to make that point. No one is attempting to mislead the American people or be dishonest. As we get new information, we are adjusting to the situation that we are in.

The second point I want to bring up is that, as a parent of a public school student and having been a teacher for 15 years, parents make the decision for their individual child. Superintendents have to make a decision for an entire school district.

My superintendent had to make a decision for 19,000 children. She did that in conjunction with public health officials, with local officials, with our local hospitals, and did what she needed to do and continues to do what she needs to do for all of those children.

Individual parents, their responsibility begins and ends at their child. When you are a school superintendent, you have a different level of responsibility, so that is why some of those decisions are being made.

And I heard Mr. Roy talk about the disparities in different communities. You are absolutely right; my district has some of the largest equity gaps, and some of our schools were equipped to be up and running, open full scale. They had the spacing. They had the HVAC systems. They had modern facilities.

Those are things that we have tried to address and that we need to address. So, all communities are not created equally. So, that leads me to my questions today.

In Connecticut, there are about 390,000 cases of COVID–19. 8,400 Connecticut residents have been lost to this virus, and to date, we had about 22,000 people in ICU hospital beds.

And my State is doing well. We have 75 percent of people vaccinated and a Governor who is incredibly proactive and always looking for solutions.

But there are several socioeconomic and geographic factors that limit people's ability to be vaccinated. We have tried to include transportation, some of those other things, tried to mitigate some of the problems.

Dr. Wen, can you explain how community engagement and wraparound supports creates barriers and affects people's access to the vaccine, what that looks like, and how we, as Federal legislators, can facilitate greater community involvement so that more people can get vaccinated?

Dr. WEN. Representative Hayes, thank you for your work and for pointing out also that a strong public health response means that you are evolving to change your policies, based on new data. That is not flip-flopping if you have new data; that is actually responding to the moment.

I do think that having Congress help to combat misinformation is very important. Also, supporting local efforts that Dr. Martinez-Bianchi, that Dr. Pernell and others have mentioned, there are so many examples of local partnerships. We need to trust the communities. I think that is something we should all be able to agree on, that people on the front lines, people in the communities that they are serving know best about what works there.

And, when we see efforts that are successful in bringing vaccines to individuals experiencing homelessness or helping low-income families, we should be scaling up those efforts. And allowing maximal flexibility and funding for local communities is really essential.

Mrs. HAYES. Thank you. And, really quickly, Dr. Pernell, in high-risk priority groups, we just saw that President Biden had guidance on booster shots. Can you tell us how those vulnerable populations will be impacted and how this booster shot guidance will affect them?

Dr. PERNELL. Great question, Congresswoman. I don't think we can emphasize enough that the disproportionate burdens that Black and Brown groups bear deserves, in particular, attention. And what I mean, I think we focus a lot on age, and we need to focus more on race.

We need to stratify data by race because what we see in Black and Brown communities is, actually, they are impacted at younger ages and younger rates. So, I would be very interested to see how boosters are distributed among those populations that have been disproportionately burdened by disease, disproportionately burdened by disability due to this infection.

I think it is going to be very, very important that we continue to do the things that we know work. What works? What works is partnering and sharing power with community, explaining and making sure community understands the utility of boosters in those high-risk groups, those who have comorbidities, comorbid diseases, same communities, saddled with the diabetes, saddled with the high blood pressure.

Mrs. HAYES. Dr. Pernell, I am really sorry. My time has expired, and I don't want the Chair to be mad at me.

Chairwoman BONAMICI. Not a chance, Representative Hayes.

Mrs. HAYES. You can submit the rest of that answer. I am very interested in it. Thank you so much.

Chairwoman BONAMICI. I now recognize Representative Harshbarger for five minutes for your questions.

Mrs. HARSHBARGER. Thank you, Chairwoman and Ranking Member.

And thank you to the witnesses here today. You know, I think I understand a lot of the confusion.

And, Mr. Roy, you tell me if I am wrong in anything I say, because, you know, it is really regrettable, but you correctly stated in your testimony that all this started back in the 2020 election when you had then-President-elect Biden and Vice President Harris talking about how they didn't trust how the vaccines were developed. That is the first step; you don't trust in how these are developed through Operation Warp Speed.

And then you have the COVID guidance flip-flops on do you wear a mask, do you not; do you wear two masks, do you not. You have how did the CDC set policies with— what the studies said. If you want to follow the science, let's look at those studies. You have got the reported influence of the teachers unions on the CDC guidances. And that just happened when they said you don't have to have a mask mandate in schools, and now you do.

We still don't know the origins of COVID, do we? As Members of Congress, we don't have the hearings to hear that. And then you have the latest with the flip-flop from the FDA and the CDC on the boosters. And they say do it, and now there is different guidance.

But, you know, what tops it all off is the vaccine mandate. And you are telling private employers that if you have a hundred employees or more, you have to have them vaccinated or they don't have a job. And then you have your healthcare workers in your hospital systems. Your healthcare workers have to be vaccinated.

I understand it. I am a pharmacist, for God's sake. I took the vaccine. I tell people we didn't cut corners; we cut red tape. Do the vaccine. But, when you force them to do that, but you have over 200,000 people coming across the southern border illegally every month, and they are not—and I am on Homeland too so I know this is fact. They are not COVID tested, and they are not mandated to have that vaccine. And you wonder why Americans are hesitant? Well, I will tell you, there is your sign.

Does this sound like a mitigation strategy to you that is based on science? And, also, there is being monoclonal antibodies that are going to be withheld from certain states, and we don't know why. There is no shortage in the supply from the manufacturers, but they negated not to ask that question to the manufacturers, and now there are several states that we don't have the supply that we need. And you tell me that is not political? There is a problem there. So, if you would expound on that. And I am in a rural district, and you don't think this is going to influence the healthcare workers and the employees that were already in short supply? Our patients are not going to be taken care of.

And I would like to ask unanimous consent to place into the hearing record a September 13, 2021, Washington Post op-ed enti-

tled "In my community, Biden's vaccine mandates could put more lives at risk."

But, if you could answer that, sir, about mitigation strategy and things like that. I could go into a whole lot more as far as natural immunity and things that they should be doing, but you tell me what is wrong with anything I just said or what we need to correct.

Mr. ROY. Well, Mrs. Harshbarger, you raise a lot of points. Let me try in the time we have to focus on one or two. I think that, you know, many of you in Congress are former or current business owners. And what business owner, what employer wants their workers to die of COVID or to become seriously ill of COVID? Zero, zero.

So, this idea that somehow employers are the obstacle in getting their workers vaccinated is absolutely not the case. Every employer wants their workers to show up to work healthy and happy. That is in the absolute economic and human interests of every employer. So, why don't we actually engage employers and learn from employers about the strategies they have succeeded with or failed with at getting their workers vaccinated. That seems to me a much better approach than what we are describing here for all the reasons that we described. I think that is such an important—we all want everyone to be protected from COVID–19.

And the other piece I would bring up is something I alluded to in my last remarks, which is people who have recovered from COVID, right? This is an important thing to track and to monitor. People who have recovered from COVID have a very compelling form of immunity, generally speaking. Obviously, people who are immunocompromised or people who are elderly whose immune systems may not be as robust, there are always asterisks and things to take into account. But, broadly speaking, recovering from COVID is a form of immunity, more powerful in many cases than mRNA or other vaccines. So, we should be taking that into account in our strategy and in our policies.

Mrs. HARSHBARGER. Absolutely. Antibody testing should be one of the things available to the American public, and natural immunity, but we are not discussing that.

So, I know I am out of time, and I yield back.

Chairwoman BONAMICI. Thank you, Representative.

I now recognize Representative Levin for five minutes for your questions.

Mr. LEVIN. Thanks so much, Madam Chairwoman.

I will jump right in with first a few questions for Dr. Martinez-Bianchi.

You know, for many vulnerable communities, language barriers have kept COVID–19 testing and vaccination services out of reach. Without access to translators, what challenges have first responders and contact tracers faced while working to prevent COVID–19 outbreaks in communities with limited English proficiency?

Dr. MARTINEZ-BIANCHI. So, COVID definitely highlighted the language barriers. And some of the challenges have been that, during the COVID pandemic, you are not able to really have your interpreter on the site at the same time.

So often what first responders and physicians have done has to be using tablets or other ways of translation. This has really im-

pacted the community, the Latino community, the trust, not having somebody—one of the deficits we have in the country is that how many children that are Brown and Black have been historically excluded from health professionals as well.

So, we need to continue to work on getting more kids, more adults who are Members of these minoritized communities to be able to be part of the health workforce, but the challenges are there.

Mr. LEVIN. Yes, it has really exposed problems that were already there, hasn't it, in terms of access to healthcare? But what can States do? How can they improve access to dialect-specific language translation services and prevent disruptions, particularly to make sure people get their two-dose vaccination series and other things?

Dr. MARTINEZ-BIANCHI. One of the most brilliant things I have seen has been the contract and use of community health workers, contracted from the community, representatives of the community, often even

[inaudible] language speakers of the language spoken in the community.

Mr. LEVIN. Yes.

Dr. MARTINEZ-BIANCHI. And their representation of the community has earned a tremendous amount of trust. When we do a vaccination event and our community health workers representative of those communities are part of the canvassing and the encouragement and recruitment, we have much more success with vaccination, with access to care, and access to testing and the use of monoclonal antibodies as well.

Mr. LEVIN. Wow. I have to say that was part of the proposal in Senator Warren's and my Coronavirus Containment Corps Act at the beginning of the pandemic, so I wish we had gotten that through.

Let me ask Dr. Pernell questions about this, the thing we have been talking about to some extent, vaccine hesitancy.

How have broad generalizations about vaccine hesitancy prompted widespread disengagement, really, from certain communities, and how can stakeholders involved in COVID–19 response efforts overcome communication hurdles and address vaccine-related concerns directly, to ensure people receive COVID–19 vaccines?

And as you get ready to respond, let me just say to my colleagues, I would say some of the most meaningful moments in my life in the last months has been when I talk to someone who really believes in me or I have a real relationship with and get them to get vaccinated, often right where we are, you know, because there is a clinic related to an event.

So, Dr. Pernell, help us out here.

Dr. PERNELL. Definitely. I have had this conversation, as you can imagine, so frequently. And I can tell you most people, Black people, Brown people are no different. Most people want to be seen, heard, and validated, and we want to be understood for the fullness of our stories.

And, with that being said, there actually has been movement in Black and Brown communities around vaccination, whether we are talking about the mobile vaccination units that we have used here in the State, across 76 days, almost 3,000 shots. Fifty percent of

those shots have gone to Latinos or Hispanic persons. Another 30-plus percent have gone to Black or African Americans. And that is because we have helped them along their decision journey. Black people, Brown people at baseline were not just hesitant. At baseline, we have history. At baseline, we have questions. At baseline, we want to feel heard.

And so, when we can navigate those conversations with that level of authenticity, with that level of transparency, we see movement. We see groups move. If you look at the Kaiser Family Foundation and you look at the groups who were originally in that wait-and-see category, a lot of Black and Brown persons were in that wait-and-see category, and we have seen conversion. We have seen conversion of that wait and see to already having been vaccinated.

And the last thing that I would say, there is data that is becoming available that there has been significant improvement in the African American community, and perhaps as high as 70 percent of those in the African American community being vaccinated. And we are not telling that story enough. And the more we tell that story, it gives a sense of permission for others to say: Hey, I have fears and concerns, but I got them addressed, and I went ahead and I got vaccinated.

Mr. LEVIN. Thank you. Outstanding.

Thanks, Madam Chairwoman. My time has expired. I yield back.

Chairwoman BONAMICI. Thank you.

And next I want to recognize Representative Fitzgerald. You are recognized for five minutes for your questions.

Mr. FITZGERALD. Thank you very much. Thank you very much.

Mr. Roy, in your testimony, you stated nearly 40 percent of the deaths from COVID–19 that occurred in 2020 were in long-term care facilities. I was in Wisconsin State Legislature for the first part of the pandemic, and later on, between our Secretary of Health, Andrea Palm, who is now in D.C., obviously, and also with Governor Evers, they reclassified a lot of those deaths kind of in one large change that was made kind of across the board. And, you know, I have heard of similar types of adjustments being made.

So, my question to you is, you know, the misclassifying long-term care facilities, what they experienced, is this something that, you know, should continue to be investigated? And I don't even mean like in a legal way. I mean investigated so, in the future, any of these types of major health crises in which, you know, any governmental entity is suddenly required to record this data does a much better job.

Mr. ROY. Both excellent questions, Mr. Fitzgerald.

So, on the first point, yes, there absolutely has been problems with misclassification. New York is one of the infamous examples where they basically said: If you got COVID in a nursing home but you died in a hospital, we are going to count you as a hospital death, not a nursing home death. That was one of the ways in which New York engineered and undercounted its nursing home deaths, which was done apparently because the Governor had mandated that people discharged from hospitals with active COVID infections must be put into nursing homes. Nursing homes were required to accept those individuals, which they objected to strenuously at the time.

This was something we tracked at my think tank, at The Foundation for Research on Equal Opportunity, because no one else was measuring this in the spring of 2020. So, we actually scraped the data from every State to develop maps of, OK, where were these deaths happening? How, what share of the COVID deaths in each State were happening in nursing homes? And what was amazing is 11 States weren't even collecting the data, even though 40 percent, in some cases a majority of the deaths, were happening in long-term care facilities.

So, absolutely, we should look back. But, in terms of looking forward, I think it is really important that we examine thoroughly how nursing homes protect their residents against infectious disease. This was a problem before COVID. COVID certainly brought to the surface, brought to the fore how bad this problem is, but this problem will continue in the future with other infectious diseases if we don't make some lemonade out of a lemon, so to speak, and just try to learn from what has happened here and try to improve the protocols that are in place in nursing homes and other long-term care facilities.

Again, it can't be emphasized enough. Forty percent of the deaths in facilities that house 0.6 percent of Americans.

Mr. FITZGERALD. Yes. Just in a quick followup to that too, I mean, one of the other things we experienced in Wisconsin was that, because there are many different levels of long-term care, obviously, all the way from a nursing home, a full-blown nursing home to some type of assisted living, the populations that kind of come and go in that environment, they vary.

You know, you could have much younger individuals who could be carrying in one environment, and there is really no cross-check there. And I don't know if that is something else you saw, based on the type of environment and what their experiences were.

Mr. ROY. Yes, absolutely. You know, more of the deaths proportionally occurred among more medically vulnerable and disabled elderly population, so nursing homes. Most seriously assisted living facilities would be next and so on.

So, you know, you have to look at it that way and tier accordingly. But, again, medically vulnerable populations, medically vulnerable elderly populations was where there was enormous risk. And, if we had spent all this energy locking down the economy and closing schools on protecting medically vulnerable seniors, we could have done a lot better.

Mr. FITZGERALD. Thank you very much.

And I yield back. Thank you.

Chairwoman BONAMICI. Thank you, Representative.

I now recognize Representative Stevens for five minutes for your questions.

Ms. STEVENS. Great. Thank you.

Madam Chair, can you hear me OK? Excellent. Thank you.

Chairwoman BONAMICI. We can hear you.

Ms. STEVENS. Phenomenal. It is great to be with you, and thank you for Chairing this just very important and timely hearing.

And thank you to our witnesses as well, not only for your testimony but for your answers today to the questions.

Specifically, as we are talking about how to build for safe communities and how to target populations who remain unvaccinated, I am really focused on females and, in particular, pregnant women who continue to have just some of the lowest vaccination rates in the country, most recently reported somewhere between 25 percent to 30 percent being fully vaccinated.

And a CDC analysis of data from the V-SAFE Pregnancy Registry assessed vaccination early in pregnancy and did not find an increased risk of miscarriage among nearly 2,500 pregnant women who received an mRNA COVID–19 vaccine before 20 weeks of pregnancy. The CDC announced this in August. And we continue I know in Michigan to try and communicate and reach out to young women and, most importantly, to save lives.

And, Dr. Wen, I know that you have been so very much on the front line of communication, particularly around combating vaccine misinformation and also reaching out to populations who we want to encourage them to get the vaccine.

And I was wondering if you could shed some light around some of the effective strategies that public health educators have used or could use to debunk COVID–19 misinformation or even hesitancy, which is something that we have seen so pervasive among young women, unfortunately.

Dr. WEN. Representative Stevens, thank you for that excellent question. You are absolutely right. The rates of vaccination among pregnant women is extremely low, which is very concerning, considering that pregnancy increases the vulnerability to severe outcomes from COVID–19.

I think it does help to say that the American College of Obstetricians and Gynecologists, the Society for Maternal and Fetal Medicine, basically all these OB/GYNs across the country have said that these vaccines are safe and effective in pregnancy.

Another strategy is to emphasize too that the protection also conveys to the baby, that there are antibodies that are present that are then transferred through the placenta that then also are transferred through breast milk. Then we don't know how long that protection lasts, but that also is something that for new moms that may increase their likelihood of getting the vaccine as well.

Ultimately, this is meeting people where they are, understanding what their specific concerns are about the vaccine, and also addressing the issue not only for expectant moms but women who are looking to become pregnant.

One thing that I have also seen to be effective as a strategy is to say, look, we want you to be as healthy as possible in every way. We want to optimize—if you have blood pressure issues or diabetes, we want you to be healthy in that way. And one thing that we can do that will help to protect you now as you are looking to start a family is to also get the COVID–19 vaccine. Debunking any of these misinformation of infertility are important too.

Ms. STEVENS. Dr. Pernell, I know that your work is probably intersected with this as well, particularly as we have, you know, another challenge, which is maternal mortality challenges in this country, and, particularly, as Congresswoman Lauren Underwood, who used to be with us on Education and Labor, is now on Appro-

priations, has formed the Black Maternal Mortality Caucus that many of us on this Committee are a part of.

And I am just wondering if you have seen any research that shows how some of these challenges intersect with one another and how we can try and tackle both together.

Dr. PERNELL. Right. I would say that we have to tackle both together because what we should have learned through the experience of this pandemic is that equity always has to be a comprehensive approach.

Black mothers are dying. Black persons who are pregnant are dying at disproportionate rates. Maternal mortality in this country as a whole is abysmal when you compare it to other developed nations. If we look at these in silos, we do a disservice to actually achieving health and well-being.

The best thing we can do is to communicate to people in socially and culturally fluent terms. I do this day in and I do this day out, whether it is a phone, it is a text, partnering with another group on a virtual. We have to have conversations where people are and then help navigate them along that journey.

People want to hear from people who look like them. People want to hear from people who understand their stories. We know that is true. We can see with Black babies who fared better when cared for by Black physicians. So, people want to know that their lives count and that their lives matter, and this pandemic is an opportunity for us in healthcare to perfect that because we have been failing at that miserably. That is why we got in the situation of mistrust, because of abuses and because of lack of meaningful engagement.

So, the more we can amplify the stories of those who have been vaccinated and who are pregnant, the more we can amplify the stories of those who have, unfortunately, had devastating outcomes because of COVID during pregnancy, the more I think we can help communities navigate these difficult challenges.

Ms. STEVENS. Phenomenal. We are so glad we captured that for the record.

Thank you, Madam Chair, and I will yield back.

Chairwoman BONAMICI. Thank you so much.

I now recognize Representative Leger Fernandez for five minutes for your questions.

Ms. LEGER FERNÁNDEZ. Thank you so much, Chair Bonamici and Chair DeSaulnier.

Thank you to our witnesses for your work protecting and advocating for the communities, exactly what we heard Dr. Pernell talk about in terms of they need to understand that we care about them and that we will work for them.

You know, I have heard today talk about the politicization of vaccinations and partisanship. I want to be really honest about where that politicization is coming from. Vaccines work across the country where they are being promoted. Where they are not working is where politicians, including my colleagues on the other side of the aisle, are arguing against the vaccine.

In New Mexico, we lost two individuals who, taking their cue, sadly, from several of my Republican colleagues, took ivermectin, a horse dewormer. They took a horse dewormer, which certain of

our Republican colleagues described as effective, instead of the vaccine.

This misinformation is killing Americans. I want every Member of my community to live, whether they are in a red county or a blue city, you know, in our villages. I want them to live and be healthy. I ask my colleagues on the other side of the aisle to stop sacrificing people's health and lives for political points. Our duty has to be about protection and care.

OK. So, pushing against disinformation, I am proud that New Mexico has been a leader in vaccinations. More than 70 percent of New Mexicans age 18 and older.

You know, our Native communities in New Mexico and across the country were devastated because, as we just heard, there were issues that were underlying before COVID hit. I am really pleased that, in our Native, Latino, and rural communities, we are seeing an uptick to 70 percent, 73 percent we heard today, 73 percent responders have now received the vaccine. It surged.

Dr. Martinez-Bianchi, could you give us a description about what makes a program to vaccinate a Latino or other underserved community successful?

Dr. MARTINEZ-BIANCHI. Thank you, Congresswoman, for your—I think I need you to repeat the actual question.

Ms. LEGER FERNÁNDEZ. So, you know, we have seen this uptick, this surge with vaccinating Latinos. There was a recent study released that said we now have 73 percent.

So, I want to hear a bit more about—and you wrote about those issues in your testimony. Tell us about how we were able to achieve that and how we can use that as a model to continue and to serve these communities, such as Latinos and other underserved communities.

Dr. MARTINEZ-BIANCHI. So, creating a multi-stakeholder conversation. The media, Spanish Latino media has been one of our best allies in information, in accurate information of

[inaudible] the vaccines work, how to protect themselves, how to mask, why the masks work. They have been some of our best allies.

Community health workers representative of the Latino community have been key at participating as promotoras, bringing the community forward and going into the community. And then us, Members of the Latino community as health professionals, engaging with both government, private, and other businesses. One great example, vaccination of the Latino Community Credit Union. Often we don't talk about how much the private sector, that where people already are or at comprar foods or restaurants. We have done vaccinations in taquerias. We have done them in supermercados and we have done them at the Latino Credit Union.

Going to the places that people already consider trustworthy and becoming, as a health system, a trusted Member of that community that welcomes Latinos into our fold is——

Ms. LEGER FERNÁNDEZ. Thank you. I wanted to go quickly to another point is, we have had in my district—and I know this occurs all the time—where immigrant workers, healthcare workers sometimes cannot get their U.S. Customs and Immigration permits renewed.

And we know that immigrants play a big role in serving in our healthcare system. Could you talk about that impact that immigrants working in healthcare have with regards to serving not just immigrant communities, but our entire country, the role that—and that we need to sort of honor the role that immigrant healthcare workers play in our communities.

Dr. MARTINEZ-BIANCHI. Well, I think it is important to note, as I mentioned before, the significant contributions of all immigrant communities to the economy and the country. The tremendous amount of support through taxes, both to State and Federal Government, which are written in my report.

Wherever I am, wherever I have been as a Spanish-speaking rural doctor, city doctor, leader in academia, et cetera, I have found immigrants really doing a lot of work for their community, bringing the community together. And this is very, very visible right now in this COVID pandemic response.

It is immigrants taking care of each other and also lifting the community up to be able to actually not just say we are here because we need, but we are here to support the rest of our community, including the U.S.

Ms. LEGER FERNÁNDEZ. Thank you so much. I think we have to really remember that we cannot leave our immigrant communities behind today as we are looking at this, our larger legislation.

Madam Chair, I yield back.

Chairwoman BONAMICI. Thank you.

And I now recognize Representative Mrvan for five minutes for your questions.

Mr. MRVAN. Thank you, Chairwoman.

Dr. Pernell, what constraints or challenges affected COVID–19 inequity in greater Newark area earlier this year, and how can other cities leverage the best practices you have shared to drive down COVID–19 transmission rates for extended periods of time?

