Southwest Rural HEALTH RESEARCH CENTER

Analysis of an Innovative Approach to Target Rural Communities in Public Health Funding

Timothy H. Callaghan, PhD, Gogoal Falia, MBA, MBBS, Earl Greer, MPH, Maya Ramy, MS, and David Washburn, ScD

Purpose

During the COVID-19 pandemic, the Centers for Disease Control and Prevention (CDC) and its Center for State, Tribal, Local, and Territorial Support (CSTLTS) allocated $2.25 billion for the *National Initiative to Address COVID-19 Health Disparities Among Populations at High-Risk and Underserved, Including Racial and Ethnic Minority Populations and Rural Communities* to address COVID-19 health disparities among at-risk and underserved populations. This included $427 million allocated to rural America in the form of a carve-out of funds specifically devoted to addressing COVID-19 in rural communities (hereafter referred to as the rural carve-out). The purpose of this policy brief is to explore this CDC rural carve-out initiative and its impact. Through interviews undertaken with key actors across the CDC, Federal Office of Rural Health Policy (FORHP) in the Health Resources and Services Administration (HRSA), the National Organization of State Offices of Rural Health (NOSORH), and State Offices of Rural Health (SORHs), we explore the development of the carve-out, the impact of the carve-out on state behavior and rural communities, challenges faced, and lessons learned which can be applied to future efforts to fund rural health using carve-outs from broader funding initiatives.

Background

The COVID-19 pandemic shed new light on health disparities between urban and rural America, with higher rates of COVID-19 morbidity and mortality for those living in rural communities.[1-3] These disparities in COVID-19 outcomes were exacerbated by the fact that rural Americans have been less likely to adopt preventive health behaviors tied to COVID-19[4] and the reality that rural Americans tend to be older and suffer from higher rates of comorbidities associated with increased risk of COVID-19 mortality.[5,6] To address health disparities between urban and rural communities, both in general and specific to COVID-19, prior research has noted the need for additional rural health funding, particularly for advancements tied to access to primary and behavioral care, mental health and emergency medical services, broadband internet, transportation, and other technical assistance.[5,7,8]

While considerable investments have been made in recent decades to improve the public's health broadly, funding initiatives are typically directed at high population areas which tend to be urban.[7] This can leave rural communities more underfunded relative to need as compared to their urban counterparts and

Key Findings

- The CDC's COVID-19 rural carve-out, which explicitly designates a portion of funds for rural areas, has widespread support among stakeholders, with most encouraging the use of carve-outs for future grant programs as well.
- The development of the carve-out at the CDC was a complex and multi-faceted process, in part because it was a new type of funding mechanism.
- The carve-out has provided many leaders in State Offices of Rural Health a 'seat at the table' in state public health decision-making.
- Funds are being used in interesting and creative ways, but it is too soon to evaluate the impact of funds on rural communities.
- Despite program support, the rural carve-out has seen some challenges tied to rural administrative capacity, sustainability, and timing, as has been seen with other rural health initiatives during the pandemic.

exacerbate existing urban-rural inequities. For that reason, there has been growing interest in recent years from rural health advocates to find ways to carve out funding from broader public health funding efforts for rural communities.[7] This perspective is perhaps best articulated in Meit et al.[7] where they recommend that federal agencies "include a designated percentage, or "carve-out" for rural residents in funding opportunities" to ensure "equitable distribution of resources to impact the over 57 million Americans living in rural areas."

