From the Front Lines: COVID-19 Vaccination Efforts in Rural Communities Hit by the Opioid Epidemic

JBS International RCORP-Evaluation Team

KEY FINDINGS

RCORP grantees are integral players in the race against COVID-19 by testing (39% of grantees), contact tracing (26% of grantees), and vaccinating (91% of grantees) residents of their rural service areas[1].

Reliance on technology for vaccine registration and scheduling reduces vaccine access to many rural residents, especially among those who have limited access to broadband or cellular connections, those who are older, and those who experience literacy issues. Increasing the number of Community Health Workers (CHWs) who can conduct face-to-face canvassing activities to assist with scheduling and ways to get to a vaccination appointment is needed.

While mass vaccination sites and the use of big box pharmacies may be useful in populous areas of a state or county, an over-reliance on these vaccination venues limits the number of rural residents who can avail themselves to immunization services.

Addressing SUD/OUD stigma within the rural healthcare community will be critical to improve immunization among the rural SUD/OUD population as some patients (especially those involved with the legal system) were reluctant to seek vaccinations from a system of care within which they have had negative encounters.

Addressing vaccine hesitancy among SUD/OUD treatment providers and peer support specialists will be crucial as they are on the front-line answering vaccine-related questions from hesitant SUD/OUD patients.

RCORP grantees are partnering with homeless shelters, soup kitchens, treatment providers, recovery homes, housing authorities, and the National Association for the Advancement of Colored People (NAACP) to address vaccine disparities and facilitate equitable vaccine access.

[1] Vaccination efforts performed by RCORP grantees were undertaken outside of RCORP activities.

INTRODUCTION

Communities throughout the United States (US) are in the midst of dual public health crises: the opioid epidemic and the novel coronavirus SARS-CoV-2 (COVID-19) pandemic. While this pandemic strains all US communities, the rural US and clinically vulnerable high-risk groups (e.g., individuals with substance use and opioid use disorders [SUD/OUD]) face unique challenges[2,3]. Pre-existing rural healthcare capacity issues (e.g., staff re-assignments, hospital closures) coupled with increased COVID-19 vulnerabilities render rural residents with SUD/OUD particularly susceptible to poor COVID-19 and SUD/OUD outcomes.[4,5]. As such, vaccine distribution efforts among rural SUD/OUD populations may be especially important. This brief report documents how recipients of HRSA's multiyear initiative, **the Rural Communities Opioid Response Program (RCORP),** (which aims to reduce the morbidity and mortality of SUD, including OUD, by funding consortiums in rural communities), have been responding to COVID-19 and contributing to vaccine distribution[6].

As part of quarterly reporting (submitted March 31, 2021 for the time period December 1, 2020 to February 28, 2021), 182 project directors from the lead agencies of RCORP's multi-sector consortiums answered questions designed to enhance HRSA's understanding of on-the-ground COVID-activities with an emphasis on vaccination efforts. Closed-ended questions were followed by open-ended questions so grantees could elaborate or explain their answers. Respondents included project directors from medical facilities (e.g., federally qualified health centers [FQHCs], critical access hospitals), local or state health departments, substance abuse and other behavioral health treatment providers, community-based organizations (e.g., social service agencies), and college, university, or research organizations. This brief report (1) examines the extent of COVID-specific tasks undertaken by RCORP grantees approximately one year into the pandemic with an emphasis on vaccine roll-out; (2) summarizes the challenges to vaccine roll-out qualitatively reported by RCORP consortium leads; and (3) discusses the implications of these findings.

RESULTS

Grantee Responses to COVID-19

RCORP grantees are integral to rural COVID-19 responses, especially vaccination efforts. As illustrated bellow, nine out of every 10 consortiums (91%) were directly involved with vaccination efforts including but not limited to vaccine education, distribution and scheduling, and hosting and staffing vaccination clinics.

---

[2] Wang, Q. Q., Kaelber, D. C., Xu, R., & Volkow, N. D. (2020). COVID-19 risk and outcomes in patients with substance use disorders: analyses from electronic health records in the United States. *Molecular psychiatry*, 1-10.