Dr. PERNELL. Definitely. I would say that the Newark story has not been different from many stories across America and, in particular, in Black and Brown majority cities in urban America.

The challenges that we initially faced were challenges rooted in access, meaning access was too often tied to a healthcare setting or institution initially. As the vaccine was made more available through federally Qualified Health Centers, as the vaccine became mobile and on the move, meaning that there were community health workers in community with the State's mobile vaccination unit that was in Newark, East Orange, Irvington, Camden, Trenton, Bridgeton, you name it, people were able to get their vaccine as close as possible to where they live, and people were able to get the vaccine from trustworthy community assets.

I want to emphasize that word "asset." Too much of healthcare in public health is from a deficit approach. When there are barriers or gaps and inequities, we must find assets in community and then partner and share power with those assets.

So, in addition to assets that could help convey value and trust around language or literacy, there were assets that could make the vaccine more accessible by convenience or time. So, we are really employing this nature—I mean, this idea of a Prevention Army. And we are looking not just to bring vaccines to the front lines of

where people are, but care to the front lines of where people are. Getting community health nurses, public health nurses, getting community health workers, getting those folks as close to where people are.

That is the Newark story, and that is why Newark has gotten to where it is currently. Is there more work to be done? You better believe it. But the Newark story is one I want to say of success and one of overcoming. And the more that we can help empower communities to decide, the more that we can help empower communities to say this is the way that the approach is going to be most effective here, the better.

And the last thing I would say is our hospital was an example of an institution sharing power, whether it was the city, the city health department directly supplying vaccines or whether it was FEMA. We had our EMS staffing over 500 events and sites to be as a support. That is how you achieve an equitable response.

Mr. MRVAN. I thank you very much, Dr. Pernell. I am from northwest Indiana, and I represent Gary, Indiana, Hammond, Indiana, East Chicago, Indiana. And all of those federally Qualified Health Centers were boots on the ground. And you are exactly right, they are assets that were meeting people where they are. And our share of success had a lot to do with not only the combination of the health departments along with the federally Qualified Health Centers and the faith-based community to push and to have those initiatives and assurances to the constituencies that there is value in it. So, I thank you very much.

My next question is for Dr. Wen. Direct care workers and agencies receiving Medicaid funding are among the 17 million healthcare workers who must now be vaccinated, according to the new Federal mandate.

How could vaccine hesitancy among this critical workforce impact the people that rely on them for home-and community-based services, which are largely funded by Medicaid?

Dr. WEN. Thank you for that question. You know, I have stated earlier that I am a big proponent of vaccine requirements. It is something that we know dramatically increases vaccination numbers. We have already seen this happen. Houston Methodist, for example, one of the first hospitals, out of 25,000 workers, only about 150 did not comply with this mandate.

We also know that, when people are unvaccinated, of course, they are exposing their vulnerable patients and nursing home residents and individuals that they are caring for in the home-care setting. Also, it increases their likelihood of being out of work if they are quarantined, if they are exposed to somebody who is positive for COVID–19.

And so, I recognize the challenges that may be faced by organizations that may have staffing shortage issues, but we also have to recognize that there is another side of this, that it also increases the protection, including for some of our most vulnerable individuals.

Finally, a lot of employers have actually been looking for cover. And the Federal Government saying that there is a vaccine mandate provides them with the cover that they need in order to imple-

ment vaccine mandates that many of their employers and certainly the people that they serve have wanted.

Mr. MRVAN. I thank you, Dr. Wen.

I want to thank all the participants who have testified today with your passionate views, and may we always keep advocating for the health of our Nation.

Chairwoman BONAMICI. Thank you, Representative.

I now recognize Representative Bowman for five minutes for your questions.

Mr. BOWMAN. Thank you very much, Madam Chair.

This question is for Dr. Martinez-Bianchi. I want to thank you so much for joining us today and for providing us with such important information on the disparate impacts of COVID–19 on LatinX communities.

It is clear from your testimony that uplifting the voices, experiences, and needs of the communities most impacted by health inequity is the first step to pursuing justice. This is something that my office and organizations in my district have been working to do as well since the onset of the pandemic.

In the 16th District of New York, nearly two-thirds of constituents are Black or Latino. White households in my district make double what Black and LatinX households make, and these income disparities are inextricably linked to disparities in health outcomes, as we all know.

Earlier this year, my office helped advocate for vaccine sites to be located in Yonkers and Co-Op City, two areas with high concentrations of LatinX and Black residents. Before these sites opened closer to home, residents would often have to spend 2 hours on multiple trains and a bus to reach the nearest vaccinationsite. Continuing to address these barriers to equitable health access is vitally important for my constituents.

Reflecting on the stories that you have heard thus far in your community, what do you think are the biggest barriers to vaccine access that are faced by LatinX communities who still have not gotten their vaccine or are now eligible for a booster, and what do you think are the most important strategies that organizations and community Members can employ to combat those barriers?

Dr. MARTINEZ-BIANCHI. So, thank you, Representative Bowman, for such a great question. And the story that you are talking about in New York is very similar to what we have seen initially also, that a lot of the vaccination, a lot of the testing initially was set alongside normal places where healthcare is delivered. And what we know is that we are not delivering where the people are.

So, the best approach is going into where the people are, listening to the community, understanding their fears, their concerns, and explaining that—one of the things that I heard a lot from both African American and Latino communities was, why now? Why are you now talking to us, telling us we need to get vaccinated when we were completely forgotten before?

And what I said was, now because the majority of White people have gotten vaccinated, because the people who had the access and had the privilege and wanted a vaccine already got it, so now we are coming to talk to you because maybe there is an important part of this information that you are not aware of.

And I have been in many places. I have sat at lunchtimes. We have done vaccination events in so many different settings. And it was sitting down with people at their table and saying, hey, who is vaccinated here, asking one-on-one, what is it, what are their concerns? And then suddenly realizing that a group of seven people would get off of their table and go get a vaccine.

It is going one-to-one. It is having people that speak the language, that look like you, that look like me, that are going in and answering the questions, being about the humility that we are talking about but being about that engagement.

And then studying the settings where people are, getting those vaccines where people are, provided by people, again, that look like you, that look like me, who are speaking the languages of everyone that we are trying to reach out and to get vaccinated. Working with schools.

Mr. BOWMAN. No, absolutely. And you are referring to the lack of trust that has been in place in Black and Latino communities for several decades, throughout American history. And that trust needs to be rebuilt with intimate engagement and building relationships. Thank you so much.

Dr. Wen, I have a question for you. First of all, thank you again for taking the time to be here and providing your expertise.

Listening to your testimony, you mentioned recent data that nearly half of the unvaccinated are not opposed to getting the vaccine. The key, as you say, is community outreach, as we just heard. As a former teacher and principal, I also know that schools can play a vital role in this type of community outreach by helping to identify community needs, provide services directly to students and families, and connect community Members to external resources when unable to directly provide them.

You mentioned briefly that schools and transportation hubs could be additional access points of vaccines. Can you talk a bit more about how schools can play a role in helping to test and vaccinate key populations, such as the unvaccinated but willing, those who are now eligible for boosters, and young students who are or may soon be eligible for vaccines, and how can we coordinate across agencies and levels of government to support schools in playing this role?

Dr. WEN. Thank you, Representative Bowman. I completely agree with you. I used to oversee school health for the city of Baltimore, and I definitely believe that schools are a hub. Ideally, they are not just a hub of healthcare for the student but also for the entire family.

And so, when we get vaccines approved for younger children but also now vaccines approved for 12 and older, we should be able to offer the vaccines in schools, but also offer parents and the extended family the opportunity to get vaccinated there as well.

And I certainly think we should do a lot more to expand testing in our schools. Ideally, there is rapid testing available to every student every week, the way that L.A. Unified, for example, has done, some others have done. And perhaps those tests could be made available to the entire family too.

Mr. BOWMAN. Thank you so much.

Madam Chair, I yield back, and sorry for going over my time.

Chairwoman BONAMICI. No worries. Thank you, Representative.

I see no further Members to ask questions, so I want to remind my colleagues that, pursuant to Committee practice, materials for submission to the hearing record must be submitted to the Committee Clerk within 14 days following the last day of the hearing, so by close of business on October 11, preferably in Microsoft Word format.

The material submitted must address the subject matter of the hearing. Only a Member of the joint Subcommittee or an invited witness may submit materials for inclusion in the hearing record.

Documents are limited to 50 pages each. Documents longer than 50 pages will be incorporated into the record via an internet link that you must provide to the Committee Clerk within the required timeframe, but please recognize that, in the future, the link may no longer work.

Pursuant to House rules and regulations, items for the record should be submitted to the clerk electronically by emailing submissions to *edandlabor.hearings@mail.house.gov*.

Again, I want to thank the witnesses for their participation today. Members of the joint Subcommittee may have some additional questions for you, and we ask the witnesses to please respond to those questions in writing.

The hearing record will be held open for 14 days to receive those responses. And I remind my colleagues that, pursuant to Committee practice, witness questions for the hearing record must be submitted to the Majority Committee Staff or Committee Clerk within 7 days, and the questions submitted must address the subject matter of the hearing.

So, I now want to recognize the distinguished Ranking Member of the HELP Subcommittee, Ranking Member Allen, for a closing statement.

Mr. ALLEN. Thank you, Madam Chairwoman.

And I want to thank the witnesses. This has been a very informative hearing. I think we have learned a great deal about where we are and maybe where we need to go.

As we discussed today, Operation Warp Speed was the gold standard of vaccine development and distribution. I don't think there is any argument about that. Under the Trump administration, our private healthcare sector was able to produce several lifesaving vaccines in record time.

This proved yet again that America's healthcare system thrives when government gets out of the way and supports private innovation. As we continue discussing successful models for protecting communities from COVID–19, we must acknowledge that the most effective mitigation and prevention strategy, vaccination, is both free and widely available for every American over the age of 12. Our free enterprise system and the private healthcare industry made this miraculous feat possible.

Additionally, our Nation's pre-pandemic economy was booming. And I want to give a shout-out to all of our medical personnel for their great work during this very difficult time in our economy. Again, I said the pre-pandemic economy was booming. Contrary to a claim made earlier in this hearing, economic growth during the

Obama economy suffered greatly because of top-down government regulations and hostility toward job creators.

Under President Trump, unemployment, particularly for minority groups, was at an all-time low, worker wages skyrocketed, and job creation boomed, because of the Trump administration deregulatory policies.

Business owners and workers are eager to get back to this unprecedented period of economic growth and prosperity, but it seems that President Biden appears to know little about creating a booming economy. With three COVID–19 vaccines approved by the FDA, our economy should be back to normal. There are currently over 8.4 million unemployed Americans and 10.9 million job openings, a gap that is due, in part, to the Biden administration's absurd policies that are keeping would-be workers out of the workforce. For minority groups, the unemployment rate is a staggering high 8.8 percent.

It is truly astounding to watch an administration trade long-term economic prosperity for short-term liberal special interests. The worst part is there is little evidence that the government mandated lockdowns did much to reduce COVID–19 transmission.

To build on these early successes, it is imperative that we reestablish local and State control, working together with those leaders to execute policies that encourage vaccination. More top-down mandates from Washington will not alleviate the financial suffering this President's policies have inflicted.

Again, I thank the witnesses for participating today.

And, with that, I yield back.

Chairwoman BONAMICI. Thank you, Ranking Member Allen.

And I now recognize the distinguished Chair of the HELP Subcommittee, Chairman DeSaulnier, for a closing statement.

Chairman DESAULNIER. Thank you so much, Chair Bonamici. I really appreciate it.

Ranking Member Spartz and Ranking Member Allen, thank you.

And I want to especially thank all of our witnesses. Your testimony was terrific.

As I shared at the beginning of the hearing, those who have been historically and now continue to be left behind by our healthcare system have suffered the greatest losses during this pandemic. The Delta variant is only deepening those inequalities.

Today, we heard how communities across the country are leading effective vaccination initiatives to fight back and protect our loved ones from COVID–19. We still have a long way to go, and, unfortunately, the most vulnerable Americans are some of the last to get vaccinated. To that end, we must rally behind compassionate community-based initiatives that are reaching every corner of America and are doing something very important for everyone during this historic pandemic.

Thank you again to our witnesses. I now want to recognize the distinguished—I already did. I want to turn it back to you, Madam Chair. Thank you so much.

Chairwoman BONAMICI. Thank you, Chair DeSaulnier.

And it is my understanding Ranking Member Spartz is no longer on the platform, so I will recognize myself for purposes of making a closing statement.

Thank you so much to the witnesses for sharing your expertise and your experience. And today we reflected on the importance of equitable access to the COVID–19 vaccine in our efforts to defeat dangerous variants and protect our loved ones.

As of this morning, 56 percent of Americans are fully vaccinated. This is a testament to the successful vaccine initiatives made possible by community leaders and the historic funding provided through the American Rescue Plan, but, unfortunately, as our witnesses made clear, there are still many Americans not getting the vaccinations they need to stay safe and healthy, and, as a result, we are experiencing a resurgence of COVID–19 and too many Americans, primarily those who are unvaccinated, are losing their lives.

And, throughout this hearing today, I have been thinking about the challenges and the opportunities, both of which we have discussed today. And I am following up on Representative Leger Fernandez. I had a conversation with a school superintendent in the district I am honored to represent in a rural area where, even though there is a vaccine mandate, many of the teachers are not getting vaccinated.

And she said to me: My parents are calling and saying, I don't want my child, who is too young to be vaccinated, in a classroom with a teacher who is not vaccinated. What am I supposed to do?

And today's hearing will help us answer that question.

Then she added: And by the way, I can't get deworming medicine for my horse because it is all sold out.

So, challenges, yes, we have, but we also have the opportunities. And, following up on Mr. Mrvan's comment about the importance of our FQHCs, our federally Qualified Health Centers, in the district I represent, we have a wonderful Virginia Garcia Memorial Health Center. And they have done a remarkable job with their mobile health clinic, going out to the farms and fields and making sure that the people who are working there harvesting our crops and getting food to market are vaccinated.

So, lots of opportunities. And, just over the weekend, about 400,000 Americans got booster shots at their local pharmacy. So, we are making progress, but we know that communities must continue to invest in these vaccination initiatives and make sure that every American has equitable access to the vaccination.

And, if you haven't received yours yet, go to *vaccines.gov* to learn more and find a provider near you. It is the best thing you can do to protect yourself and your loved ones. So, thank you again to the expert witnesses for your testimony and, importantly, for your work on the ground helping our community.

If there is no further business, without objection, the joint Subcommittee stands adjourned. Thank you again.

[Additional submission by Chairwoman Bonamici follows:]

National Community Action Foundation
Connecting Communities to Washington Since 1981

Community Action and Health Equity in the Response to COVID-19

The Unique Role of Community Action: The nationwide Community Action network comprises more than 1,000 local agencies that serve virtually every county in the United States. These agencies share a common goal: to eliminate, reduce or mitigate the causes and conditions of poverty for individuals, families and communities. They are authorized and partially funded by the federal Community Services Block Grant (CSBG), which mandates key elements, such as a broadly representative governing board, a comprehensive community needs assessment at regular intervals and a coordinated approach to program planning and delivery. By design, they are highly responsive to local needs; each agency reflects the unique circumstances of its own community.

Collectively, the nation's Community Action Agencies (CAAs) are well-established and trusted local resources. They are deeply knowledgeable about the communities they serve, culturally and linguistically competent and experienced human services collaborators. CAAs were able to mobilize immediately when COVID-19 shut down American communities in March 2020, distributing food and essential supplies and working with suddenly unemployed families to help meet critical needs. They have remained on the front lines of the pandemic ever since as essential allies in the fight to end COVID-19, including through efforts to dismantle barriers to testing and vaccination for people who are poor, minorities, geographically or socially isolated.

Eliminating disparities and promoting equity is integral to the work of Community Action. COVID-19 has exposed and raised awareness of life-threatening health disparities long experienced by low-income and minority populations. Because of their historic role in serving marginalized communities, CAAs are uniquely situated to make sure vulnerable groups are not overlooked in the nation's health response to COVID-19. Since the outset of the pandemic, they have risen to this challenge in a multitude of ways, in partnership with public health departments and numerous other organizations and local groups, in communities throughout the country.

CAAs receive flexible CSBG funds that allow them to fill unmet needs, address gaps and respond quickly to unforeseen emergencies. Their designation as a Community Action Agency, combined with the flexibility of CSBG, enables them to receive and administer additional resources from a wide range of targeted programs. With regard to health-related activities, many CAAs administer Head Start and WIC, with health care personnel on staff, and others operate specialized health clinics to serve medically underserved populations, such as people who are homeless or live in rural areas. A number of CAAs are designated as Federally Qualified Health

Centers. All agencies have networks of local community-based partners and routinely conduct education, public awareness and outreach related to a wide range of health and social issues. Because of their unique expertise and position in their communities, many CAAs have been tapped as trusted messengers in federal, state, local and private COVID-19 initiatives, including those intended to share accurate information and dispel vaccine hesitancy.

The following are examples of CAA activities to promote health equity in responding to COVID-19. They are derived from an NCAF survey conducted in February 2021, plus additional recent research. *These are a small sample from about half the states, based on quickly available information, and not comprehensive of the full range of activities at the nation's CAAs.*
Cross-Cutting Initiatives to Promote Health Equity in COVID-19 Response: CAAs are engaged in the health response to COVID-19 through multiple activities, often including state or local task forces or other cross-cutting collaborations to address equity issues, especially in the distribution of vaccines and other health care services. Examples include:

- The Connecticut Department of Public Health awarded funds to a collaboration of health agencies, including Access Community Action Agency, under a Vaccine Equity Partnership Funding initiative. The initiative is intended to increase access and availability of COVID-19 vaccines to medically underserved vulnerable populations in selected communities. Grant activities focus on cultural and language-appropriate outreach and education as well as broadly increasing vaccination opportunities for the underserved. Partner agencies bring vaccine education and vaccine opportunities through a variety of mobile and pop-up clinics where people live, work, shop and play. – *Access Community Action Agency, CT.*

- First State Community Action Agency has advocated for equity in multiple ways, including through participation in state-level advocacy groups. The agency spearheaded a grassroots vaccine outreach and education campaign in two of Delaware's three counties, focusing on communities of color, rural and disconnected communities and other hard-to-reach areas, and in collaboration with community-based organizations, city, county and state governments, other non-profits, faith-based organizations, school districts, community coalitions and local businesses. First State partnered in Delaware's "COVID-19 Stops With Me" campaign, enlisting staff, volunteers and community partners to create a "force multiplier" for distributing vetted vaccine information. "We found success in the most basic of outreach strategies – door knocking and literature drops. We spent time face-to-face with thousands of Delawareans educating them about the science behind the vaccine, the importance of being vaccinated, and how to access appointments when it was their turn." In partnership with health care facilities, the state public health department, the National Guard and community and faith-based leaders, First State has hosted multiple "low-barrier" vaccination events for vulnerable individuals with barriers to vaccine access, such as language, disability, transportation or internet access. First Start established a vaccination site at its headquarters office, a known and trusted location for hard-to-reach people, with agency staff and volunteers scheduling appointments, completing forms and providing transportation for those who needed it,

local police helping with on-site logistics and medics from the local EMS branch in case of emergency. – *First State Community Action Agency, DE.*

- As vaccine distribution began in Bergen County, officials noted racial inequity among those receiving the vaccine. Despite a disproportionately high number of COVID-19 cases in communities of color, only a small portion of vaccines was initially distributed to these communities. To make sure the communities most at risk had access to crucial resources, Greater Bergen Community Action (GBCA) joined the COVID-19 Vaccine Equity Team, together with Bergen New Bridge Medical Center, the County of Bergen and the Bergen Coalition of Black Clergy. Together, the group reserved vaccine appointments for Black and Brown residents of Bergen County, and worked with leaders in communities of color to build trust with the medical center and confidence in the vaccines. More than 30 community and clergy members publicly received the vaccine to help encourage others to do the same and pastors used weekly bible study to help overcome vaccine resistance. As part of the Equity Team, GBCA is continuing to provide information to the community and helping to identify those who may need more information on receiving a vaccine. – *Greater Bergen Community Action, NJ.*

- Yamhill Community Action Partnership serves as a member of the county's Vaccine Community Advisory Group, which also includes the local public health department and other key stakeholders. The group's goals are to ensure that diverse community needs are addressed, that all people in the county have adequate access to vaccine as they become widely available and that vaccination distribution is efficient and effective. Within the state's guidance on vaccine prioritization, the advisory group worked to ensure appropriate priorities at the local level. – *Yamhill Community Action Partnership, OR.*

- Union-Snyder Community Action Agency leads a task force dedicated to COVID-19 vaccinations, created in response to a lack of information and coordination in the local area and concern that rural needs could be an "afterthought" in the national vaccine distribution process. The task force includes county commissioners, emergency management directors, Agency on Aging staff, local hospitals and public schools. "We saw how disparate testing operations were for people in the availability of testing, frequency and cost," said the CAA director and task force leader, noting before vaccine distribution began, "we need to start getting ready." – *Union-Snyder Community Action Agency, PA.*

- Tri-County Community Action Agency received funding from the Rhode Island Department of Health to establish and operate a Health Equity Zone (HEZ) for the towns of North Providence, Johnston and Smithfield. Health Equity Zones are geographic areas where investments are made to address differences in health outcomes by eliminating health disparities and promoting healthy communities. The Tri-County HEZ proposed to mitigate the impact of the COVID-19 pandemic with a focus on building community resilience and increasing awareness and compliance with community mitigation guidelines in the three communities served. Specifically, Tri-County HEZ proposed to combat COVID-19 by increasing community outreach and education relating to

prevention, testing, contact tracing and isolation supports. The Tri-County HEZ also proposed to address local barriers to complying with COVID-19 mitigation guidelines, especially in communities disproportionately impacted by the COVID-19 outbreak, specifically communities of color, immigrant groups and refugee populations. – *Tri-County Community Action Agency, RI.*

- The Commonwealth of Virginia recognized that residents and staff at assisted living, nursing home and other congregate care facilities were disproportionately affected by COVID-19 and, in response, created a Long-Term Care Task Force to identify why cases were increasing in long-term care facilities and to recommend appropriate actions. Because of its expertise in long-term care for low-income seniors, a CAA called Bay Aging was asked to participate in the Task Force in order to ensure that protections for vulnerable populations were included in the recommended solutions. – *Bay Aging, VA.*

- STEPS, Inc., a Virginia CAA, has been a member of the community's Vaccine Task Force, participating in weekly coordination calls. STEPS volunteered to serve as the point of contact for all early child care providers in an 8-county region, connecting licensed, unlicensed, faith-based and home child care centers with Centra Health, a regional health care system, to get their staff vaccinated. As chair of the Centra Southside Community Hospital board of directors and a member of the health system's board of directors, the president and CEO of STEPS was able to disseminate information to local partners and facilitated vaccination of seniors served by the regional Area on Aging. – *STEPS, Inc., VA.*

- With the local health department, Blue Mountain Action Council has participated in a Vaccination Equity Task Force, which designs systems and protocols to ensure equitable access to vaccination. Through its Commitment to Community (C2C) program, the agency expanded vaccinations to the local Hispanic community that was previously underserved. The agency operates a neighborhood outreach initiative through which organizers make contact with low-income Hispanic households to educate them about vaccinations. The agency also has been given a designated number of appointments each week by the local health department, and agency organizers and other staff contact clients via email or phone to get them signed up for an appointment. – *Blue Mountain Action Council, WA.*