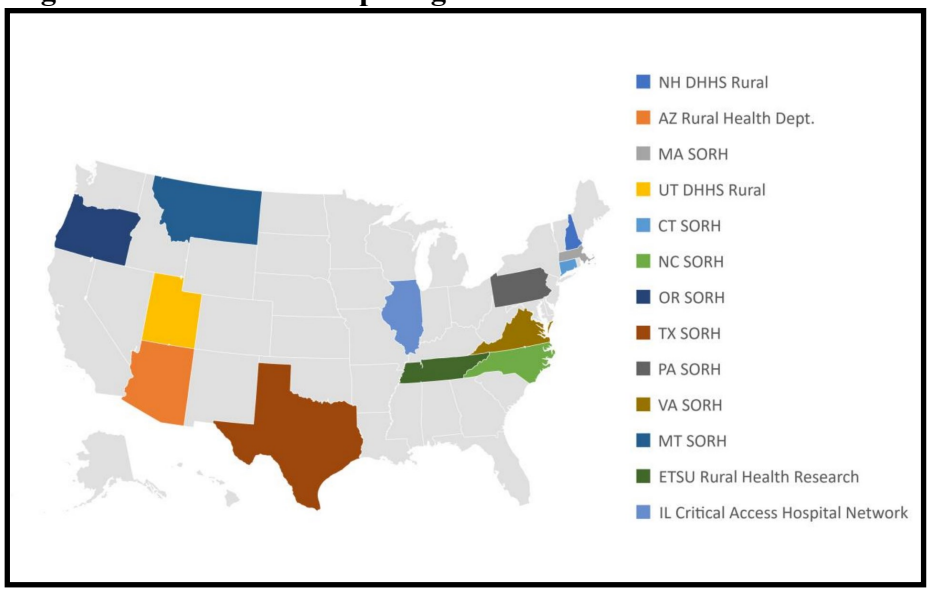
Despite growing calls from some rural advocates for federal funders to rely on carve-outs for rural health within broader public health funding initiatives, the use of these mechanisms has been rare to this point.[7] The emergence of the COVID-19 pandemic, however, spurred innovation in many areas including in rural health funding. Specifically, as part of its efforts to address health disparities identified during the COVID-19 pandemic, the CDC carved out $427 million for rural communities from a 2.25-billion-dollar funding initiative.[9] As part of the overall grant program, each state was provided with funds to reduce COVID-19 related health disparities, improve testing and contact tracing within underserved populations, and improve health department capacity and services to control COVID-19.[10] Critically, the CDC's funding strategy noted that "approximately 19% of total available funding will be awarded to states with rural populations," that "all state recipients will receive a portion of the rural funding available," and that "each recipient's share will be based on the size of the rural population within the recipient's jurisdiction."[10] Furthermore, the CDC's funding announcement emphasized rural health by urging states to work with key rural partners including SORHs and rural health clinics.

Combined, the CDC's COVID-19 health disparities funding initiative represents a massive influx of funds for rural communities across the United States and the largest rural health carve-out ever implemented. Critically, however, little is known about how this unprecedented carve-out came to be, how it is being implemented, challenges faced so far, or lessons learned for potential future funding of carve-outs. Our policy brief works to explore each of these issues.

Methods

To investigate the CDC COVID-19 rural carve-out initiative and its impact, this research relied on interviews conducted with public health leaders across the United States from March to June in 2022. Interviews were conducted with four key groups: individuals involved in the development of the carve-out at the CDC, individuals at the FORHP who were involved in helping the CDC to develop the carve-out, a leader from NOSORH who helped link states involved in the initiative with each other, and representatives from 13 SORHs responsible for implementing the carve-out. Recruitment of participants for all groups relied on snowball sampling, with Tom Morris at FORHP and Diane Hall at the CDC providing initial connections to relevant stakeholders who then also suggested other stakeholders to interview. In total, we interviewed five individuals from the CDC, three individuals from the FORHP, one individual at NOSORH, and 18 individuals within SORHs representing 13 states. Our analysis included SORH officials from Arizona, Connecticut, Illinois, Massachusetts, Montana, New Hampshire, North Carolina, Pennsylvania, Oregon, Tennessee, Texas, Utah, and Virginia. The included states provide necessary diversity based on state size, rural populations, and geographic locations to ensure that our analysis represents various perspectives of SORHs from across the country. **Figure 1** depicts each of the states included in our analysis.

Figure 1. States of Participating Stakeholders



Note: We also interviewed stakeholders from the CDC, FORHP, and NOSORH

Each interview was approximately 60 minutes long and was conducted in English. In total, 27 personnel across the CDC, FORHP, NOSORH, and SORHs participated in this research. Each interview focused on inter-agency interactions, the role played by each actor in the carve-out process, the use of carve-out funds, challenges faced by the actors, the impact of the carve-out on rural communities thus far, and lessons learned with a goal of incorporating these lessons into future funding initiatives. All interviews were audiotaped and videotaped after subjects were given the opportunity to review a study information sheet in line with IRB approval at Texas A&M University. These recordings were subsequently transcribed and coded using the qualitative data software NVivo Pro. Our study relied on a thematic analysis that was inductive – allowing information that emerged from the interviews to guide theme development.[11,12] Data were coded independently by two researchers on the project team and a high degree of concordance was found across the coders. The research team met regularly to develop and refine a final codebook for the project.

Results

Our thematic analysis of interviews with stakeholders related to the rural carve-out revealed important information about the development of the carve-out, its impact within states, and challenges faced which could serve as lessons for future carve-outs.