[3] https://directorsblog.nih.gov/2020/04/21/coping-with-the-collision-of-public-health-crises-covid-19-and-substance-use-disorders

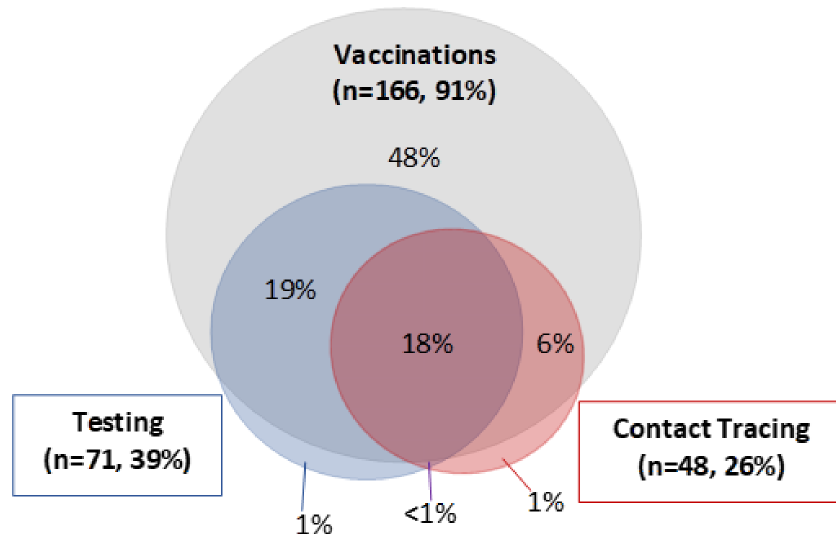
[4] Jenkins, W. D., Bolinski, R., Bresett, J., Van Ham, B., Fletcher, S., Walters, S., Friedman, S., Ezell, J., Pho, M., Schneider, J., & Ouellet, L. (2020). COVID-19 During the Opioid Epidemic – Exacerbation of Stigma and Vulnerabilities. *The Journal of Rural Health*, 37(1), 172-174.

[5] Monnat, S. M. (2020). Why Coronavirus Could Hit Rural Areas Harder. *Lerner Center for Public Health Promotion, Issue Brief*, 16.

[6] Vaccination efforts performed by RCORP grantees were undertaken outside of RCORP activities.

Roughly four out of every 10 grantees (39%) coordinated with labs to offer COVID-19 testing with a quarter of grantees (26%) performing contact tracing. Despite these additional and time-consuming tasks, only 41% (n=68) of the grantees involved in vaccine distribution reported that it had extreme or moderate impacts on their ability to complete RCORP work plan activities.

RCORP Grantee COVID-19 Efforts (December 1, 2020-February 28, 2021, N=182 grantees)



Eighteen percent of RCORP grantees (n=32) enlisted the help of Community Health Workers (CHWs) with vaccination efforts. CHWs provided education and messaging about COVID-19 vaccines (13%, n=24), assisted with vaccine distribution (10%, n=18), and/or addressed vaccine hesitancy (7%, n=12). Qualitatively, grantees reported that CHWs also helped individuals schedule vaccine appointments, especially when on-line scheduling access or other issues were experienced.

18% (n=32) of all RCORP grantees (n=182) involved CHWs in vaccination efforts.		
13% (n=24) used CHWs to deliver vaccine education	10% (n=18) used CHWs to assist with vaccine distribution	7% (n=12) used CHWs to address vaccine hesitancy

Challenges with COVID-19 Vaccine Efforts

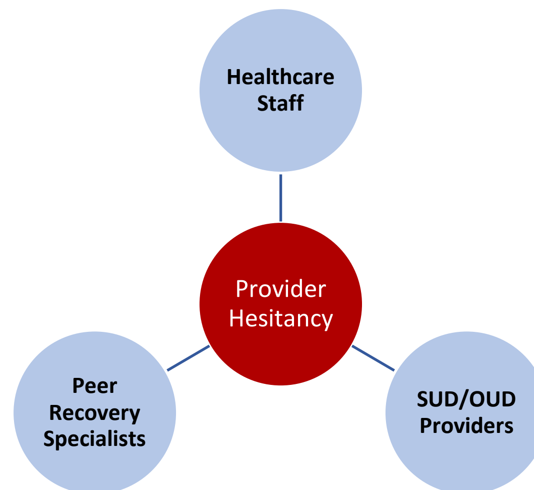
Responding to open-ended questions, grantees noted the following vaccine challenges that were widespread and diverse.

Challenge #1: Vaccine hesitancy. Vaccine hesitancy exists within multiple rural populations.