- Early in the pandemic, Community Action of Skagit County mobilized its long-standing and broadly representative Skagit Latinx Advisory Committee (LAC) to learn why COVID-19 transmission was skyrocketing among Latino, Hispanic and indigenous populations and to develop community-wide strategies to address the crisis. LAC identified a disproportionate number of essential workers, overcrowded housing, lack of access to health care and an overload of information as major factors. In response, the CAA convened weekly meetings of public health and other decision-makers with community organizations and others involved in on-the-ground COVID-19 prevention efforts, so decision-makers could learn what was working and what changes were needed (e.g., public health agencies expanded testing hours and developed a mobile testing site);

conducted information and outreach through known and trusted bilingual staff who reached people in the neighborhoods, farms and places where they work and live; used its food distribution center as a hub for receipt and distribution of masks and other PPE; and conducted 24 public policy listening sessions and focus groups with public health agencies, the business community, economic development and low-income housing leaders, the Governor's Safe Start leadership group, state lawmakers and staff, and Members of Congress. – *Community Action of Skagit County, WA.*

Education and Outreach: Education and outreach are universal services that CAAs commonly provide to support numerous initiatives. They are currently using their experience and expertise to support public health goals related to COVID-19, and especially to ensure that vulnerable and underserved people learn about vaccines and overcome reluctance to get vaccinated. In addition to activities identified above as part of cross-cutting initiatives, some examples of education and outreach include:

- Conducting outreach through Health Ambassadors who canvass neighborhoods, talk to residents directly and educate the community about the importance and safety of vaccines, overcoming hesitancy and filling appointments to ensure equitable distribution of vaccines. – *Anne Arundel Community Action Agency, MD.*
- Deploying health care professionals as "trusted messengers" to provide accurate information about vaccines to overcome vaccine hesitancy among specific population groups. – *Tri-Valley Opportunity Council, MN.*
- Assigning Pandemic Outreach Coordinators to work with minority populations on reducing vaccine hesitancy through education and outreach. – *Community Action Partnership of Mid-Nebraska.*
- Launching a statewide public education campaign called "Sleeves Up North Carolina" aimed at dispelling common myths and providing factual information about COVID-19 vaccines, particularly among minority communities, centered around a series of 30-second public service announcements that each debunk a common myth. – *North Carolina Community Action Association.*
- Leading a local coalition of nonprofits working with the local health department and other vaccine providers (e.g., hospitals) to identify and address the needs of special populations, reduce barriers to access and provide grassroots education. Working with local academic institutions to create education resources that can target families. – *Community Action Program for Madison County, Inc., NY.*
- Creating a billboard that leads individuals to readily available educational materials about COVID-19 and the vaccine, helping to overcome a high level of stigma about vaccines in the community. – *Community Action of Laramie County, WY.*

Testing and Contact Tracing: As community-based organizations with deep local roots and knowledge of the people and neighborhoods they serve, CAAs are well-positioned for contact tracing activities and have also worked to expand the availability of testing for underserved population groups. Some examples of activities to support testing and contact tracing include:

- Connecting the Maine CDC with the state's ten CAAs to conduct contact tracing and referral of people exposed to COVID-19 to their local CAA for follow-up services, including meal delivery, medical transportation services and behavioral health during quarantine, to minimize exposure of others. – *Maine Community Action Partnership.*
- Offering free testing in a tent outside an existing health center for low-income families and people experiencing homelessness, who might be nervous about going in for testing or receiving a bill for services – *Frederick County Community Action Agency, MD.*
- Working with the county public health department to provide free COVID-19 testing at the agency; embedding navigators at COVID testing sites to enroll people without insurance either in the state's free testing program or in health insurance to cover the cost of testing and any follow-up care and treatment. – *Scott, Carver and Dakota Community Action Partnership, and other CAAs in Minnesota.*
- Partnering with the National Guard to create free community-based testing sites, with walk-up and drive-up services and translation into multiple languages – *East Bay East Bay Community Action and Comprehensive Community Action Program, RI.*

Removing Barriers to Vaccine Access: The on-line signup system used by most vaccination providers has been a major barrier to people without access or ability to use the internet. Likewise, transportation can prevent people without cars or accessible public transportation from getting to a vaccination appointment. In addition to activities described above as part of cross-cutting initiatives, some examples of CAA activities to remove barriers to vaccine access include:

- Helping tenants in agency-owned and operated low-income housing to register for designated vaccination appointments; coordination with ride-share programs to transport tenants to the vaccination sites. – *Project GO, Inc., CA.*
- Partnering with a local pharmacy and RV dealer to establish a Mobile Vaccination Unit to travel to the most remote communities in the agency's geographically vast and isolated county. Opening a phone hotline for community members without the ability to register on-line, enabling them to call for assistance with registration for vaccination appointments. – *Aroostook County Action Program, ME.*
- Providing assistance in setting up vaccine appointments, thus eliminating a barrier for older people who do not have access or necessary skills to navigate the online systems, as well as for people living in rural areas without access to the internet or with unreliable service. Agency staff make appointments for people while also answering questions and proving information. Also providing transportation to appointments if needed. – *Penquis, ME.*
- Reaching out to all recipients of home-delivered meals and senior dining services to see if they have been vaccinated or registered to be vaccinated and, if not, assisting those that need help. Also working with St. Louis County to register all clients in the agency's homeless programs. – *Arrowhead Economic Opportunity Agency, MN.*
- Through the agency's Women's Health Services program, coordinating with county health departments for referrals and registrations. – *Community Action Partnership of North Central Missouri, MO.*

- Transporting residents to clinics through a volunteer transportation program; assisting county residents in getting appointments for vaccination, including by searching during non-business hours for on-line appointments; assisting public health agencies with maintenance of waiting lists, registrations and sharing pertinent information on vaccine eligibility and access.– *Tioga Opportunities, Inc., NY.*
- Using the CAA's existing 2-1-1 systems as hotlines for low-income people and seniors to register on vaccination sites by placing a call and receiving assistance from an agency navigator, avoiding the need for on-line registration. – *Lifeline, Inc.| Lake Geauga Counties' CAA, OH.*
- Helping seniors register for the vaccine through the Meals-on-Wheels program. – *Combined Community Action, Inc., TX.*

Support for Administration of Vaccines: Due to the reach, capacity and flexibility of the Community Action network, agencies have been able to assist with vaccine distribution in various ways. For example, CAAs in multiple states that are designated Federally Qualified Health Centers are participating in the HHS/HRSA COVID-19 Vaccine Program, which is intended to address health equity in vaccine delivery by providing a direct supply of vaccines to select health centers that specialize in caring for hard-to-reach and disproportionately affected populations. Moreover, many CAAs have partnered with health departments or other providers to help establish or operate vaccine clinics. In addition to activities described earlier as part of cross-cutting efforts, some examples of CAA support for health equity in the administration of vaccines include:

- Partnering with the state public health department and university nursing students to administer vaccines. – *Making Opportunity Count, MA.*
- Advocating and coordinating with the local health department and Federally Qualified Health Center on a plan to vaccinate people who are homeless, including a recommendation to use the Johnson & Johnson one-shot vaccine. – *Action Inc., MT.*
- Partnering with the local public health department to connect shelter residents with vaccinations (i.e., people over 65 and/or with underlying health conditions who were sheltering in a hotel purchased by the agency at the outset of the pandemic for people without homes). – *HRDC, Bozeman, MT.*
- Coordinating vulnerable populations and health equity set-aside vaccine clinics for the county, covering people of color and all vulnerable, at-risk populations in county; serving as a weekly vaccine distribution site; dedicating staff and resources to vaccine distribution; siting on vaccine incident team for the county; and participating in statewide equity committee. – *Community Action Partnership of Strafford County, NH*
- Working with CVS to vaccinate residents living at the agency's 11 senior housing developments. – *Southwestern Community Services, NH.*
- Hosting vaccine clinics at one of the agency's facilities in conjunction with the local department of public health. – *Tioga Opportunities, Inc., NY.*
- Holding contactless drive-through "Big Pop-Up" events to distribute essential supplies to low-income families, with some events also including free vaccinations with no appointment needed. – *North Carolina Community Action Association and individual CAAs in the state.*

- Taking the lead, in partnership with the local health department, in getting all of the local homeless population (both sheltered and unsheltered), as well as homeless providers, vaccinated; hosting vaccination clinics for this very challenging population. – *Lifeline, Inc.| Lake Geauga Counties' CAA, OH.*
- Combining the agency's community organizing skills, and medical expertise as a Federally Qualified Health Center, to vaccinate thousands of people, with a special focus on residents of areas with high poverty rates and limited resources; holding vaccination events for seniors to make finding and receiving doses easier and to overcome the challenges posed by lack of internet access or knowledge to use the internet. During a historic snow storm that shut down power and disrupted travel, the agency was able to distribute 10,000 vaccinations during a two-month period and use every dose received. – *Community Action Corporation of South Texas.*

[Additional submission by Chairman Scott follows:]

Carrying Equity in COVID-19 Vaccination Forward: Guidance Informed by Communities of Color

July 2021

CommuniVax
A Coalition to Strengthen the Community's Role in an Equitable COVID-19 Vaccination Campaign

Johns Hopkins Bloomberg School of Public Health | Center for Health Security

Texas State Anthropology

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Contents

Executive Summary

Seven months into the COVID-19 vaccination campaign in the United States, nearly 50% of the American population has been vaccinated. While this is a monumental accomplishment, there is still much work to do.

In the coming months, the country will face a series of vaccination challenges including serving groups with persistently low vaccine uptake (due to, for example, low/no access, vaccine hesitancy, or a combination of factors), expanding COVID-19 vaccination to children (particularly those whose parents may be less willing to vaccinate their children than to get vaccinated themselves), and orchestrating a potential booster dose campaign (with its own hesitancy issues). As the COVID-19 vaccination campaign continues, lessons from the vaccine rollout to date can help provide direction moving forward.

One challenge that deserves closer attention and more refined solutions is the campaign's limited success at delivering vaccines to low-income persons and communities of color. During the pandemic, these populations have experienced significant physical, financial, and psychological harms at a disproportionate rate. The continued emergence and spread of new SARS-CoV-2 virus variants and the resumption of routine social, commercial, and educational activities across the country amplify the risks that COVID-19 poses to these groups.

This report provides specific guidance on adapting COVID-19 vaccination efforts to achieve greater vaccine coverage in underserved populations and, through this, to develop sustainable, locally appropriate mechanisms to advance equity in health.

In the first half of the report, we outline findings from local, ethnographic research conducted within Black and Hispanic/Latino communities in Alabama, California, Idaho, Maryland, and Virginia. Since January, local research teams have been assessing community infrastructure; listening to community members, public health officials, and government leaders; and coordinating engagement activities to understand how best to promote awareness of, access to, and acceptability of COVID-19 vaccines. In the second half of this report, we present the policy and practice implications of the local research. The Working Group on Equity in COVID-19 Vaccination—an advisory body of community advocates, public health experts, and social scientists—developed the recommendations, eliciting local team feedback.

FINDINGS

1 Naming vaccine hesitancy as "the problem" obscures a more complex set of realities

The now popular term "vaccine hesitancy" glosses over diverse concerns about vaccines, COVID-19, and health authorities. Rather than a perceived moral failure of being "hesitant" or "noncompliant," a lack of vaccination is often an external reality related to lack of access to vaccines. The same socioeconomic and structural forces that contribute to the disparate impacts of COVID-19 have also created persistent barriers to accessing vaccines. A myopic focus on vaccine hesitancy can conceal access issues, including those due to structural racism. Vaccine decision making is ongoing, dynamic, and interpersonal, rather than a straightforward process of an individual, alone, digesting educational materials and then moving to action.

2 Assuming communities of color are homogeneous is a critical error

Common experiences among communities of color do exist, particularly the shared burden of economic and racial inequalities. Where the communities live can also create similar experiences; for example, urban areas often have more developed internet and transportation infrastructure compared to frontier and rural locations. Despite these similarities, differences between and within local communities make them unique and result in different experiences. Black and Hispanic/Latino persons experience racism differently due to factors such as language, culture, and historical experiences with certain institutions (eg, immigration and law enforcement). Within communities, demographic characteristics like age, gender, and political party affiliation greatly influence and differentiate individuals' experiences and perspectives.

3 Hyperlocal responses to the pandemic result in better health outcomes

Community led, organized, and advocated measures have closed COVID-19 response gaps. Grassroots groups already have the trust of community members and understand the socioeconomic and cultural realities of their lives. Governmental public health agencies and healthcare systems do not always have such assets to the same extent or depth. Such trust is important. Vaccination moves at the speed of public trust; without trust, education campaigns, national messaging campaigns, and other pro-vaccination efforts fall flat.

RECOMMENDATIONS

Urgent Actions: Take immediately to improve vaccine coverage within underserved communities

1

Humanize delivery and communication strategies for COVID-19 vaccines

To reverse the vaccination campaign's current slowdown and persistent unevenness in vaccine coverage, the campaign should support more peer-led and neighborhood-based opportunities for community conversation and for convenient vaccine access. Health systems and health departments should develop and/or strengthen their collaborations with community-based organizations (CBOs), FBOs (faith-based organizations), and community health workers (CHWs) and, importantly, commit to maintaining these relationships after the COVID-19 pandemic subsides. CBOs, FBOs, and CHWs should play a key role in identifying reasons for low vaccination coverage and should be involved in developing interventions to address those issues, such as providing vaccines at locations community members perceive as safe, familiar, and convenient. Groups and people communicating about COVID-19 vaccination should target as many social settings as possible—in person, on air, and on screen—to create multiple opportunities that prompt peer-to-peer conversations about vaccination. Individuals do not make their decision alone, even if they make the final decision about getting the vaccine.

2

Anchor COVID-19 vaccination for hard-hit areas in a holistic recovery process

First, public agencies, hospitals and health systems, nonprofit social service providers, CBOs, FBOs, and CHWs should align themselves around a "whole person" model of recovery to meet underserved communities' self-identified needs (eg, food, housing, jobs, mental health support) and to multiply the benefits of each vaccination encounter. A wraparound service approach provides the sense of safety and security important to informed health decision making. Second, local and state jurisdictions should take immediate steps to plan for long-term recovery and community resilience by: (a) convening a cross-sector council of stakeholders, including Black and Hispanic/Latino leaders, CBOs, FBOs, and CHWs to apply a whole-of-community, whole-of-government approach; and (b) engaging existing data-driven coordinating bodies that already facilitate disaster recovery, economic development, and other long-range planning.

Essential Actions: Execute steadily to create systems-level changes and advance health equity broadly

3

Develop a national immunization program to protect people throughout the life course

During the COVID-19 vaccination effort, public health authorities and government leaders at federal and state levels should capitalize on an already highly successful national immunization program for children, building out systems to provide broader coverage for COVID-19 vaccines and the 13 other vaccines recommended for some or all adults. Tasks include reconfiguring funding systems to support a life-course (versus childhood-only) approach to immunization, facilitating the integration of adult immunization with other health systems and priorities, and developing systems to monitor program progress and measure social and economic impacts. The funding support must be adequate to ensure health departments have sufficient staffing to oversee progress in enhancing adult immunization uptake and can take corrective actions if progress is judged to be inadequate.

4

Rebuild the public health infrastructure, properly staffing it for community engagement

Political leaders at all levels should allocate steady core funding for the public health infrastructure, sustaining its capacity to respond to future emergencies and address prevalent health challenges (eg, diabetes, heart disease) that affect communities of color in greater numbers. A mandatory national investment of $4.5 billion per year in a public health infrastructure fund will ensure a predictable minimum capacity at state and local levels. State and local officials should provide steadfast support to agencies that protect the health of their populations. Furthermore, state and local health departments should commit to the strategic goals of promoting equity in their ranks at every level, including their boards of health, and strengthening human-centric competencies through the recruitment of more social and community proficient professionals, such as health educators/promoters, risk communicators, language translators, social media strategists, and sociobehavioral researchers.

5

Stabilize the community health system as the backbone for equity and resilience

Federal, state, and local leaders should take steps to formalize and finance the country's struggling, but promising, community health system. Through community roots and shared experiences, CHWs build trust with clients while navigating health and human services systems, bridge client

and provider cultures to adapt service delivery and better meet needs, and advocate for system-level changes that will improve clients' access to care and overall health. In consultation with local, regional, and national CHW networks, federal and state officials should create sustainable financing strategies (including Medicaid reimbursement) for community health work on disease prevention, health promotion, and social determinants of health. To generate opportunities and a career ladder, state legislators should authorize a CHW workforce development plan; public health officials should work with human resources systems to create positions at varying levels of experience. To acknowledge the deep social assets and community organizing abilities of CBOs, FBOs, and CHW-led organizations, public and private funders should provide grants directly to these entities, adapting funding processes and eligibility criteria to create an environment where communities with the greatest need benefit from funding first.

Introduction

This report outlines recommendations for immediate and ongoing actions that public health officials and government leaders can take to facilitate COVID-19 vaccination. Drawing upon research conducted with Black and Hispanic/Latino communities across the country, it provides specific guidance on adapting COVID-19 vaccination efforts to achieve greater vaccine coverage in underserved populations and, through this, to develop sustainable, locally appropriate mechanisms to advance equity in health.

Problem

Despite considerable effort, the United States did not reach the Biden administration's goal of having 70% of adults vaccinated by July 4.[1] Several factors can be attributed to this problem, including a slowdown of the vaccination campaign and the persistence of pockets of low vaccine coverage.[2-4] As the COVID-19 vaccination campaign expands to include young children and a potential booster dose campaign, the country's COVID-19 vaccination strategy should be updated to address issues that require more focus or different approaches.

A critical inclusion in the updated strategy should be improving vaccine coverage for persons hardest hit by the pandemic: socially disadvantaged groups and communities of color. Low vaccination coverage in these groups is highly problematic, as many people in these communities are generally at risk for poor health outcomes due to the lack of or poor access to healthcare and high rates of chronic health conditions like diabetes. These people are also more likely to be exposed to SARS-CoV-2 through their living and working conditions, be diagnosed at later stages of infection, require hospitalization due to COVID-19 symptoms, and die from this disease.[5-7] The emergence and spread of new variants and the resumption of routine social, commercial, and educational activities only amplifies the risks that COVID-19 poses to them.[8]

To improve vaccine coverage within poor communities and people of color, equity in vaccination is crucial. Unlike equality (the requirement that everyone be treated the same), equity entails recognizing different circumstances and compensating for them, so that all persons can reach an equal outcome.[9] Equity in vaccination, therefore, demands that the most marginalized, vulnerable individual in a community has the same ability to access vaccination as anyone else in that community. This means that the individual is aware of the vaccine's purpose and availability, understands the value of vaccination, has the means to get to a point of vaccination without worry of undue risk (eg, concerns about taking time off work, immigration status, poor treatment due to race or ethnicity), and is able to receive the vaccine if they choose to do so.[10]

Developing equity in COVID-19 vaccination—through, for example, adjustments in public health financing, workforce composition, and community partnerships—will also provide opportunities for communities, states, and the nation to advance equity in health more broadly. Currently, the United States trails other developed countries in healthcare access and health outcomes.[11] This lag is not due to a lack of technological

knowledge, but rather to longstanding structural inequalities that limit life choices and life chances in poor communities, especially poor communities of color. As jurisdictions continue their COVID-19 vaccination campaigns, advancing equity while improving vaccine coverage will help create opportunities for durable change that will benefit everyone moving forward.

Approach

In November 2020, the **CommuniVax Coalition** was formed for the purpose of strengthening COVID-19 vaccination efforts across the United States by putting communities of color at the center of these endeavors.[12] This alliance includes 6 local research teams, the Working Group on Equity in COVID-19 Vaccination, and national stakeholders that represent both the delivery and uptake sides of vaccination. Through national reports, webinars, and other activities, the coalition facilitates and supports the development of inclusive governance systems that enable improved health and wellness during the COVID-19 pandemic and into the future.

The research driving this report was derived from the efforts of local research teams working with Black and Hispanic/Latino communities in 6 distinct sites in Alabama, California, Idaho, Maryland (Baltimore and Prince George's County), and Virginia (Table 1; Table C1, Appendix C).

Building on their existing relationships in these communities, the local teams used rapid ethnographic methods including interviews, focus groups, and social mapping to collect data from community members and local government and public health officials. Each local team also completed an environmental scan to assess their local and state infrastructures, COVID-19 disease burdens, and COVID-19 vaccination policies and they coordinated community engagement activities (eg, town halls, human-centered design workshops) that contributed to their understandings of local circumstances during the pandemic and vaccine rollout.

Drawing from this research, the local teams generated reports specific to their communities' experiences and needs. The working group members reviewed these reports and, combined with their own expertise, made suggestions for crosscutting national recommendations via 2 virtual meetings and written comments. Based on working group feedback and deliberations, a core writing team developed a draft version of this report, which the full coalition reviewed. Their constructive comments were integrated into the subsequent version of this report, which was again circulated to the full coalition for further comment, revision, and sign off.

Table 1. Descriptions of Local Research Areas

Local Research Area	Urbanicity	Socioeconomic Description	COVID-19 Case Counts and Ratios[a]	Vaccination Counts and Ratios[a]
Alabama *Majority and minority Black communities in a 6-county area in West Central Alabama*	Ranges from rural to semiurban, but the majority of the research area is rural	• 16% to 35% live in poverty • Available work has shifted from agricultural production to heavy manufacturing and food processing	551,298[a] 21.5% were Black persons, 5.3%[b] lower than proportion of Black population	1,839,512[a] 29.2% were Black persons, 2.4%[b] higher than proportion of Black population
California *Majority Hispanic/Latino community in the South Region of San Diego County*	Urban	• 14.4% to 18.7% live in poverty • Unemployment ranges from 9% to 12.2% • Affordable housing is limited	282,582[c] 54.5% were Hispanic/Latino persons, 23.2%[b] higher than proportion of Hispanic/Latino population	2,833,418[c] 30.9% were Hispanic/Latino persons, 0.4%[b] lower than proportion of Hispanic/Latino population
Idaho *Minority Hispanic communities in a 2-county area of Southeast Idaho*	Rural	• 19% live in poverty • Economy based on agriculture, food processing, transportation, and warehousing	195,172[a] 18% were Hispanic persons, 5.2%[b] higher than proportion of Hispanic population	720,293[a] 5.9% were Hispanic persons, 6.9%[b] lower than proportion of Hispanic population
Maryland (Baltimore) *Minority Latino community in Baltimore City*	Ranges from semiurban to urban, majority urban	• 22.5% live in poverty • Latino individuals often work in service-related, construction, and maintenance positions • Affordable housing is limited	462,634[a] 15% were Latino persons, 4.4%[b] higher than proportion of Latino population	3,750,323[a] 9% were Latino persons, 1.6%[b] lower than proportion of Latino population
Maryland (Prince George's County) *Majority Black community in Prince George's County*	Ranges from rural to urban, majority suburban	• 8.7% live in poverty • On average incomes of Black households are lower than White households	85,578[b] 44% were Black persons, 19%[b] lower than proportion of Black population	459,311[b] 57.2% were Black persons, 5.8%[b] lower than proportion of Black population
Virginia *Minority Black communities in Southeastern Virginia*	Ranges from semiurban to urban, majority urban	• 13.8% live in poverty • On average incomes of Black households are lower than households of all other race/ethnic groups	681,194[a] 19% were Black persons, 0.9%[b] lower than proportion of Black population	5,065,779[a] 8.2% were Black persons, 11.7%[b] lower than proportion of Black population

[a] Statewide data, obtained from Alabama's COVID-19 Dashboard Hub,[13] Idaho Official Resources for the Novel Coronavirus,[14] Maryland COVID Dashboard,[15] and Virginia Department of Health COVID-19 Dashboard.[16]
[b] Ratios calculated by taking the difference between the percent of cases/vaccinations among Black or Hispanic/Latino persons and the proportion of these populations in the state or county of reference.
[c] County data, obtained from San Diego County COVID-19 Daily Update,[17] San Diego County COVID-19 Vaccinations Demographics,[18] Prince George's County COVID-19 Dashboard,[19] and Prince George's County COVID-19 Vaccine Dashboard.[20] All data are subject to local and state reporting standards; some data may be missing or incomplete (eg, in Alabama race was unreported for about 27% of cases). Data were current as of July 5, 2021.

