

[COVID Information Commons \(CIC\) Research Lightning Talk](#)

Transcript of a Presentation by Gabriela Wilson (University of Louisiana, Lafayette) December 9, 2024



Title: [National Initiative to Address COVID-19 Health Disparities Among Populations at High-Risk and Underserved, Including Racial and Ethnic Minority Populations and Rural Communities](#)

CDC Award #: [Link to Award Page](#)

[YouTube Recording with Slides](#)

[December 2024 CIC Webinar Information](#)

Transcript Editor: Lauren Close

Transcript

Slide 1

Thank you so much, I've been looking forward to this gathering. The first time I was approached about participating in this panel, I was at the University of Texas, Arlington, and I was transitioning to the University of Louisiana, Lafayette. I have been at this job for four months, doing lots of things that are somehow related to what I did in the past on COVID-19. The focus of my presentation is going to be on the work that was funded through the CDC at the University of Texas, Arlington, so I will describe... for some reason I cannot advance my slides... Ok, can you see? Great, wonderful.

Slide 2

So the title of the grant that we received through the CDC and mainly through the Tarrant County Public Health Department, where the University of Texas, Arlington is located, was the National Initiative to Address COVID-19 Disparities Among Populations at High Risk and Underserved, Including Racial and Ethnic Minority Populations and Rural Communities. The entire Department of Public Health in Tarrant County received \$16 million and they were really good at connecting community partners to be part of this big initiative. The intended outcome of this funding was to reduce COVID-19 health disparities. There were multiple Public Health departments across the country that received funding. Texas was able, and Tarrant County in particular, to have a very compelling story because we have a large Hispanic population. This is, the majority minority in north Texas. We could see that there was reluctance in accepting vaccines and some stigma, lots of misinformation. Our focus was really looking at minorities, but with a focus on the Hispanic population in north Texas. What we wanted to accomplish

through this grant was to improve and increase testing and contact tracing. This funding was for a period of three years among populations at high risk and those that are underserved, but also with a focus on rural communities. Let's face it, Texas has lots of rural communities, especially in north Texas. The goal at the national level was, and particularly here in Texas, to improve state, local, U.S. territorial, and free associated states' Health Departments' capacity to provide more services and control infection among high risk populations.

Slide 3

Part of the approach that we used in Tarrant County was to focus on three areas. It's like a stool with three legs. We want to reduce disparities related to COVID-19, but how do we do that? It was clear from the beginning that we had to have a very strong communications and messaging initiative across north Texas. This had to be consistent messages being disseminated across different groups. We also needed to involve the community in the process. This meant community health workers, public library workers, faith-based organizations, grassroots organizations, etc. Then, we also needed to focus on countering the misinformation that was being spread through different areas. This would play a role in marketing and promoting the vaccine - all the initiatives that the Public Health Department was trying to promote.

The second leg of the stool was partnership. This was going to be extremely important. We'd need to train with and include more partners to do the contract training. We'd need to provide transportation so people can go to different pharmacies, for example, where the vaccine was going to be distributed. We'd have mobile units in place in areas where there were no places delivering the vaccine. We needed to make sure that everyone has access to the distributed vaccine, and other similar barriers like PPE, limited paid leave, etc.

Last but not least, we focused on reducing the cultural barriers and made sure that we used trusted resources and connections for vaccine sites. We'd need to address the language and cultural barriers that existed. As I mentioned, we are heavily in the Hispanic population and we wanted to make sure that COVID-19 was not being translated as "la gripa", which means "influenza" in Spanish. We noticed there were lots of announcements at the airport, for example, where the translation for "Get tested for COVID-19" were translated as "Get tested for gripa" - in the Hispanic population, "gripa" is not COVID-19. "Gripa" was really influenza. So that was something we wanted to address. We don't want people to think this is just a "gripa" - an influenza. It's something much more complicated. We wanted to build and improve the relationships with the communities, especially those underserved, and involve the community in the entire process from beginning to end.