Who is hesitant? In addition to hesitancy among individuals with SUD/OUD and other community members, project directors reported that portions of SUD/OUD treatment providers, healthcare workers, and peer support specialists were also hesitant to get the vaccine. This impacts provider ability to re-introduce in-person services, something consortium leads feel is important to maintain treatment engagement. It also limits the ability to educate and move hesitant individuals with SUD/OUD towards vaccinations. SUD/OUD treatment providers and peer support specialists are the most logical staff to address vaccine hesitancy among the SUD/OUD population based on relationships and contacts. In fact, consortium project directors reported that clinical staff were on the front-line answering vaccine-related questions from patients. If staff are hesitant to become vaccinated, they may inadvertently communicate their hesitancy to patients. Hence, addressing vaccine hesitancy within the provider community is

critical if individuals with SUD/OUD and other members of rural communities are to become vaccinated.

Service Provider Groups Who Are Vaccine Hesitant (N=182)



Why are they hesitant? Vaccine hesitancy encompasses vaccine-specific concerns, mistrust of the government, and negative experiences with potential vaccine providers.

Consortium project directors noted that concerns over emergency use authorization, short-term side effects, and long-term consequences deterred individuals from becoming vaccinated as did a lack of concern over the COVID-19 virus itself. Additionally, mistrust of the government, political affiliations, and colonialism and historical trauma were reported to further alienate a portion of rural residents and individuals with SUD/OUD from vaccination efforts. To address this, consortiums are working with CHWs and consortium members to disseminate educational and messaging materials to alleviate these concerns. Prior negative experiences with healthcare providers may also discourage individuals with SUD/OUD from seeking vaccinations. Consortium project directors reported that some rural healthcare providers display prejudice and a distinct dislike for patients with substance use disorders which contributes to negative provider experiences among the SUD/OUD population. These negative experiences contribute to the provider distrust felt by some individuals with SUD/OUD, and grantees reported that some patients (especially those involved with the legal system) were reluctant to seek vaccinations from a system of care within which they have had negative encounters. Given the finding that eight in 10 individuals will turn to healthcare providers when deciding whether to get vaccinated[7], it is not

"We do notice that within the SUD community, there seems to be much hesitation and fear to receive the vaccine. For example, none of our Peer Support Specialists are willing to take the vaccine until it is required."

"The major challenge we have experienced in the last quarter is related to the stigma our participants face with other service providers (including medical providers) in the community. The [ ] have heard multiple reports from would be clients refusing to go to Primary Care providers, ED or crisis services due to a history of poor treatment".

[7] https://www.kff.org/coronavirus-covid-19/dashboard/kff-covid-19-vaccine-monitor-dashboard/?utm_source=web&utm_medium=trending&utm_campaign=COVID-19-vaccine-monitor

surprising that prior negative experiences with the rural healthcare system impede individuals with SUD/OUD from receiving vaccinations.

Challenge #2: Vaccine Availability. In qualitative data, grantees stated that vaccine availability was geared to more populous regions of the country thus reducing availability in rural locations. For example, grantees reported that vaccine distribution has given priority to larger mass vaccination sites that can be hours away causing limited availability and long waiting lists for rural areas. Reliance on big box pharmacies as vaccination sites (e.g., CVS, Rite Aid) further reduces vaccine availability.

"There is a lack of vaccine distribution and administering health care providers for our geographic region. The county is serviced by small healthcare facilities that do not have the capacity to run large scale (>250 per day) mass vaccination. Limited vaccine supply has compounded this as the state's vaccine distribution has given priority to larger mass vaccination sites. No priority is given to high-risk individuals, minority/ethnic populations or underserved populations."

Challenge #3: Scheduling. When vaccines are available, scheduling challenges are pervasive because of roll-out confusion and complexity, confusing insurance status questions in online registration platforms, and an over-reliance on technology. Consortium project directors noted that vaccine distribution plans were vague and eligibility requirements changed and were confusing. For example, one state diverted a rural supply of vaccines to an area of the state with a COVID surge while another state decided to vaccinate based solely on age, disregarding high-risk medical conditions. This created uncertainty, complicating the community's ability to plan, distribute and vaccinate in a timely and coordinated way. Registration questions about health insurance status in some on-line registration platforms were also posited as a possible barrier to completing registration once started among the uninsured. Finally, reliance on technology for registration and scheduling can be time-consuming and complex, especially for older individuals and those with limited literacy.