Local Observations

Local research provided detailed information on how the COVID-19 pandemic was experienced by individuals and within communities; the unfolding of local and state vaccination programs, as recounted and experienced by community members and implementers; and factors that motivated, facilitated, dissuaded, and/or prevented Black and Hispanic/Latino individuals from receiving or not receiving COVID-19 vaccines. Evidenced by select quotes and narratives, the 3 primary insights below highlight key issues that communities, cities, states, and the nation must address to facilitate continued COVID-19 vaccination and opportunities for greater equity in health moving forward.

The observations outlined in this report are not the only findings from the local research (which is ongoing). Those data speak strongly to declining mental health due to surges in substance abuse, the pain of losing loved ones, and the guilt of exposing family members and friends, who later died, to the virus. Future reports will address these and other compelling findings.

1 Naming vaccine hesitancy as "the problem" obscures a more complex set of realities

Vaccine hesitancy can be many different things

According to the World Health Organization, vaccine hesitancy is the "delay in acceptance or refusal of safe vaccines despite availability of vaccine services."[21] In public discourse, however, the term's meaning is more expansive and includes people's concerns about vaccination that may or may not keep them from being vaccinated. During the COVID-19 pandemic, observers frequently cite vaccine hesitancy as the cause for low vaccination rates in cities and states and within particular groups, such as young adults and persons of color.[22,23] However, calling vaccine hesitancy "the problem" often obscures a much more complicated picture.

First, vaccine hesitancy—as used in the public discourse—involves a range of concerns about vaccines that can vary in detail and severity from person to person.[24] In speaking with 10 people, for instance, it is possible to hear 10 very different types of concerns that, even when similar, differentially influence the decisions of the persons expressing them. Concerns noted in the local research included how quickly COVID-19 vaccines were developed; whether vaccines have significant side effects; why, if the vaccine is so good, people are being paid (in fishing licenses, lotteries, or other incentives) to take it; and how valid are rumors like the vaccines may cause infertility or result in some other type of population control (eg, microchips).

Second, hesitancy to accept COVID-19 vaccines can stem from beliefs about the disease itself and have nothing to do with vaccines. In this research, some respondents reported a lack of concern about COVID-19, noting that they were healthy, that others they knew

had only been slightly ill and recovered quickly, and that their own personal health practices were an effective defense against contracting the disease. Because of this, they also felt that vaccination was not necessary.

> *My personal theory on it is that I do believe that this virus is out, and it's killing people… making people sick. However, before the virus even came out, I take very great pride in being health conscious. So, I've always [taken] vitamins, [drank] alkaline water… I don't eat fast food… I exercise 5, 6 days a week…. So I've always looked at it like, even if like these viruses or sickness or illnesses and things are going out or whatever, it's not going to harm me and people like me because… [we are] very healthy.* (Unvaccinated respondent from Prince George's County, Maryland)

Finally, a third source of hesitancy identified in the local communities was a longstanding distrust of medicine, public health, and government. For decades, and in some cases centuries, communities of color have experienced poor care and/or purposeful mistreatment, been kept out of healthcare systems, had their concerns discounted or dismissed, and experienced discrimination in criminal justice, employment, housing, education, and political action.[25-33] Participants in Prince George's County, Maryland, for instance, often cited public health and government officials' inconsistent interest in their communities as an example of their distrust:

> *Why are you [the health system, government] so concerned with us now? Where were you when we needed help with type II diabetes, with heart disease, and access to care?*

In Alabama, participants referenced the Tuskegee Syphilis Study as a metonym for their mistrust the US healthcare system due to its historical and ongoing unequal treatment of Black individuals. The conviction that it is not a good idea to take any aspect of the healthcare system at face value strongly informed some participants' responses to the prospect of COVID-19 vaccination. Reluctance to trust the healthcare system to act for their benefit was reflected in their ready acceptance of narratives of carelessness (the Pfizer vaccines have been mishandled and are unsafe), incompetence (the vaccine might give you COVID-19), and/or malice (the government is using vaccines to install a monitoring chip).

In all 3 Hispanic/Latino communities in this study, distrust of the healthcare system was also associated with immigration status. Individuals in the United States without documentation, or those with family members in the country illegally, often reported being afraid of traveling to and/or visiting vaccination sites for fear of deportation:

> *So [the health department] started this campaign to get them [members of the Hispanic/Latino community] to go and get the vaccines. What happens? They are afraid. Why? Because they say, "I'm going to go, they're going to ask me for my information." They're not supposed to ask for Social Security…*

> *none of that [is] needed. But nevertheless, the fear of being deported was what was holding them back because they were saying, "OK I'm going to go there, they're going to be seeing me around, ICE [US Immigration and Customs Enforcement] is going to come by right away, they're going to report me, they're going to deport me."* (Community health worker from California)

Even in situations where Hispanic/Latino individuals felt safe going to vaccination sites, some still stayed away out of fear and confusion over the Public Charge Rule, a Homeland Security rule expanded under the Trump administration—since blocked by the courts—that allowed immigrants' citizenship applications to be affected by applicants accessing health and other social services.[34]

Narrative[a]: Different types of hesitancy – Juliet's story (California)

Juliet[b] is a friendly 28-year-old *transfronteriza*. She crosses the border to stay in the San Diego area with her partner and his mother during the workweek, and returns to Tijuana, where she lives with her parents, on the weekends. Juliet is fully vaccinated because, as she said, "I just want to feel safer; like it makes me feel safer to know that I got it." However, many people close to Juliet have not been vaccinated, which saddens her.

One such person is Juliet's mother, who has expressed strong feelings against the COVID-19 vaccine. With self-professed embarrassment (and her interviewer's reassurance), Juliet confided that her mother obtains most of her information from social media like Facebook and believes in conspiracy theories like microchips or *nueva orden mundial* [literally, new world order; a secret, emerging, global totalitarian regime]. Exasperated, Juliet recounted beseeching her mother "check your sources, make sure they are doctors," and also "listen to the other side, not only to your side."

Her mother's church, too, was at fault in Juliet's view. Rolling her eyes, she said it would make no difference if the Pope himself told believers to vaccinate. Given his stance on "LGBT [and similar issues … my mother's] like 'No, he's the Antichrist… he's not following the rules.'"

When Juliet received her own vaccine, "I got home and I'm like 'Mom I got vaccinated' and she said 'No! What?!?' She almost cried. Like 'NOOO' and was super scared but then she… forgot about it."

Juliet's father also is unvaccinated. This worries her, because, unlike her mother who stays at home, he has continued to travel across the border daily to work in San Diego, where he spends the day around other people. In contrast to her mother, Juliet believes that if her father was offered vaccination, he would take it. However, she and her family seemed unaware of how to access vaccines: she received hers at her job, so she did not have firsthand experience finding appointments or going to public vaccination sites.

Juliet's boyfriend is also unvaccinated. He is waiting to see how the vaccines affect people, although she would prefer that he hurry up. Juliet's boyfriend recently returned to work in person as a customer service employee at the zoo, where, Juliet says, management is not doing much to protect the staff because they let customers go mask-free. Further, "the gorillas got vaccinated and their employees didn't so that's like very, very messed up."

All of these decisions have occurred in the context of firsthand experience with COVID-19. Some of Juliet's extended family had the disease, and her great-aunt passed away because of it. Juliet described this as traumatic, not only due to the sadness of the death, but because "she had to be wrapped in plastic and looked crazy, I don't know. I feel like it takes away a little bit of your dignity as a person."

Juliet's parents had the disease as well. Her father developed symptoms first, due to his job Juliet suspects. "He was off work for a month," said Juliet, explaining with frustration that he didn't let her know that he had been ill with a fever for a few days before she came home for the weekend, and he did not tell her not to come, as he should have. Her mother was ill too, and still coughing after 2 months.

Juliet suggested that one way to help people come to the decision to vaccinate would be the provision of more public "resources of how to inform yourselves" or media literacy education "like how to verify." She also wondered how to make up for the negative impact of "gentrification," lamenting how the pandemic laid bare the "disparity of wages." At the start of the pandemic, when her boyfriend was laid off, he "started getting unemployment and he started making more money" than he did when employed: "that's a problem," Juliet declared.

[a] A narrative is a coherent account based on 1 person's actual experience. A composite narrative (used in some of the examples that follow) is a coherent account drawn from experiences of multiple persons and described as a single experience.

[b] All names of research participants used in this report are pseudonyms. The photos included with the narratives are stock photos, not photos of the actual research participants.

Access, not hesitancy, is the real issue in some areas

A myopic focus on hesitancy can conceal issues of access, including those due to structural racism.[33,35,36] Maryland's governor, for instance, publicly accused the Black community in Prince George's County of refusing vaccination.[37] The reality, however, was that most of the vaccines in this area were distributed to wealthier, White people from neighboring counties who were able to navigate the online registration system, travel to the vaccination sites in Prince George's County, and wait in line for hours. The issue was displacement, not hesitancy or resistance.

Since the beginning of the COVID-19 vaccine rollout, access to vaccines has been, and continues to be, a significant barrier for many marginalized groups.[36,37] The same socioeconomic and structural barriers that have contributed to the disparate impacts of COVID-19 by socioeconomic status and by race/ethnicity have also created barriers to accessing vaccines.[38]

Access issues identified in the local research included a lack of transportation to vaccination sites (especially in rural areas), the lack of funds to pay for transportation to vaccination sites, limited operating hours at vaccination sites, the inability to take time off work for vaccination appointments or to take time off if vaccination resulted in sickness, a lack of childcare and/or eldercare, a lack of access to computers and/or smart phones (to access online appointment registration portals or even information about when and where vaccines were available), limited or no internet access (another common problem in rural areas), and a lack of online literacy.

In Hispanic/Latino communities additional barriers included a lack of information in Spanish and/or indigenous languages, a lack of multilingual speakers at call centers and vaccination sites, and the need to show government identification before receiving vaccines. While some of these problems were later rectified, the early inability of the system to meet people's needs only exacerbated community members' feelings of not mattering.

> *I don't speak English that well, but I've been here in the US for many years. Sometimes people come here [to the United States] and they don't have information on how to do things, it's difficult for Latinos. It is a drastic change of culture, something difficult for Latinos. It's embarrassing and scary for Latinos to do things here.* (Respondent from Baltimore, Maryland)

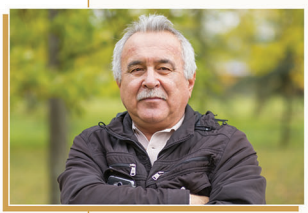
In considering barriers that can prevent individuals from receiving COVID-19 vaccines, it is also important to recognize that many people face multiple barriers simultaneously—a fact that is often overlooked by system planners and operators who do not have personal experience facing multiple hurdles.

Composite narrative: The convergence of barriers – José's story (Baltimore, Maryland)

José came to Baltimore in 2010. Like many undocumented migrants, he came to earn money to support his family—a wife, 3 children, and 2 grandchildren—back home in El Salvador. He had hoped to be able to earn enough money to return home, but the expenses of living in Baltimore combined with the unsteady pay from his under-the-table, intermittent jobs as a handyman, painter, and landscaper have prevented him from doing so. With the exception of a complicated trip home for a few months in 2014, during which he was unsure if he would be able to return to the United States, he has spent the past 10 years in Baltimore away from his family.

To save as much money as he can, José lives with 5 other men in a 2-bedroom apartment. The apartment is run down and in a neighborhood that was particularly hard hit by the pandemic. Like José, many of the people in this poorer area of Baltimore work in the service sector and as manual laborers—"essential" workers with no option to work from home. Many people in José's neighborhood were exposed to COVID-19 through their work and, when they returned home, spread the disease to their housemates and family members.

Two of José's roommates were sick with COVID-19, but so far José has not experienced symptoms himself. He is very concerned about getting the disease, not because he feels it will kill him—José believes he is young enough and healthy enough to get through—but because he doesn't have the money to spend on hospital bills.



One of the men José works with had COVID-19 and ended up in the hospital. He told José that he was intubated, that he couldn't communicate with his family, and that hardly anyone spoke Spanish. He was scared and alone. Leaving the hospital was in some ways even worse. José's friend had missed a month of work, there was no money for rent, no money to send to his family in Mexico, and no money to pay the substantial hospital bills. The financial aspects of his friend's story terrified José the most. He couldn't afford not to work, his family in El Salvador need the money and he desperately wants to earn enough to go home for good.

José has heard about COVID-19 vaccines, largely from the Spanish radio station he listens to, but he doesn't know how to get one. Even if he knew where to go, he isn't sure he can take the time off from work. If he takes time off, he loses the entire day of pay and he needs the money. Additionally, the work isn't stable. José often waits at the home improvement store with many other daily laborers. If he's not there he could quickly be replaced by another man in line waiting for a job, and if he's replaced even once there's a chance his regular boss won't take him back.

José has also heard, from YouTube videos he watches on his phone, that some people died after being vaccinated. However, a friend from work who didn't want to get vaccinated, finally got the vaccine. This friend talked to José about this concern and explained that only a few people died from the 1-dose vaccine. He suggested José get the 2-dose vaccine instead.

José is actively considering this, especially if he could get a vaccine outside of work and somewhere close, or at least somewhere the bus goes. However, he also worries about having his identification checked and possibly being deported. It's enough of a risk that he isn't sure what he will do.

Vaccination decision making is a social, nonlinear, and often ongoing process

When considering vaccine decision making theoretically, it is easy to envision a straightforward process involving education, cues to action, and (if necessary) perseverance to overcome any existing barriers. In reality, vaccination decision making is ongoing, dynamic, and open-ended.[39,40]

In the local research, individuals routinely shared the dynamic nature of their decision making. Their assessments of vaccination changed over time as they were exposed to new information (accurate or not).

> *If I hadn't heard of the side effects, I'd be the first person to get the vaccine. But as the news came out, as we heard about different side effects… I'm just not there. I'm gonna stay away and be cautious. Johnson & Johnson drove it home even more. I was like, "Hello!" It made me furious. So I haven't gotten the shot and don't plan to.* (Unvaccinated respondent from Virginia)

For some individuals, their evaluation of COVID-19 vaccines continued even after they were vaccinated. Prompts for this reassessment included regret for receiving the Johnson & Johnson vaccine following the pause, renewed worry after being exposed to new rumors, and frustration at learning about breakthrough infection—the possibility that vaccinated persons could still contract COVID-19. The ongoing nature of evaluating COVID-19 vaccines even led some vaccinated individuals to state they plan to refuse booster doses. Most problematically, these individuals shared their newfound hesitancy with those around them.

Information sharing—regardless of being accurate, inaccurate, in favor of, or opposed to vaccination—is an important component of vaccine decision making.[39,41-43] While healthcare providers, the US Centers for Disease Control and Prevention (CDC) and World Health Organization websites, and other authoritative sources are available—at least to people with access to them—many people still primarily rely on trusted individuals in their personal networks for information and advice. Among those who lack access to more official sources of information, social networks are relied on almost exclusively. As an undergraduate student researcher in Idaho reported:

> *One of my aunts, she was kind of hesitant getting the vaccine and she knew that I was working on this project; and I had been talking to them about it and like relaying the information that I got back to them… And so, my aunt would come back to me, and she'd be like, "Wait. Is it safe?" Like she'd come to me for comfort and stuff, and I'd be like, "Yes, it's okay."*

This process of relying on others—who are, in turn, being exposed to a variety of sources and relying on yet other persons for additional information and advice—creates the diverse and multilayered social dynamics that underpin many vaccination decisions.[39,41,42]

Narrative: Iterative decision making – The story of a Black barber (Prince George's County, Maryland)

Gregory Cradle is a highly respected Black barber. For the past 35 years, he has owned and operated The BGC barber shop on the corner of Moment Street and Movement Drive in Capitol Heights, in Prince George's County, Maryland. Mr. Cradle is respected and his word is gold. Big-G, as he is known by his loyal clients, is an influencer with people in the community. When people have questions—ranging from finance to romance—they come to Big-G for guidance. But one day, it was Big-G who needed guidance. It was a rainy day in early April 2020. Big-G found a flyer stuck in the door of his barber shop when he arrived. Big-G read the oversize letters out loud: *"COVID IS A HOAX… DON'T TAKE THE TEST, DON'T TAKE THE VACCINE."*

The one page flyer had a lot of small text as well. It was a showcase of conspiracy theories (tracking chips, infertility poison), disinformation designed to confuse and misleading information designed to distract.

His confusion was natural, Big-G already had his own doubts about this new virus *"Is it real or is it man-made hype?"* The entire situation made him anxious and uncertain about the future of his livelihood. His mind kept racing with questions. *"Closing my shop? I got kids; I got a house. How can I get back to work if people are afraid of catching the virus in the shop? How can I get the money the government is handing out if I do close up? And most importantly, how do I keep myself safe? If I go down… the whole household goes down."* As far as Big-G was concerned, there was no way he was going to take any future COVID-19 vaccine. Big-G was in the "wait and see" camp. He was not going to be first in line.

Big-G decided to take his concerns to one of his clients, Dr. Thomas, a professor in the School of Public Health at the University of Maryland. For the past 9 years, Dr. Thomas had led a wellness program through barber shops and salons. Big-G shared the flyer with Dr. Thomas, explaining that he had realized that all the "junk" in the flyer was exactly what many of his clients were talking about in the chair.

Dr. Thomas said, "first things first, let's make sure you and the other barbers/stylists are not infected," and working with colleagues, he began a COVID-19 saliva testing service for barbers and stylists. Doing the tests increased Big-G's confidence in his ability to stay safe while he worked, and staying open meant opportunities to talk with his clients about COVID-19.

Often, Big-G would hear a steady stream of myths, conspiracy theories, and adamant refusals to consider the COVID-19 vaccine once it was available. Through many conversations with Dr. Thomas, Big-G began to see that severe COVID-19 infection could be prevented through vaccination. As days turned into weeks, and weeks into months, Big-G moved from "wait and see" to getting the vaccine for himself, his wife, and his kids. He is also using his influence to chip away at the misinformation held by his clients in the "hell no" group—who often refuse the vaccine for no reason.

Big-G's approach is to push information, not the vaccine. Big-G said, *"when you take time to listen and provide good sound information, people will naturally gravitate toward saving their own lives and the lives of those they love."* The approach seems to be working. More and more of his clients have moved from "hell no" to "maybe" and then from "maybe" to "where can I get the shot?" Big-G called this progress "Changing hearts and minds, one by one, in the chair."

It is also important to recognize that COVID-19 vaccination decision making is occurring during a pandemic in which many individuals are simultaneously experiencing job loss, food insecurity, housing instability, and the death of loved ones.[44,45] For many Hispanic/Latino individuals additional difficulties include managing multinational family obligations, including sending money and/or traveling to other countries to care for sick

loved ones.[46] Individually or in combination, these stressful situations can take a high priority for those who experience them, while vaccination takes a low priority.[47]

> *I have a sister now who is battling with [COVID-19…] and it's not getting any better. But COVID really… COVID changed my whole life and I had it, I hate it…. After COVID came and whenever COVID leaves, my life will still not be the same because I lost the biggest and the most important person in my life [my mother…] to COVID.* (Unvaccinated respondent from Alabama)

To address these issues, dialogues and especially one-on-one conversations have the potential to significantly influence vaccine acceptance. While national messaging campaigns and education on the technical aspects of COVID-19 and COVID-19 vaccines can influence individuals' decisions, the importance of trusted voices and the underlying social networks of information that produce widely held opinions cannot be overlooked.[48]

2 Assuming communities of color are homogeneous is a critical error

It may be tempting to imagine that groups, including communities of color, are the same within a single location and also across geographic areas (eg, all Black persons living in Prince George's County face similar challenges or Hispanic/Latino communities in Idaho face the same situations as those in San Diego). However, just as no single message can reach all White individuals, no single messaging campaign is sufficient to reach all Black or Hispanic/Latino individuals in the United States. The same holds true for all other demographic groups. Even tailored, locally appropriate messaging campaigns that reach some or most members of specific communities will not reach everyone.

Common experiences exist…

Economic inequality is a longstanding issue within many communities of color in the United States. In Virginia, for example, 90% of low-income housing residents are Black, although Black persons account for only 19.2% of the state's population.[49] In Idaho, 19% of Hispanic residents live below the poverty line compared to 10% of non-Hispanic White individuals.[50] Even in Prince George's County, the most affluent Black-majority county in the United States, the median income for Black residents is still 8% lower than that of White residents.[51]

Economic inequality, in turn, is strongly associated with a lack of access to healthcare, food and housing insecurity, and other harmful factors. In most cases, the pandemic has worsened these inequalities. Across the United States, Black and Hispanic/Latino individuals have lost their jobs at a higher rate than White individuals and are more likely to have experienced food and housing insecurity as a result.[52]

Similarly, racial inequality—ranging from structural racism (eg, redlining; high rates of policing, prosecution, and conviction of crimes in minority communities; lack of non-English language materials) to overt, interpersonal racism (eg, racial slurs, racial profiling)—continues to harm persons of color.[53,54] In Baltimore, for example, the lack of Spanish-language material limited Latino individuals' abilities to access COVID-19 vaccines. Latino individuals in this area also reported hesitation to attend vaccination events or travel to vaccination sites because of the potential exposure to questions about their immigration status.

Narratives: Racism and COVID-19 vaccination – The stories of Alice, Madison, and ShuWei (Alabama)

Structural racism – "Them's that Got Shall Get"

Alice, a 70-year-old Black woman living alone in a rural Alabama, wanted to be vaccinated. Some of her friends and extended family had contracted COVID-19 and a few of them had died. Her grandson also had the disease, but his case was mild and he recovered quickly. However, the grandson was much younger and healthier than Alice.

The difficult part of getting a vaccine was knowing where to go and making an appointment. The state had put all of this information online, but Alice didn't have a computer and internet reception in the area she lived was spotty at best. Alice was able to learn about the vaccines and vaccine clinic opportunities at church—younger members of her community had pushed for this information to be shared in newspapers, churches, and other forms of communication commonly used in the area—but Alice still needed to sign up for a vaccination appointment using the state's online portal. Her neighbor's niece was finally able to do that. The niece lived in Birmingham and had collected a list of names from her aunt—all people living in that rural area of Alabama that needed vaccination appointments.

In contrast to Alice's experience, the White neighbor of one of the principal investigators shared that she had been told by a family member that vaccination would open up for her age category (60 years and above) in 2 weeks. She then explained how she had immediately gotten online and made vaccination appointments for herself and her spouse. This involved "camping out" on the appointment portal and refreshing her connection at regular intervals until she was able to schedule the appointments.

> *While there was no deliberate attempt to withhold vaccination information from Black residents—who were more likely to live in rural areas and lack online access—the fact that the primary means of communication was closed to them is a product of structural racism, especially when the common characterization of population of color as "hard to reach" is considered. If the means of communication chosen is one that is unavailable to a group because of a lack of resources, knowledge/skill level, or both, then the term "hard to reach" is not only inaccurate, it puts the responsibility for being informed on the audience rather than the communicator. Structural racism considers circumstances of difference as due to the nature of the "others" and posits the "overcoming" of otherness as an extra burden that is secondary to what is "normally" done. The effect, in this case, was unequal vaccine access.*

Overt racism – Policing the line for (some) violators

Madison, a Black University of Alabama graduate student, was eligible to receive COVID-19 vaccines in February/March due to her teaching responsibilities. When she went to receive her vaccine she was explicitly asked "how are you eligible?" After responding she was a graduate teaching assistant (GTA) she was then asked to verify this by showing her student identification. ShuWei, a Taiwanese GTA, had a similar experience. He was asked to prove his status as a student, but his student identification was not enough. The nurse insisted that ShuWei have his supervisor call her to verify his eligibility.