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As a PI for the University of Texas, Arlington site, I wanted to - and again, I'm a health informatician who moved into public health informatics during the pandemic - at the time I was in Indiana, moving into a new role at the University of Texas, Arlington. I started tracking the number of COVID cases, first in Indiana. Then I said, wait a minute, I am starting a new job in Texas on March 1, 2020. March 13th was the start of the pandemic and I couldn't move to Texas until August. I did all this work to first track and make sure I understood the community where I

was going to move. Then, I realized that this is much bigger than me as an individual tracking cases. It's actually something that I think we can help with data analysis - identifying high-risk neighborhoods. I wanted from the beginning as a co-founding co-Director of a center focused on health informatics to establish the center as a good partner for the University. I also wanted to be part of the solution by collaborating with community partners to prepare and monitor cases of COVID-19 in Tarrant County. Lots of work was done for free at the beginning just because we care about the community. Then, of course, by connecting with the Tarrant County Public Health Department, I got the opportunity to also receive funding.

Slide 5

From the beginning, the way that we approached this as a University was that my entire team wanted to build trust in our citizens to accept the COVID-19 vaccine when it became available. At the time it wasn't available, we were just talking about it. We participated in contact tracing and other things, but we knew then the vaccine became available, we wanted to make sure that everyone had access to it. Then, we wanted to provide the Tarrant County communities in high-risk neighborhoods with information that was culturally-sensitive, related to the vaccine, and COVID-19 health in general. We wanted to be able to support the equitable distribution in high-risk neighborhoods and continue to monitor the impacts of the pandemic. At the time, we were thinking it was going to be just a few months or maybe one year, but we all know it took longer than that. That's why it was very important to continue to monitor the impacts of the pandemic, including vaccination, emerging variants, and now even Long COVID. People are still working on this to see broad impacts on general health.

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I'm going to describe how we supported equitable COVID-19 vaccine distribution in high-risk neighborhoods and how we used the data and public health informatics to address these needs and support the Public Health Department in Tarrant County.

Slide 7

What we thought was that people needed to see on a map and develop a visual of the situation rather than just graphs and data correlations or coefficients. In public health, as you probably know, it is easier to pinpoint zip code level or census tract level data. The focus from the beginning was to do a data-driven health intelligence approach in preparing for vaccine distribution and pandemic monitoring. What you see on this map is Tarrant County's high-risk neighborhoods at the census tract level. The darker red areas are those high-risk neighborhoods. We have a paper that I'm citing here describes the entire approach, but in doing this, we were able to show the Tarrant County Public Health Department where to distribute the vaccine. The pharmacies are marked with the white cross and the high-risk neighborhoods in red don't have a pharmacy in that area. We were able to help deploy the mobile vaccination units into those neighborhoods and provide information about vaccine availability.

We didn't just add the Social Vulnerability Index (SV), we also added all the SDOH data, including health literacy, because local demographics about health literacy played an important

role here, even if that data was from 2017. We used that data as an indicator of where more onsite information was needed. That information could be shared in any form - we did focus groups, surveys on paper, we did sessions with leaders of faith-based organizations, with the public libraries - just to be able to provide the information that was needed in a very culturally-sensitive manner.

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Then, how did we monitor the impacts of the pandemic and the vaccination rate? That was the second part of the study.

Slide 9

We focused our research on two hypotheses. We all love social media, right? We know that when the vaccine became available, everyone was super excited and wanted to get the vaccine even though it was age category restricted. First, we vaccinated the elderly and those who were more vulnerable. Then it was teachers. I'm not even talking about the healthcare workers who were frontline and received the vaccine first, but lots of people wanted to get a vaccine even if it wasn't their time. There were huge lines, I remember, in auditoriums and stadiums across north Texas. Then, all of a sudden, people started hearing that you shouldn't get the vaccine, you shouldn't do that. What we wanted to do was use social media to analyze these sentiments, which can influence vaccination rates. We wanted to see if there was a correlation and identify other factors that contribute to vaccine hesitancy.