"Others have difficulty accessing the online registration platforms, due to lack of internet access, and/or difficulty navigating those platforms due to literacy issues. The registration process also is time consuming and overly complicated for many individuals, especially those with limited proficiency with computers."

Challenge #4: Disparities. Disparities in vaccine availability and uptake were noted especially for Black, Latino/a, homeless, and SUD/OUD populations. In fact, only 20% of grantees (n=37) reported that people with SUD were included in their service area's category of high-risk/underlying medical conditions prioritized for vaccination. Additionally, grantees qualitatively reported that many of their service areas did not have plans for vaccinating those who are homeless or are intravenous users of substances.

To help address these vaccine disparities in underserved populations, RCORP grantees reported delivering targeted education and positive messaging and implementing drive-through vaccination sites and mobile vaccination approaches. Some grantees have begun to partner with

homeless shelters, soup kitchens, treatment providers and recovery homes, and the housing authority to ensure equitable access. Federally qualified health centers (FQHCs) placed vaccine clinics in minority communities, and one grantee reported partnering with the National Association for the Advancement of Colored People (NAACP) to bridge gaps in access.

"The [ ] is partnering with several organizations on a Vaccine Equity Project to ensure that rural communities, black and brown communities, and disadvantaged communities have access to the vaccine."

SUMMARY

Working on the front lines in many rural communities throughout the US, ***RCORP grantees are integral players in the race against COVID-19 by testing, contact tracing, and vaccinating residents of their rural service areas.*** These unexpected activities are being undertaken alongside a diverse set of tasks designed to reduce the morbidity and mortality of SUD/OUD. Through RCORP grant reporting mechanisms, RCORP grantees describe the various challenges they face as they work to immunize individuals with SUD/OUD and other rural Americans against COVID-19.

While vaccine hesitancy is by far the biggest hurdle to overcome, there are attendant issues that complicate how vaccine hesitancy can be addressed. First is the surprising finding that service providers (including healthcare providers) are themselves hesitant to receive a vaccine. Second is the fact that individuals with SUD/OUD continue to experience stigma at the hands of some healthcare providers. Hence, in addition to vaccine education, specifically addressing hesitancy in the provider community and stigma in the medical community and holding vaccination clinics at provider agencies to minimize the possibility of negative interactions will be critical to improve immunization among the rural SUD/OUD population.

"Based on our COVID-19 Impact Survey of SUD populations, people who use drugs and people who are in MAT have very high levels of vaccine hesitancy."

As vaccine availability increases, addressing scheduling barriers will be especially important. It is well known that the use of technology can be challenging in rural communities in the best of times. Relying on technology in the worst of times (e.g., during the COVID-19 pandemic) may require a change in direction. For example, communities may need to increase the number of CHWs who can assist with scheduling (and ways to get to a vaccination appointment). CHWs could conduct face-to-face canvassing activities to register rural residents for vaccines. Without a targeted approach to address technological challenges, vaccine access may remain limited for many individuals with SUD/OUD and other rural residents.

Special vaccine distribution initiatives may also be warranted. While mass vaccination sites and the use of big box pharmacies are useful in populous areas of a state or county, an over-reliance on these vaccination venues limits the number of rural residents who can avail themselves to immunization services. Whether it be the lack of big box pharmacies in rural communities,

transportation challenges, or the mere fact that residents may be unaware of events far away, developing and expanding vaccination venues (e.g., mobile vaccination approaches) *in rural communities* is needed.

Disparities round out the vaccine challenges. To address this, some RCORP grantees report partnerships with groups and venues where there is access to vulnerable and underserved populations. It is vital to attend to the specific needs and concerns of subpopulations (e.g., individuals with SUD/OUD, people of color) who are consistently and frequently over-represented among those experiencing poor health outcomes, health disparities and inequities due to stigma. Continuing to think outside the box will be necessary to ensure equitable access to immunization.

In sum, despite increasing COVID-19 vaccine availability, there are challenges to overcome before the majority of individuals with SUD/OUD and other rural residents become immunized. Importantly, through HRSA funding, there are groups on the front lines addressing the dual public health emergencies of opioids and COVID-19. Developing and implementing special initiatives to assist them in this work should help them move their work forward in a more expeditious fashion.

This report is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $3,000,000 (grant number U3CRH33332) with 0 percentage financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government.