Grace, a White University of Alabama graduate student, did not experience the same gatekeeping behavior when she went to the same site as Madison and ShuWei:

> *I had found out from a source in my department that GTAs were considered eligible… for the vaccine early in February/March. Though I was no longer a teaching assistant, I signed up through the DCH website for the soonest appointment available, February 11. At this time, only those in older age categories and those with underlying conditions were considered eligible, at least that was public knowledge at the time. As I approached the first nurse to check in, they handed me a paper to fill out which asked for basic demographic information and eligibility… it (the form) was not read over or checked or verified by any other staff member after this point.*
>
> *For eligibility, I circled "K-12 Educator" as it was the only option that was semicorrect… my cohort of coworkers had said that they also checked off the same eligibility tab, though it was not technically true for them either. We did work in education, but at the university, which at the time was not listed.*
>
> *While waiting in line to receive my vaccine, I struck up conversation with a nurse. I sheepishly disclosed that I felt like I was "cutting the line" after watching an older woman (who I later was told was 90 years old) get turned away for not having made an appointment. The nurse then joked that I was smart to have jumped (at) the chance of getting the vaccine, regardless of my eligibility.*

For reflection

A critical/skeptical reader might ask, What's the big deal? These are not the accounts of people being denied vaccination. Madison and ShuWei might have had to answer a few more questions, provide a bit more information, or wait a little longer, but they all got vaccinated. By highlighting these instances, you are making a minor inconvenience into a major issue. Best to let this go and keep our eyes on the prize of population immunity. The problem with this attitude, however, is that it minimizes the experiences of Madison and ShuWei and at the same time perpetuates behavior that undermines the trust of communities of color.

In the case of COVID-19 vaccination specifically, this type of racially informed gatekeeping behavior and the structural racism described earlier are barriers that can deter people from being vaccinated and/or strengthen their sense of hesitancy.

> Consider this: How many people who lack broadband access, internet skills, or community members to advocate for more accessible vaccination information stopped pursuing vaccination before word of the no-appointment clinics reached their communities? How many who sought out the no-appointment clinics were deterred by the long lines that were in part comprised of "vaccine tourists"? And, how often did race-informed gatekeeping behavior allow people who were ineligible to be vaccinated because their appearance made them less subject to scrutiny? Or, conversely, how many eligible people were deterred from vaccination by gatekeeping behavior?

Communities were also similar based on their degree of urbanicity. Rural areas in this research (Alabama and Idaho) were further characterized by a lack of employment options, a lack of local infrastructure including mass transportation systems (making travel to vaccination sites problematic), limited primary care services (making vaccination sites more spread out), and, sometimes, a lack of local CBOs.

> *It's difficult for people around here. Not having the ability to get people to drive into town. I had to hire somebody to bring me to town. Some people died because someone transported them, and they got it [COVID]…It's just a lot.* (Respondent from rural Alabama)

On the other hand, rural communities were also more likely to be close knit, where residents tended to know and look out for one another and have a greater sense of shared values (eg, hard work, independence, religious affiliation).

…HOWEVER, differences between and within local communities make them unique

Despite these similarities, important differences also exist between and within communities. Racism, for example, has been experienced in very different ways within Black and Hispanic/Latino communities. In Alabama, Maryland, and Virginia, 400 years of racial hierarchy and systemic deprivation were strong themes. Distrust, rooted in this mistreatment, consequently had significant impacts on people's perceptions of COVID-19 and COVID-19 vaccines (eg, "I don't want to be a guinea pig"). The same sentiments were largely absent from the Hispanic/Latino communities. Instead, language barriers, stigma associated with immigration status, and fear of deportation were commonplace.

Within individual communities, important variations also existed. In Prince George's County, significant economic disparities within the Black population affected where and how people lived, how or if they accessed healthcare, and what information they received about COVID-19 and COVID-19 vaccines (eg, access or no access to online sources of information, different trusted sources of information, and different social networks where diverse opinions were shared). In Idaho, the amount of time spent in the United States led to distinct differences in English proficiency, education, and understanding of the US health system between recent immigrants, immigrants of longer US residence, and the US-born children and grandchildren of both these groups.

In essence, while local participants in this research may have all been Black or Hispanic/Latino persons living in particular geographic areas, they had significantly different characteristics including age, gender, political identity, religious identity, education, and socioeconomic status.

Composite narrative: Generational experiences with COVID-19 – The Martinez family story (Idaho)

It had been such a weird time, probably the longest school year ever, thought Rosa. Her own life hadn't changed much, at least at first. As a senior in college, just about to complete her bachelor's degree in nursing, Rosa was busy with classes and clinical rotations. Most of her classes had been moved online, but the hands-on work in the hospital was still in person. That had been difficult. The ICU was a nightmare. At first, Rosa had been thrilled with the idea of getting vaccinated, being taught how to put on the protective equipment, how to issue the meds—all of it was new and exciting. It remained so until the little local hospital started getting COVID-19 cases. They just kept coming. Some days Rosa worked extra hours. Even though she was still a student, there was so much to be done.

Rosa's mom Ana worked at the local grocery store. There was only one in their small farming town. Every Monday through Friday (and sometimes on the weekends) she'd get up, get Rosa's little brothers and sisters settled, and make sure her oldest son was ready for his online classes. That was a hassle. In addition to managing a sleepy teenager, the internet kept going on and off especially when the wind blew or it was snowing. Afterwards, Ana bundled up, told the kids to study and not fight, and then drove 5 miles to the grocery store where she stood at the cash register for the next 8 hours.

At her work, customers came and went but only a few ever wore masks. Ana was nervous. She became sick around Christmas with COVID-19 and was home all through the holidays, drinking tea, and trying to keep the house together. Then feelings of breathlessness came, usually at night. Her coughing became relentless. She called the local clinic, which was nearly 20 miles away, but they told her to call back if she couldn't breathe at all. So Ana stayed home. If she survived, she swore to herself, she'd get the vaccine the first opportunity she had. Her husband made fun of her for this—"It's just the flu, you'll feel better soon," he told her. What would he know, Ana thought. He was out driving trucks or working in the big garage at the potato plant. His employer said he had to get the vaccine, so he did, but he kept grumbling about it, even so.

It was his family in northern Mexico that was having a really hard time. Grandparents, uncles, and aunts got sick and couldn't work. They asked their relatives in Idaho to send money. The military wouldn't let them leave their houses, they said, and there wasn't any work, and they really needed food and medicine. Ana and her husband tried to keep the details of these calls from their younger children, but it was like they were living in 2 countries at the same time. They felt helpless.

> Everyone, except for Rosa's abuela, that is. Grandma had come to Idaho after Rosa's mom and dad had moved there. She only spoke Spanish. She enjoyed Spanish radio and was devoutly religious. Whenever Rosa got depressed, she would sneak into abuela's room at the back of the trailer her family lived in and tell her what she'd seen at the hospital that day. Grandma would listen then reassure Rosa that God would watch over her. Then grandma would brush Rosa's hair like she used to when Rosa was little.
>
> It must have been late March when Rosa noticed her grandma wasn't doing well. She had a cough that you could hear through the whole trailer. Rosa had gone in early that morning to see her grandma before she left for a clinical rotation at the hospital. "Call the ambulance!" she'd shrieked to her mom. She climbed into the back of the rig with her grandma as the paramedics loaded her in, she knew them and they said it was ok. Nearly an hour later, the ambulance finally arrived at the hospital. Rosa was left in the waiting room, waiting for her family to make it over the icy roads. She wasn't sure if her grandma would make it and couldn't imagine what life would be like if she didn't.

It is also important to note that in most communities multiple racial/ethnic groups are present. This can be problematic when the most populous minority group receives the most attention. In California, for example, where Hispanic/Latino persons were the majority, the local health department was very aware of the need for communications in Spanish. Their entire website was available in Spanish prior to the pandemic, and they had multilingual staff on hand to handle Spanish-language communication efforts when the pandemic began.

In Baltimore, however, where Latinos account for only 5.5% of the local population,[55] the city health department was ill-equipped to engage Latino residents. No materials (online or print) were available in Spanish prior to the pandemic and only 2 Spanish-speaking persons were employed by the health department. It was only through the efforts of community-based organizations, including Centro SOL (the Center for Salud/ Health Opportunities for Latinos), that Spanish-language health communications were made available.

3 Hyperlocal responses to the pandemic result in better health outcomes

Seven months into the vaccine rollout, most adults who were receptive to national messaging campaigns have been reached. Remaining pockets of hesitancy and issues of access are now best addressed at local levels, where experiences with COVID-19, concerns about COVID-19 vaccines, and the impact of socioeconomic and cultural variables can be properly understood and acted upon in context using locally feasible solutions from trusted sources.

Community led, organized, and advocated measures have closed COVID-19 response gaps

Community partnerships have been used with great success throughout the pandemic. In the Mission District of San Francisco, for example, the Latino Task Force was instrumental in organizing a community hub for food distribution and other wraparound services.[56] In an alliance with Unidos en Salud, the University of California San Francisco, and the public health department, representatives of these organizations went door-to-door to promote COVID-19 testing, which resulted in 4,200 COVID-19 tests conducted in 4 days, with 70,000 tests overall, and provided a platform for the community's eventual vaccination efforts.[57,58] By late June, 67% of the Hispanic/Latino population in San Francisco had been vaccinated.[59]

Similar efforts have taken place in the CommuniVax research areas. In Alabama, the local team became concerned with the implementation of the Federal Retail Pharmacy Program and what reliance on partnerships with Walmart, and later CVS, would mean in poor, rural counties with sparse retail infrastructure. To address this issue, the local CommuniVax team produced GIS maps showing the concentration of partner pharmacy locations with respect to the proportion of Black residents in each county. The maps, which provided a clear picture of sparse vaccine access in rural, predominantly Black communities, were then shared with a concerned and influential community advocate, who leveraged his political and social capital to encourage state leadership to take a proactive approach to access issue. As a result, the state utilized the National Guard to distribute vaccines in areas the maps indicated had few pharmacy locations.

In Idaho, team members worked closely with the district-level health department, meeting with them every 2 weeks. This communication was essential to producing quick solutions to problems like distrust of the vaccination process on the part of undocumented individuals. In relation to this specific concern, once the local team explained this issue, the health department immediately revised its messaging to assure community members that documentation status would not be requested when individuals came to vaccination appointments. Further, the health department developed a partnership with Idaho State University—the state's designated lead institution in health professions. This community–university partnership significantly strengthened the region's ability to respond to the pandemic and distribute vaccines despite a severely underfunded public health system.

Of course, without continuous funding to support community-led efforts, such efforts are merely temporary solutions for gaps in public health funding. They are limited to the funding period or to the length of a leader's involvement.[60] The ebb and flow of community partnerships, and the lack of consistency in public health funding generally, has led to the situations that have eroded trust within the communities of color in this research, as well as other communities across the United States.[61]

Vaccination moves at the speed of public trust

For many communities of color in the United States today trust is the key to public health engagement.[62,63] Education campaigns, national messaging efforts, and pleas from public officials are of limited use when trust in the information, the messengers, and/or the system is lacking.

In the scope of the CommuniVax project, some communities and individuals were willing to engage with vaccination efforts, when they would not otherwise have done so, because they trusted the individuals involved—like the barbers and hair stylists in Prince George's County and the *promotores* in Idaho and California. These persons were local, or had longstanding local connections, and had shown themselves to be reliable and respectful—traits needed for individuals and organizations involved in local efforts to promote COVID-19 vaccination.

Narrative: Genuine Community Engagement – A View from the Virginia Team Lead, Andy Plunk

Since 2016, our team of Black and non-Hispanic White researchers has collaborated on several projects with a community advisory board (CAB) comprised of Black low-income housing residents from Norfolk, Virginia. During that time, I experienced what doing genuine community engagement and being a trustworthy collaborator entail.

Early in the pandemic, the team realized that COVID-19 would disrupt our community engagement activities. We wanted to move the meetings online but recognized most members of our CAB did not have personal computers. We quickly ordered tablet computers with webcams and unlimited data. Once our virtual meetings began it was clear a digital divide still existed, so we refined our approach and provided basic digital literacy training to everyone who worked with us.

This investment in our partners—a first step to community capacity building—paid off. We tripled the size of the CAB and expanded it to include low-income housing residents from each of the 7 cities in our region. The CAB also became an important barometer for the community impacts of COVID-19. We found out about emerging issues before they were reported in the news media or captured in opinion polls.

Our community partners trusted us, but this trust was fragile. The Johnson & Johnson vaccine pause was enough to damage it. Even before the pause, our CAB members were unwilling to discuss COVID-19 vaccines as a group. Consequently we had introduced breakout sessions where people were split into "pro," "hesitant," and "anti" vaccine groups. The number of participants in each group were almost equal at that time. After the pause the "hesitant" and "anti" groups merged, and several CAB members reported cancelling their vaccination appointments.

But this was not the only effect. Our community partners in the CAB had been willing to work with us to promote vaccination in their communities, even when they were personally more ambivalent about the vaccines, and even when they considered other issues, like the emerging mental health crisis, as far more pressing. They had trusted us, and we had trusted the science. We had not appreciated what a leap of faith this required on our partners' parts. The pause validated their initial concerned. They felt betrayed. And our relationship began to erode.

To stop the damage, we chose to have a frank discussion about our goals and be transparent about what we knew and what we did not. As the academic team leader, I reiterated that one of my goals is to increase vaccine coverage in their communities. I also told them we remain deeply committed to addressing other health inequities and asked whether they were willing to partner with us to address all these issues. The CAB emphatically agreed. Since then, we no longer discuss COVID-19 at every meeting and give equal attention to other community concerns. When we do bring up vaccination, everyone makes a good faith effort to participate and willingly gives feedback. Our relationship with the CAB has never been stronger.

Recommendations

The research findings mentioned present a frontline view of the dynamic COVID-19 vaccination campaign—one that continues to evolve and include new challenges like expanding vaccination to children and potentially providing booster doses to already vaccinated individuals. Drawing from these insights and looking ahead, we recommend 2 differently paced streams of activity for local, state, and federal officials, with the theme of community trust braiding them together. *Urgent actions*, to be taken immediately, can facilitate broader COVID-19 vaccine coverage in Black and Hispanic/Latino communities. *Essential actions*, to be executed steadily, can drive systems-level changes that lead to greater health equity (Table 2).

Table 2. Summary of CommuniVax Recommendations to Carry Equity in COVID-19 Vaccination Forward (July 2021)

URGENT ACTIONS – *Immediately* improve vaccine coverage in underserved communities		
1. Humanize Delivery and Communication Strategies for COVID-19 Vaccines		
Actors	Actions	Outcomes/Impacts
Hospitals/Health Systems STLT Health Departments	**Let CBOs, FBOs, and CHWs lead** in diagnosing low vaccine coverage and developing interventions; simultaneously develop individuals' skills and organizational capacities. Prioritize the local use of ARPA and other emergency response funds for this purpose. Employ CHWs for regular community health needs assessments. Commit to co-creating health activities beyond COVID-19 (eg, curbing high rates of diabetes, heart disease, obesity).	• Broader vaccine coverage in groups with high rates of COVID-19 cases, hospitalizations, and deaths. • Ongoing, consistent delivery of services that improve the health and wellbeing of underserved populations. • Repair for structural and interpersonal racism experienced with medical, public health, and governmental systems.
	Bring vaccines to the people thus removing major access barriers. Conduct door-to-door vaccination, stage mobile clinics, offer vaccines at workplaces, and use community locations that people feel are familiar, convenient, and safe.	
	Put personal choice in its social context, aware that individuals do not make decisions alone. Prompt community conversations via culturally relevant, multilingual vaccine communications – go in person,	

	on air, and on screen. Offer options: people may refuse a specific vaccine and still want to get vaccinated with another.	
2. Anchor COVID-19 Vaccination for Hard-Hit Areas in a Holistic Recovery Process		
Actors/Sectors	Actions	Outcomes/Impacts
Governor/County Executive/ Mayor Public Health Mental Health Emergency Management Public Safety Primary Care Community Health Social Services Economic Development Education Business/Financial Leaders VOAD Nonprofit/Civic Organizations CBOs/FBOs Media	**Enable the recovery of whole persons** by providing vaccinations alongside other critically needed goods and services. Co-design vaccination sites as resource "hubs" with FBOs, CBOs, and CHWs to meet other human needs and multiply benefits of every vaccination encounter. Motivate hospitals to provide community benefit beyond COVID-19 response and partner broadly for preparedness. **Stand up a long-term recovery and community resilience organization**, applying a "health-in-all policies" approach. Engage existing data-driven coordinating bodies that already facilitate long-range planning (eg, disaster recovery, economic development). Consult diverse stakeholders and communicate broadly about pandemic recovery so those with the greatest losses can take part in decision making that is relevant to their lives.	• Enhanced health and wellness among the worst-off survivors of the pandemic. • More trust in health and governmental systems that prove themselves as trustworthy by caring about whole persons, not just vaccination rates. • Advances in the social determinants of health, that enhance the quality of life and strengthen community resilience to extreme events.
ESSENTIAL ACTIONS – *Steadily* drive systems-level changes that advance health equity		
3. Develop a National Immunization Program to Protect People Throughout the Life Course		
Actors	Actions	Outcomes/Impacts
Congress HHS/CMS/CDC State Legislatures STLT Health Departments	Capitalize on the COVID-19 vaccination moment to **develop a national immunization program to protect people throughout the life course**. Reconfigure funding systems to support a life-course (versus childhood-only) approach to immunization, integrate adult immunization with other health systems and priorities, and develop systems to monitor progress and impacts.	• Broader coverage for COVID-19 vaccines and 13 other vaccines urged for some or all adults. • Improved immunization rates for adults of color now trailing those for White adults.

4. Rebuild the Public Health Infrastructure, Properly Staffing It for Community Engagement		
Actors	Actions	Outcomes/Impacts
Congress HHS/CDC State Legislatures STLT Health Departments STLT Human Resource Systems	**Level out "boom and bust" funding** of the public health system. Transition to strategy of core federal support of $4.5 billion per year for a public health infrastructure fund, complemented by sustained and sufficient state and local funding for their own public health agencies.	• Capacity to respond to emergencies and to address prevalent health challenges (eg, diabetes) affecting communities of color in greater numbers. • Innovations in practice, culturally competent services, and strategies for social determinants. • Capacity to practice authentic community engagement and demonstrate trustworthiness.
	Mirror the communities being served by promoting equity among all ranks of the public health workforce, including state and local departments as well as boards of health.	
	Strengthen human-centric competencies. Develop and sustain a social and community proficient workforce—eg, health educators and promoters, risk communication specialists, language translators, social media strategists, social and behavioral researchers.	
5. Stabilize the Community Health System as the Backbone for Equity and Resilience		
Actors	Actions	Outcomes/Impacts
Congress HHS/CMS/CDC State Legislatures State Medicaid Administrators STLT Health Departments STLT Human Resource Systems	**Formalize and finance the community health workforce.** Develop and sustainably fund the CHW workforce via Medicaid benefits, increased FMAP, competency-based training, good career path, competitive job packages, certification or registry processes. Establish new, fully fledged and funded local community health departments.	• Prioritization of disease prevention and health promotion, leading to better health outcomes. • Improvements in the social conditions of health and the eradication of racist policies and practices. • Communities' control over the trajectories of their own health and wellness.
	Grant funds to CBOs, FBOs, and CHW-led organizations directly to acknowledge their deep social assets and community organizing abilities. Adapt funding processes and eligibility criteria to create an environment where communities with the greatest need benefit from funding first.	

Abbreviations: ARPA, American Rescue Plan Act; CBO, community-based organization; CDC, US Centers for Disease Control and Prevention; CHW, community health worker; CMS, Centers for Medicare and Medicaid Services; FBO, faith-based organization; FMAP, Federal Medical Assistance Percentages; HHS, US Department of Health and Human Services; STLT, state, territorial, local and tribal; VOAD, Voluntary Organizations Active in Disaster.

1 Humanize delivery and communication strategies for COVID-19 vaccines

To reverse the COVID-19 vaccination campaign's current slowdown and persistent unevenness in vaccine coverage, it should incorporate more peer-led and neighborhood-based opportunities for community conversation and for convenient vaccine access, as epitomized by Mr. Greg Cradle's barber shop. Further gains in vaccine coverage, especially within Black and Hispanic/Latino communities, require that COVID-19 vaccination implementers reset expectations about campaign objectives, how to achieve them, and by what deadline. The initial strategy of using mass media messages and mass vaccination sites to achieve population immunity as quickly as possible had limited success among persons of color, especially those with limited means. Vaccine communication and delivery strategies to obtain expedient results must now give way to those capable of generating enduring community trust.

Let CBOs, FBOs, and CHWs co-lead diagnosing low vaccine coverage and developing interventions

Health systems and health departments should develop and/or strengthen their collaborations with CBOs, FBOs, and CHW groups, and importantly, commit to these relationships so they are sustained even after the COVID-19 pandemic ends. Due to common roots and longstanding trusted relationships in communities, these groups are uniquely able to identify concerns, design workarounds for access barriers, and point out neighborhood locations that can give vaccination a more trusted presence.

An appropriate local use of American Rescue Plan Act dollars is to employ community health organizations and workers to co-develop appropriate "diagnostics" to determine reasons for low vaccine uptake and develop protocols to address problems identified. This critical knowledge could inform the co-development of novel systems to advance vaccination coverage well beyond the pandemic.

At the same time, this activity could build on an existing, or jumpstart a new, community health needs assessment (CHNA)—an accreditation requirement for local public health agencies and an Affordable Care Act mandate for critical access hospitals, which is conducted every 3 years.[64] Typically, after a CHNA is completed, an implementation or improvement plan is enacted to address unmet community needs. The CHNA should be integrated into the community's general/comprehensive plan and referenced in the hazard mitigation and safety elements of the general plan. This would assure an explicit link into the daily planning of the jurisdiction and protect against the isolation of critical public health and community health matters.

Moreover, because COVID-19 vaccination coverage within marginalized populations is an immediate need, all hospitals, regardless where they are in the 3-year CHNA cycle, should reset the planning clock. In collaboration with community partners, they should immediately and urgently renew their CHNA, incorporating actions outlined in the report.

When co-developing a ground-level COVID-19 vaccination campaign with CBOs, FBOs, and CHWs, health departments and health systems should simultaneously work to strengthen individual and community capacity over the long run. Supporting CHW skills development in computing and online facilitation, for instance, could enable the co-creation of innovative health communication strategies that can complement traditional communication channels like in-person meetings.[65] As the team working with Hampton Roads (Virginia) residents can affirm, genuine community engagement involves actions, not just words; the team proved themselves as trustworthy partners by investing in community-held technology, sharing knowledge of vaccine science, and prioritizing the community's own concerns.

CBOs, FBOs, and CHWs have insights into community issues that political leaders, health officials, and hospital executives may not be aware of. The current administration and US Immigration and Customs Enforcement, for instance, have officially stated that enforcement activities will not occur at or near vaccine distribution sites or clinics.[66] Yet, regardless of policy pronouncements, deportation fears still run deep, as the California, Idaho, and Maryland teams' data show. To create a vaccination encounter that feels safe, trusted Hispanic/Latino-serving organizations could co-host a vaccine clinic with a hospital, pharmacy, and/or health agency and employ *promotores* to reassure people that proof of identification is not a requirement.