Slide 10

All of this was done in combination with interviews and community focus groups. My group focused on analyzing social media activity. We started with Twitter / X, analyzing the data. We realized that the Hispanic population was not using Twitter, they were using Facebook. And we needed a study in both English and Spanish, so we developed Natural Language Processing techniques and Machine Learning algorithms, AI, everything that was at our disposal to identify the sentiments being expressed by the population in both languages as related to the vaccine and their worries. Then, we worked with our community partners in the Public Health Department to develop a message that can address these concerns instead of simply saying: "hey, you should get the vaccine because the government wants you to." Then we looked at the health literacy and social vulnerability index and realized that the vaccination rate is highly influenced by the level of health literacy and the SVI index.

The conclusion of this study - I listed here two of our publications, we added a few more after this on other topics, like abortion, for example. We know Texas was first to push for revised abortion laws, so we wanted to look at the population's stance towards abortion. Social media is a really powerful way to understand how people feel about certain things. Instead of just saying: "you shouldn't listen" or go on social media for information. We should all be very active. Instead of going into bystander mode - we have a paper on this too - when there is toxic information on social media, those of us who know the truth and the science can't remove

ourselves from this situation. Instead, we need to go on social media and provide the correct information.

These studies were correlated closely with what we were seeing in the community through interviews and focus groups.

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With education, we were able to increase the vaccination rate in areas where it had been lower. We received data from the Public Health Department on vaccination each month and we are now in the process of publishing a study that correlates all of the social media sentiments with the real vaccination rate.

The third piece of our study focused on how we can build trust and provide the culturally-sensitive information that's so needed. It was needed during the pandemic and it is still needed for other aspects of public health.

Slide 12

Even though it was not funded by the CDC, this was a different study we wanted to mention here. High school students were our champions for providing correct public health information to their families here. Again, the focus was on the Hispanic population because in Texas you can become a Certified Community Health Worker (CCHW) at age 16. We realized that some Certified Community Health Workers were in high school. We identified high schools in predominantly Latino neighborhoods where the vaccination rate was very low. We realized that if we used those high school CCHWs and trained them how to discuss the COVID-19 vaccine, they would go home to their families, many of which are multi-generational households. Whatever information comes home from school would go to the parents and grandparents, who would discuss the situation and either approve it or disapprove it. If we have the right kind of training for our CCHWs in high school, they can go into these communities and share the right information on COVID-19. Because of this project, we developed a training program for CCHWs in high schools in areas of high risk. Because of this initiative, we received the Inaugural Racial Justice and Equity Award given by the Coalition of Urban Serving Institutions in 2021. I am extremely proud of being able to get to that level and put on the map the efforts that the University of Texas, Arlington was doing in the community. The University of Texas, Arlington is and was a Hispanic-serving Institution. That was amazing for all of us and we are very proud. We organized the first symposium on Racial Justice and Equity at our University the following year because of this award. That was great visibility.

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There are way too many people that I should acknowledge here so what I thought was to share this diagram of all the individuals, the community partners, that contributed to this effort. This includes, of course, the University of Texas, Arlington, the libraries, Public Health, [inaudible] as well, all partnering schools and the Alianza in the Dallas Fort Worth Area, the community health workers, Health Literacy Texas. We are all together able to achieve much more than if we remained in isolation. We were able to inform people about COVID-19 and the vaccines. We

were able to address community concerns and combat misinformation with targeted messaging developed with social media analysis and community interviews.

Slide 14

I want to end with this beautiful mural that was painted by University of Texas, Arlington students during the lockdown when nobody was able to go onto campus. The art students would go one at a time to paint this beautiful mural. It reminds me to go back and visit campus, but it is really a reminder of the times when we all came together. We wanted to solve a big problem that hopefully we will not experience again.

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Here are my references in case anybody is interested. Thank you!