Bring vaccines to the people

Hospitals, health systems, health departments, pharmacies, and other COVID-19 vaccination campaign implementers should leave their facilities and/or centralized clinics and prepare to deliver vaccines at local sites that CBOs, FBOs, and CHWs identify and help staff. Such places should be familiar, convenient, and feel safe to underserved populations—including places where they live, work, shop, play, and worship.[67]

Access to COVID-19 vaccines remains one of the primary reasons for low vaccine coverage in the United States, especially where poverty is prevalent or critical infrastructure like transportation, broadband access, and public health staffing is lacking. Though less noticeable, this is also true for impoverished individuals living in more affluent areas.

A person's lack of vaccination is often an external reality, rather than a perceived "moral failure" of being hesitant or noncompliant. Less obvious access barriers include the inability to access vaccination clinic business hours due to employment obligations or to travel to a vaccination site due to a lack of reliable transportation.

Meeting people where they are—meaning, understanding their context and circumstances and adapting public health interventions accordingly—can solve these kinds of problems. Solutions to make vaccines more accessible can take many forms including door-to-door vaccination efforts, mobile clinics, vaccination sites in locations community members often frequent (eg, places of worship, barber shops, grocery stores, community centers), and workplaces.

In Idaho, migrant farm workers were able to receive COVID-19 vaccines at the farms that employed them. The agricultural work often took place 6 or 7 days a week for most of the day, preventing farm workers from accessing vaccines at any other place. Recognizing this issue, local clinics, pharmacies, the region's university, and the local health department partnered with the farmers to bring vaccines to the farms themselves, leading to high rates of vaccination among the farm worker population in the area.

Put personal choice in its social context

Groups and people communicating about COVID-19 vaccination should target as many social settings as possible—in person, on air, and on screen—to create multiple opportunities that prompt peer-to-peer conversations about vaccines. Local data show that individuals do not make decisions on their own, even if they make the final decision about getting the vaccine.

Vaccination decision making is highly interpersonal: people want to talk about vaccines with people whom they trust, ask questions in their own language, and feel as if they are being listened to rather than judged. They also prefer to engage in dialogue rather than sit for a lecture, check in with the other people in their lives, and take the time they need to weigh information, some of it potentially competing or conflicting. Social relationships, too, are not confined by geographic proximity. Many individuals in Idaho, for example, rely on family members and friends in Mexico to get information and to help them make choices about vaccination.

It is also important to consider the issue of vaccine choice. Seven months into a highly scrutinized vaccination campaign, many individuals have strong preferences for or against certain vaccines. Some Black residents in Prince George's County, Maryland, and in Hampton Roads, Virginia, for instance, rebuffed the Johnson & Johnson vaccine largely because the single-dose countermeasure—billed as good for "hard to reach" populations—demeaned people like them. Similarly, early public health talk about using leftover vaccines to avoid waste left the impression in some Hispanic/Latino communities, for example, that the quality of the leftovers might be less.

To facilitate uptake, it is best to accommodate concerns about a specific vaccine by offering vaccine options. This will prevent missed vaccination opportunities due to someone refusing a vaccine because of the type offered, not because they are wholly opposed to being vaccinated. Given their ongoing community conversations, CHWs can serve as a feedback loop to health authorities on such preferences and serve as a trusted local source of information on all vaccine types to undecided individuals.

2 Anchor COVID-19 vaccination for hard-hit areas in a holistic recovery process

With COVID-19 vaccination as a first step, leaders should launch a deliberate process for recovery from this pandemic that has disproportionately harmed vulnerable communities and individuals.

Vaccines are often presented as the way to restart the economy and get back to "normal." However, a normal life for many Black and Hispanic/Latino individuals, especially those considered essential workers, is what put them at particular risk from COVID-19's economic, physical, and psychological effects in the first place.

> *What is normal, like, you know? [M]y student debt is still active, even though it's been suspended. And if COVID ends tomorrow I'm still owing that money. And there's people who still owe months of rent; they just can't get evicted. It's just like, what is normal? [T]here's so much focus and emphasis on going back to normal.... And I don't want normal to be something that we kind of had struggles in our community and just kind of like accepting them.... [We can't] just accept certain disparities and stuff like that just for the sake of feeling, you know, just for the sake of forgetting that COVID happened.* (Respondent from California)

This acute situation demands moving beyond conventional approaches to vaccination to include a deliberate focus on, and plan for, recovery. Immunization against the SARS-CoV-2 virus, for example, does not provide protection against future disasters for many of the Hispanic farm laborers in southeastern Idaho who have few options for obtaining health insurance, especially if they are undocumented.

Apply a whole person model of recovery

Public agencies, hospitals and health systems, nonprofit social service providers, CBOs, FBOs, and CHWs should align themselves around a "whole person" model of recovery to meet underserved communities' self-identified needs and to multiply the benefits of each vaccination encounter.[68,69] Vaccines cannot stand on their own as an intervention to stop COVID-19's direct and indirect effects.

Despite a spotlight on low vaccine coverage, many Black and Hispanic/Latino persons require comprehensive support to help their recovery. COVID-19 vaccinations and/or culturally and linguistically appropriate information about them, should be provided alongside other critical goods and services, such as food, housing, and job opportunities.[67] This type of wraparound service approach provides the sense of safety and security that is essential for informed health decision making. Vaccination sites could be resource centers, or hubs, in partnership with CBO and FBO staff to provide holistic support.

As part of any clinical vaccination visit, practitioners should link underserved individuals to other parts of the healthcare and social service systems that could benefit them, such as chronic disease follow up. CHWs can be an integral part of this support. Care for the whole person, for example, is precisely what the partnership between Idaho State University's Bengal Pharmacy and the Idaho Vaccination Coalition intends to provide. Over the next 2 years, they will bring single-dose COVID-19 vaccines to 2,000 people in underserved groups along with screenings for other diseases and health education opportunities.

Apart from the kind of recovery support provided and by whom, it is crucial to identify where such support will take place. Policymakers at all levels should foster health systems' willingness to adopt an extension model, that is, to make longer-term and relatively low-cost investments of consistent time in community sites (eg, churches, barber shops, neighborhood grocery stores). There, providers could address chronic diseases, make flu vaccines available, provide stress management resources, make referrals to mental health services, and promote disaster resilience. This extension work could fulfill the Internal Revenue Service's requirement for nonprofit hospitals to provide community benefit.[70]

Moreover, the Emergency Preparedness Rule issued from the Centers for Medicare & Medicaid Services (CMS) requires all CMS providers and suppliers to meet specific preparedness criteria, including working in collaboration with other community partners.[71] If funding is associated with the CMS preparedness rule that requires community engagement, then mechanisms could be explored that share the incentive with the community, or the CMS conditions of participation for healthcare entities could be used to incentivize more outreach to community partners.[72]

Stand up a long-term recovery and community resilience organization

State and local jurisdictions should immediately take steps to plan for a process of short-, intermediate-, and long-term recovery and community resilience. The COVID-19 pandemic—which has revealed deficiencies in public health capacity, healthcare delivery, the social safety net, and other core community functions—is an opportunity for visionary leadership, goal setting, and transformation.[73] After a disaster, quickly returning to normal is a common impulse; however, it should be tempered by the aspiration for more community safety, equity, and quality of life.[74,75]

Political leaders should convene a cross-sector council of stakeholders—including Black and Hispanic/Latino leaders and community organizations—who can apply a whole-of-community, whole-of-government approach for managing the pandemic's recovery phase.[62,76] These leaders should also include existing data-driven coordinating bodies that facilitate disaster recovery and other long-range planning (eg, economic development, community development).[77] In planning for pandemic recovery and community resilience, state and local jurisdictions do not need to start from nothing; they should draw on policy guidance, toolkits, case examples, sample plans, and governance frameworks from groups that include the Federal Emergency Management

Agency, US Environmental Protection Agency, United Way, National Voluntary Organizations Active in Disaster, and American Planning Association.[78-82]

Consulting diverse stakeholders and communicating broadly about pandemic recovery is essential so that city and state residents—especially those who have suffered the greatest losses—can take part in decision making that is relevant to their lives. Based on best practices in disaster recovery planning, elements of an effective organization for pandemic recovery include an authorizing and approving body; planning leadership in the form of a lead planning agency or official and a planning task force; planning development enabled by specialists in planning, information and data management, and communication and public involvement; and public and stakeholder involvement.[77]

A health-in-all-policies approach is also needed, first to identify and then to plan for how to address the pandemic's myriad impacts including psychological trauma, lingering medical needs, economic displacement, housing uncertainty, food insecurity, and disrupted educations. Among sectors to include are public health, mental health, emergency management, public safety, primary care, social services, community health, economic development, kindergarten through grade 12 education, colleges and universities, and private industry. Second, a health-in-all-policies approach will ensure that the diverse entities with responsibility for the social determinants of health can work together on strategies to strengthen resilience among communities of color and prevent disproportionate losses in future health crises.

For the foreseeable future, an organizing question for major projects at local and state levels should be, "How do these activities contribute to making the communities and individuals affected by COVID-19 whole?" In Idaho, a pandemic recovery/community revitalization process that closes public transportation gaps could ensure better access to all services, not just those related to vaccines. In Virginia, a national high-speed internet infrastructure that provides free access to all could be the foundation for systems that regularly connect residents with health systems and health departments. It could also provide critical digital resources that expand the classroom environment and improve access to educational opportunities.

Develop a national immunization program to protect people throughout the life course

COVID-19 vaccination provides an ideal opportunity to develop a national immunization program that would not only bolster coverage of COVID-19 vaccines but also the 13 other vaccines recommended for some or all adults by the Advisory Committee on Immunization Practices. For most vaccines, immunization rates for racial/ethnic adults are far below those of White adults.[83]

A clear precedent for establishing a national immunization program while attempting to control an epidemic exists: the Vaccines for Children Program.[84]

Efforts to Eliminate Measles Led to the Establishment of the US National Childhood Immunization Program, but an Infrastructure Gap for Adults Remains

Measles elimination efforts were initiated in the 1960s, shortly after the establishment of the CDC's Public Health Service Section 317 Immunization Grants Program ("Act 317") provided funding for state and local immunization efforts.[84] This initiative combined the provision of robust routine vaccination in infants and school-aged children with other interventions, such as epidemic control and surveillance. While the visibility and success of these initial efforts fluctuated over the next decades, the measles elimination program jumpstarted a national program to support immunization for *all* childhood vaccines, rather than measles alone.

By the early 1990s, discussions about achieving measles elimination led to creation of the National Vaccine Program, which formalized national immunization efforts for children at the federal level and laid out the infrastructure needed to support it. Congress-enabled funds from Act 317 were allocated to the national program to support vaccine delivery, expand insurance coverage of childhood vaccines, bolster the use of immunization coalitions at the state and local levels to foster policy advocacy, and establish standards of practice. To bolster the vulnerable systems financing the national immunization program, the Vaccines for Children (VFC) Program was created.

Funded by Medicaid, the VFC program covered the cost of childhood vaccines for approximately 40% of the birth cohort who otherwise would not have received free immunizations at their primary care providers' offices, thus ensuring that vaccine access was equitable and would reach children at all income levels. Furthermore, medical practices participating in the VFC network agreed to annual visits by VFC representatives. This built an effective interface between providers and public health officials. By supporting surveys that assess immunization coverage in children nationwide, the program also ensured that critical benchmarks of coverage were met.

Without a national immunization program for adults, the ability for adults to get vaccinated free of charge can vary widely according to each state's Medicaid program, and no single system exists to monitor adult immunization coverage or support progress. State Medicaid programs provide some level of adult immunization coverage, but only about 43% cover all 13 Advisory Committee on Immunization Practices-recommended vaccines for adults.[85] Even with the Affordable Care Act, major gaps still exist in what vaccines are covered and what level of compensation providers are given, making the provision of certain vaccines—especially newer, more expensive ones—less financially sustainable. There are also gaps in how Act 317 funds can be used for privately insured individuals or for undocumented migrants hesitant to reveal their insurance status.[86] Adults are covered under the National Vaccine Injury Compensation program, but only for vaccines also administered to children.

While individuals need vaccination throughout their lives, routine immunization in the United States centers largely around children, and generally, vaccination coverage of adults is much lower.[87,88] Barriers that have hindered adult immunization coverage include no clear funding channel to support equitable access, a fragmented adult healthcare system, a lack of integration of adult immunization with other health priorities, the absence of methods and infrastructure to monitor the progress and

impact of adult vaccination efforts, limited evidence quantifying the benefits and impacts of adult immunization, hesitancy and lack of awareness, and access issues in the adult population.[89]

A national immunization program to protect people throughout the life course would support disease prevention, particularly COVID-19, influenza, and pneumococcal disease,[90,91] throughout the US population. Establishing such a program will require clear, objective benchmarks and indicators; accountability mechanisms to maintain transparency, ensure equitable progress, sustain political support, and address vaccine safety concerns; and activities that promote vaccination's benefits across the life course and the need to protect self and others, thus normalizing the need for vaccination into adulthood. Moreover, a firewall between systems that gather health information and systems that enforce immigration policies—and broad public communication of this arrangement—will be needed to help counteract the fear of deportation, which can impede access to health services like immunization.

4 Rebuild the public health infrastructure, properly staffing it for community engagement

To have the greatest impact on community health, the public health workforce should be sustainably resourced, demographically representative, and practiced at authentic community engagement. A scarcity of Spanish-speaking contact tracers and operators for the 211-based COVID-19 hotline in Baltimore—where the Latino community has been the fastest growing ethnic group in the city for decades—is a clear example of the deficits in the US public health system. In this case, community groups were able to bridge the language and cultural gaps. The Baltimore city health department is now partnering with these organizations. Collaborations like these—where the health department's mission and the community group's goals merge—can be very powerful.

Level out "boom and bust" funding

Political leaders at all levels—local, state, and federal—should allocate steady core funding for the public health infrastructure, sustaining its capacity to respond effectively to future emergencies and to address prevalent health challenges like diabetes, heart disease, and asthma that affect communities of color in greater numbers.[92-94]

Prior to the COVID-19 pandemic, the public health workforce was already in crisis due to chronic underfunding and reliance on project- and grant-based funding to compensate for dwindling or stagnant core support from state budgets, including those under both Republican and Democrat control.[95-97] In the wake of the 2008 recession, local and state health departments lost more than 20% of their workforce capacity.[98] From 2009 to 2012, at least 4 out of every 10 local health departments reported lower budgets compared to the previous year.[99] In fiscal year 2020, 7 state health departments reduced public health funding, despite the advent of a "once-in-a-century" pandemic.[100] While the United States spent $3.8 trillion on health in 2019, only 2.9% was targeted to public health and prevention.[100]

Congress should facilitate the nation's investment in a mandatory $4.5 billion-per-year public health infrastructure fund to ensure a predictable minimum capacity at local, territorial, state, and tribal levels.[92-94] This dependable core support will ensure the ability of public health agencies to provide effective services during steady state periods and to coordinate their jurisdictions' effective response to emergencies.

This ongoing, fundamental support should quickly follow short-term investments made through the COVID-19 emergency supplemental funding. If it is not provided, then the feared and well-established "neglect-panic-repeat" cycle of support for the public health infrastructure will continue and trust, particularly within racial/ethnic communities will erode even further.[97,100,101]

> *In the 25 years I've worked in public health, there have now been 3 instances where a chronically underfunded and underresourced public health system, all of a sudden, just has money being thrown at it. Like more money than we can reasonably spend in an appropriate way. And that was after the anthrax and terrorist threats in 2001, it was H1N1 in 2009 and now.*
>
> *But the reality is our resources are so stretched in the 'in-between times' that we [...] I would love to have a public health nurse and a community health worker in every office, but we don't have the resources for that. So, "Roberta" covers 2 offices, plus our nurse manager. "Shayna" is covering multiple offices and helping to administer big contracts like our title 10 contract.*
>
> *So, I think being able to put into place personnel resources that are there consistently to build that trust especially in smaller communities but also those people that we put into place reflect the population.* (Public health official, Idaho)

At the same time, state and local officials should fulfill their responsibility to provide steadfast support to the agencies that protect the health of their populations. They should fully and consistently fund their health departments, disavowing short-sighted budget cuts that have previously diminished core organizational capacities, often beginning with community engagement.[60-102] Prince George's County's investment in health and human services, for instance, has been deficient historically, especially for a county that has a majority–minority composition (ie, a large racial/ethnic population) and that is second only to Baltimore city in health disparities.[51]

State and local authorities, too, should sustain support the emergency preparedness and response function of public health, which, in certain cases, has been cut with the rationale that federal grant funding can make up shortfalls in jurisdictional budgets and/or that emergency preparedness and response is less of a priority than other public health functions.[103,104]

Mirror the communities being served

To improve health in low-income communities, it is essential that health departments commit to the strategic goal of promoting equity in their ranks at every level, including its board of health.

As a meaningful first step, public health agencies should implement a workforce development strategy to assess diversity within their labor force, address recruitment and retention issues that disproportionately affect people of color, and provide workplace training in cultural competency to foster a supportive work environment.[105-107] An increasingly diverse nation with persistent health disparities urgently requires greater parity in public health workforce composition.[105] A public health workforce composed of people with diverse experiences and perspectives creates the right conditions for innovations in practice, culturally competent services, and an equity lens that elevates the need to address the social determinants of health.[105-108]

Unless deliberate steps are taken, the public health workforce and the rest of the nation will be out of sync. The US Census Bureau projects that the non-Hispanic White population will shrink over coming decades, from 199 million in 2020 to 179 million people in 2060, although the US population will continue to grow.[109] Based on these projections, the nation will become "minority White" (49.7%) in 2045.[110] A 2017 snapshot indicates that racial/ethnic populations comprise 42% of the governmental public health workforce, with variations across federal (45%), state (36%), and local (42%) levels that ranged from 68% in big city health departments to 36% in other local health departments.[105]

In tandem with issues of representativeness, however, is the matter of authority. At state and local health departments, people of color hold a majority of clerical and administrative positions. Non-Hispanic White individuals hold a disproportionate number of public health science positions in state and big city health departments, as well as supervisory, managerial, or executive positions.[106] Public health leaders, most of whom are also non-Hispanic White individuals, make resource allocation decisions, influence stakeholder engagement, and determine whether and how community-based input is used.[111] This type of leadership composition is one factor that facilitates health departments overlooking key and critical issues facing racial/ethnic populations.

Strengthen human-centric competencies

When rebuilding the public health infrastructure, it is critical to develop and sustain support for a workforce of social and community proficient professionals, such as health educators and promoters, risk communication specialists, language translators, social media strategists, and social and behavioral researchers. Their numbers and compensation should be commensurate with their critical contributions to the health of low-income communities of color. Fortunately, many schools of public health already have both community health and health resource management education tracks. It is important that the attributes expressed here be incorporated in the composition and training of future public health practitioners.

When genuinely engaged with community members, public health and safety authorities see themselves as working *with*, rather than *on behalf of* populations. They also confer upon community members both respect and responsibility as collaborators who are charge of their own wellbeing.[112,113] The local health departments most able to ensure that their approaches to health emergency management are attuned to local conditions, are culturally competent, and are considered socially acceptable share certain organizational traits. Those traits include top leadership that elevates community collaboration and supports a formal policy of community engagement; a professional culture that affirms collaborating with the community as a constant practice and not a "one-off" activity; and, a cohort of skilled staff who can expend steadily the face time and follow through necessary to foster trusting relationships with grassroots organizations and underserved groups.[60,102,114,115]

Strengthening the numbers of public health positions that employ human-centric perspectives and people-oriented skills, including those developed through strong health education and promotion training, will be as equally critical to updating the public health workforce as will be recruiting for positions that use data-driven skills such as informatics, epidemiology, and laboratory science.

5 Stabilize the community health system as the backbone for equity and resilience

Racial disparities in rates of COVID-19 infection and deaths have brought renewed awareness of glaring health inequities in the United States, and in the labor force uniquely suited to help repair both: CHWs.[65,116,117] Federal, state, and local leaders should take steps to fortify the country's community health system that is constituted by CHWs and the community organizations that typically employ them. Currently, this system is vastly underdeveloped due to funding systems that prioritize curative services over disease prevention and health promotion, mainstream health models that disaggregate individual illness from social determinants, and hierarchies that elevate professional and medical authority over community voices.[118] This must change.

Formalize and finance the community health workforce

With roots in the communities they serve, CHWs—like the *promotores* in Idaho and California—have the capacity to harness shared experiences to build trust with community members, navigate health and human services systems, bridge client and provider cultures to adapt service delivery, and advocate on behalf of community members for systemic changes in policies and practices that inhibit their access to care and overall health.[119]

CHWs are now involved in testing for COVID-19, tracing contacts, providing vaccinations, and addressing food insecurity; some are supported through the American Rescue Plan while others are supported by state and local health departments.[120] Whether their distinctive contributions will be treated as a temporary measure in the

current crisis or more fully integrated with medical, public health, and social service systems is an open question.

Another important question yet to be answered is how existing systems will integrate CHWs. There is no shortage of CHW models available. If CHWs are absorbed into primary care and public health systems, they may be relegated to tasks that serve, rather than transform, those systems. CHW work was founded on principles of advocacy and community engagement. With structural forces as they are, it is too easy to allow their work to become case management and patient compliance.

As the National Association of Community Health Workers (NACHW) observes, "Despite nearly 60 years of research on CHW effectiveness, 2 decades of public health recognition, landmark workforce development studies, and a national labor classification, CHWs and allies are still building a national identity, state-level policies and models for sustainable funding."[121] That identity, however, should not be eclipsed by the demands of payers and other structural forces.

In consultation with local/regional CHW networks and NACHW, policymakers should take immediate steps to develop and sustainably fund the CHW workforce:

- To ensure that states include CHW services as a basic component of their pandemic recovery and long-term resilience strategies, the US government should add CHW services as an optional benefit in Medicaid and increase Federal Medical Assistance Percentages for these services.[122]
- Private payer systems should include CHWs as a reimbursable expense so that institutions and clinics can contract more as bridges to the community connecting people to services for early prevention and intervention.
- State legislators should create sustainable financing strategies, including reimbursement of CHW services through state Medicaid programs, and should authorize a CHW workforce development plan that includes competency-based training and a registry or certification process.[119,122-124] CHWs should be involved in the development of this process, especially this last decision, so that the final registry or certification process does not harm or create hurdles for the very CHW models that are instrumental to community partnerships with public health.
- To generate opportunities and a career ladder for CHWs, public health leaders can work with state human resources systems to establish positions at varying levels of experience and define a clear scope of CHW practice[125] and, in particular, correctly compensate mid-level practitioners.
- City/county officials should establish "community health" as a complete and fully funded local government department with an emergency responder designation equivalent (if not senior) to law enforcement and fire service sworn officials. This configuration will enable the full integration of healthcare, public health, and community health while also preserving the unique principles, providers, and practices of community health.

Grant funds to CBOs, FBOs, and CHW-led organizations directly

Every community has groups capable of grassroots and grasstops organizing: they give voice to communal needs, facilitate mutual aid, connect people with basic services, build up a sense of identity, foster social cohesion, and serve many other functions.[126] Cultural centers, neighborhood groups, fraternal organizations, faith communities, social welfare nonprofits, local advocacy organizations, and other civic-minded associations have assets (ie, leadership structures, communication networks, volunteer rolls, place-based knowledge, and/or meeting places) that can be mobilized as part of a community's larger readiness, response, and recovery system.[126,127]

CBOs and FBOs deeply rooted in Black and Hispanic/Latino communities and other underserved groups can channel the public health response and recovery in ways that do not recreate discriminatory systems and perpetuate inequities in the middle of a crisis.[63] Support for a "bottom-up" approach to public health emergency management has sometimes flowed from health departments to grassroots partners in the form of mini-grants; however, this form of trickle-down funding has not been substantial, predictable, or flexible as a function of larger issues with the Public Health Emergency Preparedness cooperative grant program.[60-102]

In the present model, too, when large institutions (eg, universities that receive National Institutes of Health support) engage CBOs for collaborations, these organizations may still work within racist structures that do not enable genuine partnerships in either strategy or tactics. These bureaucratically administered institutions, for example, may expect CBOs to adapt to their processes (eg, long, complex reimbursement cycles; a 60-day waiting period). A better partnership model is needed to operate collaborative efforts according to shared terms with CBOs, rather than the terms of the institution alone.

To promote equity in preparedness and response, leaders in Congress and state and local government should take the following measures.[92,95,100]

- Direct targeted resources—during the COVID-19 pandemic and ongoing appropriations—to CBOs and other community health networks focused explicitly on the health and wellbeing of Black, Hispanic/Latino and other communities at risk of disproportionate impacts from health disasters
- Make long-term investments that benefit from advances made by CDC's National Initiative to Address COVID-19 Health Disparities Among Populations at High-Risk and Underserved, Racial and Ethnic Minority Populations and Rural Communities grant
- Adapt grant-making practices, eligibility criteria (eg, disease burden, social context), and evaluation criteria to create a funding environment where communities with the greatest health needs can benefit from competitive grant mechanisms and to offset any potential bias toward organizations with the means to prepare better applications

- Provide the least restrictive funding to achieve the impacts that are the most relevant for the community and implement longer performance periods and flexibility in programming that allow communities to decide the trajectory of their own public health solutions

Conclusion

Practicing equity in COVID-19 vaccination and carrying it forward, using the recommended steps provided, will produce tremendous gains.

Humanizing delivery and communication strategies for COVID-19 vaccines will result in broader vaccine coverage in groups with high rates of COVID-19 cases, hospitalizations, and deaths; jumpstart ongoing and consistent delivery of services that improve the health and wellbeing of underserved populations; and begin the work of repairing the structural and interpersonal racism experienced with medical, public health, and governmental systems.

Anchoring COVID-19 vaccination for hard-hit areas in a holistic recovery process will enhance health and wellness among the worst-off survivors of the pandemic now; generate trust in health and governmental systems that prove themselves as trustworthy by caring about whole persons not just vaccination rates; and prompt advances in the social determinants of health that strengthen quality of life as well as community resilience to extreme events.

Developing a national immunization program to protect people throughout the life course will enable broader coverage for COVID-19 vaccines and the 13 other vaccines urged for some or all adults and it will raise immunization rates for racial/ethnic minority adults whose vaccination rates trail those of White adults.

A rebuilt public health infrastructure that is sustainably resourced and equitably staffed will have the capacity to respond to emergencies and address prevalent health challenges (eg, diabetes) affecting communities of color in greater numbers; lead to innovations in practice, culturally competent services, and strategies for social determinants; and demonstrate trustworthiness and practice authentic community engagement.

The effects of stabilizing the community health system as the foundation for equity and resilience will include the prioritization of disease prevention and health promotion that will lead to better health outcomes, improvements in the social conditions of health, the eradication of racist policies and practices, and communities having control over the trajectories of their own health and wellness.

The country needs to seize this moment to achieve widespread and lasting COVID-19 vaccine coverage, including among the most vulnerable groups, and to develop locally appropriate mechanisms that advance equity in health.

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Appendix A. Glossary

Community-based organizations (CBO): Public or private nonprofit organizations that are representative of a community and provide services to individuals in that community.[1]

Community engagement: The participation of community members in the generation, implementation, and evaluation of policies and practices that affect their lives. Authorities achieve collaboration with a community through dialogue, power-sharing, joint decision making, and synergistic activities.[2]

Community health worker (CHW): An individual who serves as trusted intermediary between community members—with whom they share roots and experiences—and health and social service systems. By increasing health knowledge and self-sufficiency, a CHW builds individual and community capacity via outreach, community education, informal counseling, social support, and advocacy.[3]

Equity vs. equality: With equality, everyone is treated similarly (ie, if someone receives a certain amount of resource, then everyone else receives the same). With equity, individuals' circumstances are considered and then differences are made up so that everyone can achieve the same outcomes (ie, people receive different amounts of resources depending on their needs).[4]

Faith-based organizations (FBO): Nonprofit organizations associated with or inspired by religion or religious beliefs that provide social services to a community.[5]

Hispanic vs. Latino: *Hispanic* typically refers to people with a Spanish-language background, and *Latino* to persons with a Central and/or South American lineage. The report uses *Hispanic/Latino* generally and more specific terms (Hispanic or Latino) when referring to specific communities based on the preference of the members of those communities.[6]

Overt racism: Racism that is observable and operates in unconcealed, unapologetic forms of ethnocentrism and racial discrimination.[7]

Structural racism: Perpetuation of racial inequities by societal norms, institutional practices, and public policies. Even though an individual may not explicitly intend it, discrimination on the basis of race still occurs, as a result of a system's design. Under structural racism, people of color experience disadvantages in areas such as health, housing, employment, and criminal justice.[8]

Vaccine equity: The conditions that enable even the most marginalized, vulnerable individual in a community to access vaccination: ie, being aware of the vaccine, understanding the value of vaccination, and having the means to get to a point of vaccination without worry of undue risk (eg, concerns about taking time off work, immigration status, or poor treatment due to race or ethnicity).[9]

Vaccine hesitancy: Technically, a delay in acceptance or refusal of vaccination despite availability of vaccination services. A more popular meaning is any concern that causes persons to question vaccination regardless of whether they accept vaccines or not.[10]

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Appendix B. US COVID-19 Vaccination Timeline

The timeline below traces the evolution of US public opinion on COVID-19 vaccines over time, highlighting specific events, public health measures, and policies that have shaped vaccine confidence, hesitancy, and coverage among target populations, particularly people of color and other underserved communities.

Table B1. US COVID-19 Vaccination Timeline

Month	Polling	Rollout Inequities	Notable Events and Policies
January 2021	• 66% of the American public was optimistic about the rollout; respondents were either very confident (16%) or somewhat confident (49%) that vaccines would be distributed fairly.[1] • Fewer than half of Black adults believed that distribution efforts accounted for the specific needs of Black communities.[1] • The majority of Black, Latino, and low-income adults reported not having enough information about how to obtain a vaccination.[1]	• The CDC reported that among the 6.7 million vaccine recipients who disclosed their race or ethnicity, 60.4% were White, 11.5% were Hispanic/Latino, 6% were Asian, 5.4% were Black, 2% were American Indian/Alaska Native, and 0.3% were Native Hawaiian/Pacific Islander.[2]	• The US Department of Health and Human Services announced $22 billion in funding to support vaccine distribution.[3] • President-elect Joseph R. Biden announced that he planned to release most available doses, a reversal of Trump Administration policies.[4]
February 2021	• 18% of US adults had received at least 1 dose (18%) or wanted one as soon as possible (37%).[5] • Half of Black adults and 35% of Hispanic adults expressed skepticism that the vaccines had been adequately tested for safety and effectiveness within their respective racial/ethnic groups.[5]	• Special access codes intended to help hard-hit Black and Latino communities in California schedule vaccination appointments were co-opted by outsiders.[6]	• The Biden Administration announced that 50 million vaccine doses had been administered since Inauguration Day.[7] • The FDA granted an emergency use authorization to Johnson & Johnson for its single-dose vaccine.[8]

March 2021	• 55% of Black adults surveyed either got vaccinated or wished to do so as soon as possible, up from 41% in February.[9] • 24% of Black adults were more likely than White adults (16%) to say they would "wait and see" before getting vaccinated.[9] • 50% of Black adults and 52% of Hispanic adults were concerned about contracting COVID-19 from the vaccine, compared to only 33% of White adults.[9] • 38% of Black adults and 27% of Hispanic adults worried about not being able to get vaccinated at a trusted site.[9] • 20% of Black adults and 22% of Hispanic adults expressed concerns about traveling to vaccination sites.[9]	• The CDC reported that 90.3% of non-Hispanic White adults completed their recommended dosing regimens, compared to 83.7% of American Indian/Alaska Native adults, 88.8% of Black adults, and 87% of Hispanic adults.[10]	• President Biden announced that the United States would manufacture enough vaccines for every adult in the country by the end of May, invoking the Defense Production Act.[11]
April 2021	• Nationally, vaccine demand began plateauing slightly, with only modest gains in the number of adults who had received at least 1 dose of vaccine or soon intended to (61% in March vs. 64% in April).[12] • 55% of Black adults and 64% of Hispanic adults expressed concerns about having to miss work due to vaccination-associated side effects, compared to only 41% of White adults.[12] • Doubts about vaccine safety figured prominently among Black adults (75%), Hispanic adults (72%), and White adults (70%) alike.[12]	• A CDC analysis of willingness to receive a vaccination among incarcerated or detained individuals in 4 states showed that fewer than half (45%) of these individuals were willing to be vaccinated, with the lowest levels of willingness reported among Black participants (36.7%).[13]	• All US adults became eligible for vaccination.[14] • Concurrently, many states reported vaccine surpluses amid diminishing demand.[15] • Federal health officials announced that some recipients of the Johnson & Johnson vaccine developed thrombosis with thrombocytopenia syndrome.[12] • The CDC and FDA recommended pausing the Johnson & Johnson vaccine pending further investigation. The Advisory Committee on Immunization Practices later cleared the vaccine for continued use.[16]

	• Only 46% of US adults were at least somewhat confident that the Johnson & Johnson vaccines were safe.[12]		
May 2021	• 41% of parents of adolescents aged 12 to 17 years either received a dose or planned to do so as soon as possible. Only 8% of unvaccinated parents said they would get their child vaccinated "right away," compared to 46% of vaccinated parents.[17] • The percentage of individuals receiving at least 1 dose increased slightly from the previous month, with a 5% gain among Black adults, 10% among Hispanic adults, and 5% among White adults.[17]	• Of the roughly 24.8 million vaccinees who reported their race or ethnicity, 70.7% were White, 7.6% were non-Hispanic Black, 6.2% were non-Hispanic multiracial, 6.7% were Hispanic, 3.5% were non-Hispanic Asian, 0.8% were non-Hispanic American Indian or Alaskan Native, and 0.2% were Native Hawaiian or other Pacific Islander.[18] • Vaccination coverage was lower in rural counties (38.9%) than in urban counties (45.7%).[19]	• FDA announced that Pfizer-BioNTech's vaccine had been authorized for use among adolescents aged 12 to 15 years in the United States.[20]
June 2021	• Just over half of unvaccinated people reported that they would prefer to be vaccinated at their doctor's office, with only minor variations by race.[21] • 27% of Black and 22% of Native American respondents reported that fear of discrimination by medical providers would disincentivize them from seeking a COVID-19 vaccination, compared to 13% of White individuals.[21]	• As of June 7, the percentage of White individuals across 41 states who received at least one dose of vaccine was 1.4 and 1.3 times higher than that of Black and Hispanic individuals, respectively.[22] • Upticks in vaccination rates among Black and Hispanic individuals (1.9% and 2.8%, respectively) suggest that the racial gap is narrowing.[22] • In Washington, DC, Black residents—who make up 45% of the city's population—accounted for more than 80% of new COVID-19 cases reported in late May.[23] Similarly, Hispanic residents—who make up 40% of California's population—account for 63% of cases.[22]	• Novavax reported that its COVID-19 vaccine candidate demonstrated 90% efficacy against laboratory-confirmed symptomatic infection in Phase III clinical trials.[24] • As of June 13, providers were administering roughly 1.1 million doses per day, a nearly 67% decrease from April 13, when daily dosing rates peaked at 3.38 million.[25]

Abbreviations: CDC US Centers for Disease Control and Prevention; FDA, US Food and Drug Administration.

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Appendix C. Local Team Research Methodology

Research Sites

Alabama

The Alabama local research team collected data from Black communities in 6 rural counties. Three of these counties, which are majority Black, are located in the state's Black Belt region—an area named for its rich, dark soil. Over the past 50 years, agricultural production in these counties has steadily shifted to heavy manufacturing and food-processing industries, however, poverty remains high, affecting 25% to 30% of county residents. Health outcomes in all 3 Black Belt counties are in the lowest quartile of all counties in Alabama. In contrast, the 3 non-Black Belt counties, which are majority White, are more economically diverse and rank in first or second quartiles in health outcomes.

California

The California local research team centered their work in the south region of San Diego County—an area where 61.3% of residents are Hispanic/Latino. While economic opportunities are plentiful in this urban area, residents face a high cost of living that only worsened with the onset of the COVID-19 pandemic. This circumstance has resulted in many Hispanic/Latino persons in the research area to live in overcrowded households (ie, roommates, extended families, multigenerational families). Unemployment in the south region ranges from 9% to 12.2%; employed Hispanic/Latino individuals are overrepresented in jobs where there is a greater risk of being exposed to COVID-19.

Idaho

The Idaho local research team focused data collection efforts in and around 2 rural towns: American Falls and Aberdeen. The economy of the area is based on agricultural production. The Hispanic population makes up 31% of the research area's residents, with 19% living below the federal poverty level. Due to the rural location, there are health professional shortages in primary care, dental care, and mental health services generally. Access to care is further limited by a lack of health insurance among many residents, including most migrant Hispanic workers.

Maryland – Baltimore

The Baltimore local research team gathered data from Latino persons living in Baltimore City, an area that has seen a steady increase in the Hispanic/Latino immigration over the past 2 decades. Hispanic individuals living in Baltimore are mostly foreign-born and have low educational attainment and limited English proficiency. An estimated 20% live below the federal poverty level. The combination of high poverty rates, high housing prices, and a lack of low-income housing has resulted in a disproportionate number of Latino persons living in crowded living situations.

Maryland – Prince George's County

Prince George's County's population is 63% Black, 16% Latino, and 14% White. It is also the most affluent Black majority county in the United States. However, racial makeup and economic prosperity varies widely within the county. The local research team focused their research efforts in 2 urban neighborhoods with high proportions of Black residents. While plentiful health resources exist in the county, many Black residents have experienced stark, historic disparities in access to health and hospital services.

Virginia

The Virginia local research team centered data collection on public housing residents in the Hampton Roads region that encompasses 7 major cities in southeast Virginia: Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Suffolk, and Virginia Beach. Black residents make up 31% of this area's population, although geographic segregation by race contributes to higher concentration of Black residents in select cities. Within public housing, 90% of residents identify as Black. The economy of the area is largely based on the US military, commercial ports, and tourism. Residents of public housing have incomes well below the federal poverty level and 50% to 80% below the median incomes in each city.

Data Collection

The primary data collection method used by local teams was semistructured interviews. These interviews allowed teams to collect vital insights on individuals' experiences with COVID-19, factors affecting their ability and/or willingness to accept COVID-19 vaccines, and their perspectives on equity and recovery. As of July 2021, the 6 local research teams had conducted a total of 194 interviews (Table C1). Other data collection methods used by local research teams included: follow-up interviews, focus groups, and social mapping. The research protocol was approved by the Johns Hopkins Bloomberg School of Public Health Institutional Review Board, and for the Alabama, California, and Virginia teams approval was also granted by the institution review boards from the University of Alabama, San Diego State University, and Eastern Virginia Medical School, respectively.

Table C1. Interview Participant Demographics and COVID-19 Vaccination Status by Area

	Alabama	California	Idaho	Maryland: Baltimore	Maryland: Prince George's County	Virginia	TOTAL
Gender							
Female	19 (59%)	28 (72%)	24 (59%)	13 (59%)	15 (68%)	27 (71%)	126 (65%)
Male	13 (41%)	11 (28%)	17 (41%)	9 (41%)	6 (27%)	11 (29%)	67 (35%)
Nonbinary	–	–	–	–	1 (5%)	–	1 (1%)
Total	32	39	41	22	22	38	194
COVID-19 Vaccination Status							
Vaccinated	21 (66%)	33 (85%)	16 (41%)	3 (14%)	16 (76%)	28 (74%)	117 (61%)
Not Vaccinated	11 (34%)	6 (15%)	23 (59%)	19 (86%)	5 (24%)	10 (26%)	74 (39%)
Total	32	39	39	22	21	38	191

Source: Unpublished local research team reports, May 28, 2021. Note: All data collection figures are as of May 28, 2021.

Each local team also completed an environmental scan of their research area. This scan included demographic details of the area as well as assessments of community resources, health assets, community relations with public health and health care sectors, vaccination trends and current efforts, and local COVID-19 impacts and responses. Data for the scans was collected using a combination of publicly available data and key informant interviews with immunization officers, public health information officers, public health emergency preparedness coordinators, social service providers, political officials, and leaders of community organizations.

These efforts were facilitated by the long-term relationships local team members had established prior to this project. The research was also facilitated by the community engagement activities the local teams coordinated. These efforts brought together researchers, community members, and other relevant stakeholders in a bid to address community concerns and bolster public health outcomes in both the short- and long-term. Community engagement activities included vaccine promotion events (or vaccine promotion at events), assisting with vaccination clinics, disseminating COVID-19 and COVID-19 vaccine information, working with partners for data collection recruitment, sharing preliminary local research findings, and collaborating with local health systems.

Data Analysis

Interview and other qualitative texts were analyzed for this report using the principles of thematic analysis. This process involved generating a preliminary codebook (largely informed by the interview protocol, the personal expertise of the core research team, and extant literature); testing this codebook against sample interviews; providing a revised version of the codebook to the local teams; and then within the local teams,

iteratively coding interview and other texts and refining the coding scheme to reflect local realities more accurately.

To maintain a cohesive coding structure across the entire project, local teams submitted revisions and suggestions for the shared codebook via a weekly, online survey as well as a one-time submission of coded, anonymized data, which was subsequently reviewed by a research committee (comprised of a subset of the Working Group on Equity in COVID-19 Vaccination) and used to further refine the group coding list. The research committee also used this data to identify 3 code families—COVID-19 vaccine perceptions and experiences, vaccine access, and equity—as most pertinent to generating the national report. Local teams then used this final codebook to analyze their remaining data and write the local reports that were subsequently used to inform this national report.


CommuniVax
A Coalition to Strengthen the Community's Role
in an Equitable COVID-19 Vaccination Campaign


JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH
Center for
Health Security


TEXAS STATE
ANTHROPOLOGY

[Additional submission by Hon. Diana Harshbarger, a Representative in Congress from the State of Tennessee follows:]

Opinion | The Washington Post

Voices Across America

Opinion: In my community, Biden's vaccine mandates could put more lives at risk

Opinion by David Yamamoto

September 13, 2021 at 4:29 p.m. EDT

David Yamamoto is a county commissioner of Tillamook County, Ore.

In rural Tillamook County, Ore., the coronavirus pandemic rages out of control. We would welcome more help from the state and federal governments. Unfortunately, sweeping policies such as those announced Thursday by President Biden could make our situation worse.

As in so many areas of American life, the response to covid-19 has exposed a rural-urban divide. On one side are policymakers, experts and journalists living mostly in large cities and dense suburbs. The debate around covid tends to reflect their experiences. But what works for Portland or Washington or New York doesn't necessarily work for the rest of us.

This has become more acute with the spread of the delta variant. Here in Tillamook, early in the pandemic, we moved quickly to limit residents' exposure to the virus from outside the county. Those measures succeeded, and by July 31, life had almost returned to normal. While every loss was tragic, across the entire duration of the pandemic, our county of 26,000 people had reported only five deaths and 815 confirmed cases. More than 65 percent of eligible residents age 16 and older had been vaccinated, higher than the average county in the state.

Then came August and delta. Just over a month later, our case count had nearly doubled, rising to 1,550. Our lone hospital had to temporarily cease elective surgeries and convert operating recovery rooms to house covid patients. The death toll, meanwhile, nearly quadrupled, climbing to 19, with 12 of those deaths in a single two-week period.

When more than 650,000 Americans have died because of covid, 19 fatalities might not seem like that many. But in rural towns, where everyone knows everyone else, every death hits the community hard.

Perhaps the starkest indicator of how bad our situation has gotten came from Waud's Funeral Home in downtown Tillamook. It is the county's single mortuary, licensed to hold up to nine bodies. A few weeks ago, Waud's owner contacted the county commissioners. Because of the covid surge, the facility was at capacity. He asked that we find a refrigerated morgue truck to hold additional bodies. Klamath County generously offered one of theirs.

In Tillamook, as in the rest of the country, this devastation is playing out overwhelmingly among the unvaccinated. I cannot urge our unvaccinated residents strongly enough to protect themselves, their families, and their friends and neighbors by getting the shots. Yet there is a small, ardent group in our county that simply will not yield. While I may disagree with their decision, it is precisely that: a personal decision.

And measures that our state and federal governments are taking to coerce this group are likely to harm this rural community and others like it. Gov. Kate Brown (D) on Aug. 19 mandated that all health-care workers, schoolteachers and state employees be vaccinated by Oct. 18, with no weekly testing alternative.

Then last week Biden announced his plan to require all health facilities accepting Medicare or Medicaid — essentially every medical facility in our county — to have employees vaccinated. He will also require vaccination for federal workers and many employees of private businesses.

For many localities, these rules might make sense. But in rural Tillamook we don't have an abundance of workers — let alone trained, licensed workers — to replace those who will not be vaccinated. Our health-care workers are overstretched as it is; if some have to leave their jobs, it will be Tillamook's patients who suffer most.

Tillamook has two small assisted-living facilities with a total of 60 residents. Over the past 17 months, a total of one covid case has been reported. Come Oct. 18, if some employees choose not to be vaccinated, the facilities won't have enough trained workers. We'll face having to relocate their fragile occupants to other accommodations elsewhere in the state — if we can find them.

Under Brown's decree, the term "health-care worker" includes fire and rescue personnel. In many small rural counties, these workers are mostly volunteers, who lack even the financial incentive to get vaccinated as a condition of employment. We are extremely concerned that, once the mandates are in force, Tillamook will be dangerously short of fire and rescue workers.

On a recent conference call with the Oregon Health Authority, we county officials were encouraged to simply hire more people now in anticipation of losing a percentage of our health-care workers. The authority didn't seem to comprehend how much more difficult it is for rural counties to hire crucial personnel than it is for our urban neighbors.

In rural America, we want the pandemic to end just like everyone else. In Tillamook, we are doing our best to get our people vaccinated. But where we can't, we must be free to pursue alternative measures — such as weekly testing — that can help mitigate the pandemic without depriving residents of essential services.

[Questions submitted for the record and the response by Dr. Wen follow:]

October 7, 2021

Dr. Leana Wen
Professor
Fitzhugh Mullan Institute of Health Workforce Equity
The George Washington University Milken Institute School of Public Health
5311 Saint Albans Way
Baltimore, MD 21212

Dear Dr. Wen:

I would like to thank you for testifying at the Subcommittee on Civil Rights and Human Services and the Subcommittee on Health, Employment, Labor, and Pensions joint hearing entitled "*How to Save a Life: Successful Models for Protecting Communities from COVID-19*," held on Tuesday, September 28, 2021.

Please find enclosed additional questions submitted by Committee Members following the hearing. Please provide a written response no later than Thursday, October 14, 2021, for inclusion in the official hearing record. Your responses should be sent to Rasheedah Hasan (Rasheedah.Hasan@mail.house.gov), Mariah Mowbray (Mariah.Mowbray@mail.house.gov), and Ijeoma Egekeze (Egekeze@mail.house.gov) of the Committee staff. They can be contacted at 202-225-3725 should you have any questions.

I appreciate your time and continued contribution to the work of the Committee.

Sincerely,

ROBERT C. "BOBBY" SCOTT
Chairman

Subcommittee on Civil Rights and Human Services and Subcommittee on Health, Employment, Labor, and Pensions Joint Hearing
"How to Save a Life: Successful Models for Protecting Communities from COVID-19"
Tuesday, September 28, 2021
10:15 a.m. (Eastern Time)

Chairman Robert C. "Bobby" Scott (D – VA)

1) More than 400,000 people have received a Pfizer COVID-19 booster shot since September, according to the Centers for Disease Control and Prevention. For vaccinated people in vulnerable communities who are now eligible for a COVID-19 booster shot, how can states speed up outreach and ensure that boosters reach as many people as possible?

U.S House of Representatives Education & Labor Committee
Joint Subcommittees on Civil Rights and Human Services
And Health, Employment, Labor, and Pension

"How to Save a Life: Successful Models for Protecting Communities"
Tuesday, September 28th 2021

Response to Questions for the Record from Dr. Leana Wen
Research Professor of Health Policy and Management,
George Washington University Milken Institute of Public Health
Distinguished Fellow, Fitzhugh Mullan Institute for Health Workforce Equity
Nonresident Senior Fellow, Brookings Institution

Chairman Robert C. "Bobby" Scott (D-VA)
More than 400,000 people have received a Pfizer COVID-19 booster shot since September, according to the Centers for Disease Control and Prevention. For vaccinated people in vulnerable communities who are eligible for a COVID-19 booster shot, how can states speed up outreach and ensure that boosters reach as many people as possible?

Response
Chairman Scott, thank you for this important question.

As you know, at the moment I am writing this (October 12th 2021), there are three categories of people who the CDC says *should* receive the COVID-19 booster. These are: people with moderate or severe immunocompromise who received initially either the Pfizer or Moderna vaccines, who should get the booster of the same vaccine that they received before; those 65 years old and above who received the Pfizer vaccine at least 6 months before, who should get the Pfizer booster; and those 50 years old and above with underlying medical conditions who received the Pfizer vaccine at least 6 months before, who should also get the Pfizer booster.

The CDC also says that there are two additional groups who *may* receive the Pfizer booster. These are adults 18 and above with underlying medical conditions OR adults 18 and above who are at elevated risk due to occupational risk. If they received the Pfizer vaccine at least 6 months before, they are allowed to opt for the Pfizer vaccine at this time, after weighing the risks and benefits with their provider.

The Food and Drug Administration is scheduled to meet October 14th and 15th 2021 to weigh additional recommendations for those who received the Moderna and Johnson & Johnson vaccines. The CDC will meet the week after that, with recommendations forthcoming.

I lay out this process and the recommendations to date because they are complicated. They are complex for healthcare providers to process, and they are very difficult for health officials to communicate to the public, especially to communities most vulnerable who already face challenges to health literacy and accurate information. Many of these individuals also face additional barriers when it comes to accessing vaccines.

You ask an important question of how we can ensure that people who are recommended to receive boosters are able to access them. There are at least four areas that the federal government needs to help support local and state governments, and individual providers and pharmacies:

First, support educational efforts to get out the word on evolving guidance. As I laid out above, the recommendations are complicated, and they are changing with new information and ongoing scientific meetings. There are many patients who are very eager to get booster shots. They should be allowed to do so, while we also recognize that many others may not even know that they are now eligible.

There must be ongoing outreach through all channels, including doctors' offices and pharmacies. Providers who are offering patients other services, like regular checkups or flu shots, should also be discussing booster shots and offering them, when possible. In addition, educational campaigns through public health departments can also help to provide information for the broader community. The emphasis still needs to be on getting the unvaccinated their initial vaccines, but we must not neglect those who are now recommended to receive booster doses too.

Second, bring vaccines to where people are. The challenges with booster distribution will mirror those with initial vaccine distribution, in that those with access barriers with the first two doses will face similar problems now. Thankfully, there are many more points of vaccine distribution in the community now than before, with many community pharmacies, health centers, grocery stores, and other easily accessible locations available for initial vaccines as well as boosters.

The federal government should continue to distribute boosters widely to these community sites. They should also support state and local efforts to have vaccine pop-up clinics and innovative approaches to bring vaccines directly to individuals. In my original testimony, I mentioned mobile vans, vaccine outreach through churches, pop-up clinics in transportation hubs and schools, and other community access points. These efforts should continue, with providers offering both primary vaccinations as well as boosters.

Third, do not erect additional barriers, and instead, work to remove identified barriers. It's really critical that providers administering boosters do not ask for documentation to attest to a patient's high risk status. Many patients do not have primary care providers who can write a doctor's note that certifies medical conditions. Others may not be able to easily access proof of occupation to justify occupational exposure. Still others may not have their original CDC vaccination card. This is a case where self-attestation through the honor system is key.

Note that this is different from the honor system to show proof of vaccination for employment and other settings. In those settings, having vaccine verification is about safety for others. This is a case of not requiring proof because it's about the individual's own health. The CDC has said that self-attestation is sufficient. Individuals should be able to call a local hotline if they face barriers at their local pharmacy or place of vaccination, as such barriers should not exist.

Instead of making it more difficult to people to obtain boosters, the opposite should be the case. Employers should be proactive about providing time off for workers who need to get the shot, and who may need a day off if they have side effects. Transportation and childcare providers who were enlisted to assist with primary vaccinations should also offer the same services for booster doses. All of these efforts will help level the playing field so that access is not a reason for people deciding not to get the booster.

Fourth, track information on who is getting the booster and adjust outreach efforts accordingly. In my original written testimony, I went into t detail on why such tracking is important for transparency and accountability, and also to course correct in as close to real-time as possible. The initial vaccine rollout was such that individuals considered to have more privilege were ones who successfully got vaccinated earlier on in the process. The vaccination rates for those from more vulnerable communities lagged behind. This same pattern is likely to repeat itself. A critical step to addressing the problem is identifying it in the first place. Real-time tracking for state and local officials, enforced by the federal government, is crucial.

Thank you again for convening the hearing and for the crucial follow-up question. I look forward to working with you and the Joint Subcommittees as you continue your important work to support all of our communities through this pandemic.

[Questions submitted for the record and the response by Dr. Martinez-Bianchi follow:]

COMMITTEE ON
EDUCATION AND LABOR
U.S. HOUSE OF REPRESENTATIVES
2176 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6100

October 7, 2021

Dr. Viviana Martinez-Bianchi
Director of Health Equity and Associate Professor,
Department of Family Medicine and Community Health
Duke University School of Medicine
604 Chalfant Ct.
Raleigh, NC 27607

Dear Dr. Martinez-Bianchi:

I would like to thank you for testifying at the Subcommittee on Civil Rights and Human Services and the Subcommittee on Health, Employment, Labor, and Pensions joint hearing entitled "*How to Save a Life: Successful Models for Protecting Communities from COVID-19*," held on Tuesday, September 28, 2021.

Please find enclosed additional questions submitted by Committee Members following the hearing. Please provide a written response no later than Thursday, October 14, 2021, for inclusion in the official hearing record. Your responses should be sent to Rasheedah Hasan (Rasheedah.Hasan@mail.house.gov), Mariah Mowbray (Mariah.Mowbray@mail.house.gov), and Ijeoma Egekeze (Egekeze@mail.house.gov) of the Committee staff. They can be contacted at 202-225-3725 should you have any questions.

I appreciate your time and continued contribution to the work of the Committee.

Sincerely,

ROBERT C. "BOBBY" SCOTT
Chairman

Chairman Robert C. "Bobby" Scott (D – VA)

1) To reach rural communities with limited access to reliable transportation and technology, what strategies can be used to increase access to COVID-19 booster shots? For those who have not received or cannot find their COVID-19 vaccination cards, what resources can be used to confirm their vaccination status?

2) Earlier this year, a survey from the U.S. Census Bureau showed that nearly 7 million Americans did not know that the COVID-19 vaccine was free, even though the *CARES Act* has allowed millions of people to receive a COVID-19 vaccination free-of-charge. How can effective community engagement help address patient concerns about costs?

Representative Joseph D. Morelle (D – NY)

Thank you, to both of our Chairs for holding this valuable joint hearing to discuss this important topic and to all our witnesses for being here and sharing their expertise. If we are to end this pandemic, it is vital that we address vaccine hesitancy, combat misinformation, and do everything we can to encourage people to get vaccinated, especially considering the new booster recommendations from the CDC. Last month, I unfortunately was one of the rare instances of a breakthrough COVID-19 infection, and I know that my condition could have been much worse if I wasn't vaccinated. So, I want to encourage all those who are watching to follow the CDC guidelines and get one of the many safe and effective vaccines.

Today, I want to ask about the role that community incentive programs have had on encouraging individuals to get the vaccines, and how we might be able to build on these programs to reach vaccine hesitant communities and encourage people to get their boosters when it's their turn. In my community of Rochester, NY, community health organizations and hospitals systems have partnered together to develop a pilot program that provides incentives for people to get vaccinated. As a part of the program, participants are given a $100 gift card when they come in for their first vaccine. While this is a local community pilot program, and the full data aren't expected until the end of the month, preliminary results have shown dramatic increases in the number of people who have chosen to get vaccinated. I'm looking forward to getting these results soon so that we can learn how to get my community protected from this disease.

1) Drs. Martinez-Bianchi and Pernell, my question is for you both. Based on what we know about community incentive programs so far, can you both speak about what kinds of incentives have been provided? Given that local needs may vary, what types of incentives have been the most effective? How might incentives change if we are focusing on getting people the first or second shot versus the booster?

Subcommittee on Civil Rights and Human Services and Subcommittee on Health, Employment, Labor, and Pensions Joint Hearing "How to Save a Life: Successful Models for Protecting Communities from COVID-19" Tuesday, September 28, 2021 10:15 a.m. (Eastern Time)

Dear Dr. Martinez-Bianchi: I would like to thank you for testifying at the Subcommittee on Civil Rights and Human Services and the Subcommittee on Health, Employment, Labor, and Pensions joint hearing entitled "How to Save a Life: Successful Models for Protecting Communities from COVID-19," held on Tuesday, September 28, 2021. Please find enclosed additional questions submitted by Committee Members following the hearing. Please provide a written response no later than Thursday, October 14, 2021, for inclusion in the official hearing record.

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1) To reach rural communities with limited access to reliable transportation and technology, what strategies can be used to increase access to COVID-19 booster shots? For those who have not received or cannot find their COVID-19 vaccination cards, what resources can be used to confirm their vaccination status?

One approach to getting vaccines to rural areas and reach people who have limited access to reliable transportation is to bring mobile vaccination units. Additionally, local community health workers who are properly trained on how to talk to people about vaccines, and facilitate vaccine access are another successful approach.

Deployments of mobile units need to be backed by planning, and the engagement of community-based organizations, EMS services or firefighters, and local employers. Information should also be provided so the community is aware of these events. Trusted sources of information and local leaders need to be engaged in Covid-19 vaccine events. Family physicians and health care teams working in rural health clinics and community health centers can play an, especially, powerful role in increasing vaccine confidence and access. Engaging community-based organizations and faith-based organizations, including faith leaders that serve historically marginalized populations are another great approach to identifying local needs and assets, and promoting vaccine acceptance, and access.

Another approach we have seen work well is the use of pop-up vaccination events in the parking lots of supermarket stores migrant farmworkers may be driven to on Sundays, and at churches during weekend services.

Another approach, while more regulatory in nature, is to ease restrictions on the scope of practice, so more people who are properly trained can administer Covid-19 vaccines. For example, training community health workers, first responders and others to administer Covid-19vaccines will help ease the burden on the health care system.

For those who have not received or cannot find their COVID-19 vaccination cards, what resources can be used to confirm their vaccination status?

We are seeing that many people did not have or did not use an email to receive a vaccine and get registered with CVMS, and are having trouble accessing their vaccine information.

If a person registered, an individual can obtain their vaccine record through CVMS. It is likely they received an email with the information. They would need to look for the email and go to the source to find their vaccine record. These steps can be complicated and difficult for members of the community with limited electronic proficiency.

If a person was vaccinated through a health system, the individual should be able to find their immunization information in the electronic medical record, or ask the health system to provide them with the vaccine information.

Contacting the vaccine provider may be an easier approach if that is available, but many vaccinations were done at pop-up events and there may be some limitations on the community's ease to find them.

Community members recommend the creation of a reliable hotline to answer these types of questions.

2) Earlier this year, a survey from the U.S. Census Bureau showed that nearly 7 million Americans did not know that the COVID-19 vaccine was free, even though the CARES Act has allowed millions of people to receive a COVID-19 vaccination free-of-charge. How can effective community engagement help address patient concerns about costs?

Some suggested approaches include:

- Information campaigns.
- Live events on social media where the community is engaged via trusted persons who can inform and answer questions.
- Linguistically-sensitive signs about the vaccine being offered for free.
- TV commercials and marketing on social media.
- An information campaign spearheaded by primary care doctors.
- Text messages reminding people of their booster and location to obtain it.
- Mailing information and flyers.
- Incentivize employers to provide leave for their employees for the day or allow employees to leave early the day of the vaccine without cutting their pay.
- Employers sponsoring Covid-19 vaccine events on-site (Requesting a vaccination van/mobile vaccination to their site. This would be especially helpful for professions including construction workers)

In addition, we have heard community reports that some people are receiving letters with information from their health insurance company letting them know of the vaccine fees they have received from vaccination providers and that they have paid a portion of it, with an added comment of the reminder of the bill stating: "what your provider may charge you", and they send the member these comments as FYI on subscriber benefits. This causes further confusion,

because providers will not charge them, but community members are thinking they will- given that they received that information from their insurance carrier. The federal government should take a more active role in clarifying for the public what to do when these situations arise.

We have seen great examples in North Carolina with Healthier Together https://covid19.ncdhhs.gov/HealthierTogether and the NC Community Health Worker COVID-19 initiative https://www.ncdhhs.gov/divisions/office-rural-health/community-health-workers?mc_cid=e4bd1b28df&mc_eid=746f27a09e promoting vaccination access and trust using principles of community engagement.

Representative Joseph D. Morelle (D – NY)

Thank you, to both of our Chairs for holding this valuable joint hearing to discuss this important topic and to all our witnesses for being here and sharing their expertise. If we are to end this pandemic, it is vital that we address vaccine hesitancy, combat misinformation, and do everything we can to encourage people to get vaccinated, especially considering the new booster recommendations from the CDC. Last month, I unfortunately was one of the rare instances of a breakthrough COVID-19 infection, and I know that my condition could have been much worse if I wasn't vaccinated. So, I want to encourage all those who are watching to follow the CDC guidelines and get one of the many safe and effective vaccines.

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3) Drs. Martinez-Bianchi and Pernell, my question is for you both. Based on what we know about community incentive programs so far, can you both speak about what kinds of incentives have been provided? Given that local needs may vary, what types of incentives have been the most effective? How might incentives change if we are focusing on getting people the first or second shot versus the booster?

- Instead of incentivizing with money to get the shot, the best incentive would be to pay for sick leave for individuals that need to take time-off to encourage people to go get vaccinated.
- Provide related needs around getting a vaccine, for example a meal box could be provided for an individual waiting for a vaccination and any accompanying family member.
- Provide transportation to and from the event
- Provide produce boxes for families who are receiving a Covid-19 vaccine.
- Create events that are fun and social and have vaccination as ONE component but not the main one. For example, it could be a street fair with food, games, job fair, vaccination site etc. Incentives could be meal tickets, or ride tickets while at the fair.
- Incentivize employers to provide leave for their employees for the day or allow employees to leave early the day of the vaccine without cutting an employee's pay. Employers could also, request a vaccination van/mobile vaccination unit to their site. This would be especially helpful for many professions, including construction workers.

Thank you very much for the opportunity to offer testimony on this critical issue.

Viviana Martinez-Bianchi, MD

[Questions submitted for the record and the response by Dr. Pernell follow:]

COMMITTEE ON
EDUCATION AND LABOR
U.S. HOUSE OF REPRESENTATIVES
2176 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6100

October 7, 2021

Dr. Chris T. Pernell
Chief Strategic Integration and Health Equity Officer
University Hospital
1 Fineran Way, Apt. 435
Short Hills, NJ 07078

Dear Dr. Pernell:

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Chairman Robert C. "Bobby" Scott (D – VA)

1) In urban communities, planning appointments at pop-up COVID-19 vaccination sites can be challenging given rotating locations. How can community outreach strategies be implemented to increase access to COVID-19 booster shots?

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Written Responses to Subcommittee Questions

Dr. Chris Pernell

Chief Strategic Integration & Health Equity Officer

How to Save a Life: Successful Models for Protecting Communities from COVID-19

House Education & Labor Joint Subcommittee Hearing

Civil Rights and Human Services Subcommittee

&

Health, Employment, Labor, and Pensions Subcommittee

Hearing: September 28, 2021
Written Response Submission: October 14, 2021

Chairman Robert C. "Bobby" Scott (D – VA)

In urban communities, planning appointments at pop-up COVID-19 vaccination sites can be challenging given rotating locations. How can community outreach strategies be implemented to increase access to COVID-19 booster shots?

The primary keys to increasing access to booster shots for the COVID-19 vaccine lie in the coordination, collaboration and partnership among community-based organizations and local, county and state assets in order to achieve adequate vaccine uptake.

In Newark, New Jersey, many residents rely on the messaging, influence and resources of trusted community partners, as they have throughout the pandemic, for access to the vaccine and information related to its safety and efficacy. Many of these organizations, in the name of public health, have stepped up repeatedly since the vaccines became available in order to encourage their constituencies to be vaccinated. Re-engaging with these organizations should be the initial step when it comes to the booster shots for eligible populations. Leveraging a network of community assets to deliver preventive care to groups, which have been impacted disproportionately by the virus and have experienced gaps in access, is the most culturally-responsive way to achieve vaccine equity in Black and Brown communities and protect the most vulnerable in our society. This mechanism of action will be necessary for education around boosters to increase vaccine confidence and ultimately uptake.

At University Hospital, we have repeatedly engaged the Mayor's office, members of the city council, city departments, our healthcare partners at Rutgers New Jersey Medical School, faith-based institutions, community-based organizations, community health workers, and have partnered with the State of New Jersey to deliver the most comprehensive, multi-stakeholder vaccination efforts. Engaging with these groups helps us educate the public on the benefits of vaccination, addressing the lack of vaccine confidence, helping to resolve concerns related to historical and contemporary injustices, and explaining the way that new vaccine technologies (like mRNA vaccines) work, in order to allay additional fears. A key component of public health communication is ensuring the messages amplify the narratives of those the community can identify with, are literate across multiple groups, and occur in a diversity of languages.

In the City of Newark and Essex County more broadly, having consistent locations (with trusted and reliable community partners), with consistent hours, situated where there are hubs of activity in community, and located along public transportation routes have factored into vaccination success stories. In addition, in the City of Newark, free rides were made available through partnerships with Lyft and Uber which helped to facilitate access to vaccinations. Pop-ups work best when they are used as part of a hub and spoke model (i.e., pairing mobile units with community health workers who can be deployed as part of a neighborhood level canvassing operation), in addition to established vaccination centers at local community health centers, pharmacies and hospitals, for example.

For booster shots, a similar strategy should be enacted, and our plan is already in motion. In our outpatient practices, clinical teams are performing outreach to patients that qualify given their immunocompromised or transplant status. Our frontline healthcare workers, who are eligible, have been contacted, and our partnership with the State of New Jersey that delivered first and second doses to residents in areas with low vaccination rates (via a mobile unit and community canvassers) will also make booster shots available.

We will continue to leverage the full suite of community-based networks to engage all eligible members of community through social marketing, including the extensive use of social media platforms, as well as print and radio advertising to inform the public around the availability of vaccines and boosters, and to engage people in socially and culturally tailored dialogue on the benefits of vaccination. We are also using media interviews of hospital leadership to deliver the message that vaccination is important, whether it is the booster or whether the community member is seeking their first or second doses.

The final element here is scheduling appointments. Many in our community are not computer savvy or they do not have access to dependable internet service. As a result, appointments must be able to be scheduled online and telephonically, while also providing walk-up capability for vaccinations. The ability to offer walk-up appointments can help facilitate vaccine uptake among those who may be undecided but are persuadable, given access to a trusted and credible messenger in community. When the mobile unit is in a local neighborhood, we often hear stories of residents deciding to get vaccinated at that moment. Having the opportunity to talk to a nurse or other healthcare provider on the spot helps alleviate anxieties and concerns. With coordination and collaboration with the community as central to our strategy, citywide we aim to achieve robust vaccine uptake among all eligible groups for both the initial series and the booster administration.

Representative Joseph D. Morelle (D – NY)

Drs. Martinez-Bianchi and Pernell, my question is for you both. Based on what we know about community incentive programs so far, can you both speak about what kinds of incentives have been provided? Given that local needs may vary, what types of incentives have been the most effective? How might incentives change if we are focusing on getting people the first or second shot versus the booster?

In rolling out boosters or any future vaccination efforts, communities like Newark need consistency and community-tailored approaches. We found that without a well-respected community leader or a trusted community-based organization to coordinate a vaccination effort, or to partner with healthcare organizations like University Hospital, dozens of entities were cobbling together their own events and initiatives, whether those efforts came with or without incentives.

While it is true that incentives have been used to encourage vaccination efforts across the country, the evidence base is limited on the most impactful approach. What is known about incentives is that a guaranteed gift incentive[1] appears to be more effective than an incentive which only represents a chance at winning[2]. And, the type of audience or population may contribute to whether the incentive significantly improves vaccine uptake. At University Hospital, we offered our employees chances at winning several monetary prizes if they received their COVID-19 vaccination shots by a certain date.

For the Greater Newark area, the motivating factors to increased vaccination rates were not necessarily incentive based.

Growing rates of vaccination are most likely due to providing convenient, easy access to vaccinations at consistent locations with consistent and convenient hours, offering vaccinations at locations close to public transportation or in partnership with ridesharing companies like Uber or Lyft, and amplifying the voices of credible messengers. These collective actions were employed in the City of Newark.

Throughout the area, there were vaccine uptake success stories. Those wins occurred where there were robust, socially and culturally inclusive multi-stakeholder networks that came together to drive vaccine availability and access. For instance, how University Hospital partnered with city and federal assets to support community-wide vaccinations through the use of our EMS crews, our ongoing partnership with the State of New Jersey to deliver vaccines to communities with low vaccination rates using clinically staffed mobile units, and the use of corps of community health workers to engage in door-to-door canvassing were among those efforts that created meaningful uptake. *Among the most powerful incentives may be convenience and cultural competence and/or responsiveness*. When there is a coordinated and integrated system of providing vaccinations at key community hubs, such as community health centers, local pharmacies, primary care physician offices, and hospitals, in addition to pop-ups and mobile sites, vaccine uptake will improve over time.

Lastly, we found that bi-directional and regular community outreach was more effective than any incentives to the community. We approach outreach as a primary awareness vehicle to our neighbors. Whether it is community health workers, a pop-up location, a Facebook Live event, or other community education platform, access to the right information consistently is critical to public health, and even more important to our community then being rewarded for receiving the vaccine.

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[1] Bronchetti E.T.; Huffman, D.; Magenheim, E. Attention, intentions, and follow-through in preventive health behavior: Field experimental evidence on flu vaccination. Journal of Economic Behavior & Organization. Volume 116, August 2015; 270-291.

[2] Walkey AJ, Law A, Bosch NA. Lottery-Based Incentive in Ohio and COVID-19 Vaccination Rates. *JAMA.* 2021;326(8):766–767. doi:10.1001/jama.2021.11048

[Whereupon, at 1:05 p.m., the subcommittees were adjourned.]

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