Carve-Out Development

Creating and Defining a Carve-Out is a Technical Process

Study participants at the CDC consistently noted that the novelty of the carve-out, with little precedence to rely on, made its development within the broader grant a technical process requiring effort from stakeholders at multiple levels. For example, one CDC official noted the challenges in determining how to develop a rural carve-out:

> *"So just how do we make that determination? How did we derive and come up with the formula to include a rural carve-out? Many of our grants that go out of the CDC, a lot of them are competitive. So that's a whole other conversation into how you bring this kind of rural piece into it." (CDC)*

Critically, one official at the CDC noted that they quietly looked outside their organization to the FORHP for additional insight and vetting of the planned carve-out:

> *"I asked the Federal Office of Rural Health Policy to look at it, vet it with [their] partners, close hold, not ready to go yet, and just make sure that we're hitting the mark on this. We want to make sure that it's relevant to the audience that we're intending it for. And so that touch point with the community has just been helpful, and they've helped us with listening sessions and all sorts of other things. So, it's just been a great partnership." (CDC)*

Another CDC official noted that data was critical in the development of the funding formula tied to the carve-out:

> *"It came down to just a lot of data because we had to figure out how much money each state health department would get. And when we apply this definition…and Federal Office of Rural Health Policy, basically gave us the data tables that outlined how rural each state was, and then we were able to start iterating on various actual funding formulas from that." (CDC)*

In the end, multiple stakeholders noted that the language used in the carve-out's Notice of Funding Opportunity (NOFO) proved particularly important, with the CDC language explicitly requiring the involvement of SORHs vital to its success:

> *"One of the ways that we signal our seriousness about rural is how we word things in our Notice of Funding Opportunity or NOFO. And so, when a NOFO goes out and it says you must include your State Office of Rural Health, that's a big deal. That indicates loud and clear that the CDC is serious about rural being at the table in a meaningful way. And this is not being about what the state thinks is needed in rural, this is about rural informing all of that." (CDC)*

> *"And I think that state office of health is mentioned in the NOFO like a bunch of times, which is great to hammer home that when we say rural, we mean working with these specific people. The way that the grant named specific partners that you can engage with, other HRSA-funded offices were helpful as well because those are people that we collaborate with." (New Hampshire)*

Rural Health Champions Critical to Program Implementation

Interestingly, even as individuals at the CDC rightly acknowledged that the carve-out would not have come to fruition without legislation, noting for example that "It all stemmed from the legislation" (CDC), there was wide consensus that rural health champions at the CDC were instrumental to the carve-out's creation. In our interviews with SORHs across the country, it was clear that many believed that Diane Hall was central to the development of the rural carve-out. Actors in states across the country credit the Senior Health Scientist at the CDC with facilitating the CDC's growing focus on rural health and their subsequent leadership of the rural carve-out:

> *"I mean, Diane is amazing. She's been there five, six years now in that role. And she is a pit bull; She will not let things happen at the CDC without asking the question, "How does this impact rural?" She is a true champion and is always providing that lens. And yeah, I am confident none of this would have happened without her." (Tennessee)*

> *"The State Offices of Rural Health were specifically listed in the NOFO. So, that was terrific. And I was so grateful that we had that. I do believe that was due to Diane Hall's involvement, although no one has said that, it's just my assumption." (Pennsylvania)*

> *"As the effort to focus on rural led by Diane Hall, who I will give all the credit to forever." (New Hampshire)*

Of course, it is important to recognize that Diane Hall was not alone at the CDC in pushing for implementing the carve-out. Even as Diane Hall was critical to the rural-focused direction of the CDC and the carve-out, our interviews within the federal government pointed to the critical role played by others at the CDC in developing the carve-out, particularly within CSTLTS. The most prominent of these figures was Andrea Young. Notably, interviews with Diane Hall at the CDC and Tom Morris at FORHP both point to Andrea as the initial policy entrepreneur pushing for a carve-out:

> *"When CSTLTS got this funding, Andrea came to me and said, "We would really like to include rural here. What are your thoughts on how we do that?" And my first answer was, "I don't have the answer, but I can help get people to the conversation who can help you think through it in more detail." Like I can do like big picture stuff, but part of my role is to help make those connections, and so I was able to set up some phone calls with Andrea and some other people from CSTLTS with staff from the Federal Office of Rural Health Policy, and the NOSORH." (Diane Hall)*

> *"Andrea really was the driving force behind that. I think she had some initial conversations with… Diane Hall. And then at that point that's when they came to us and we became engaged with them and sort of brainstorming ideas, talking about different approaches and really they ran with that." (Tom Morris)*

Carve-Out Impact

The Carve-Out Provided Rural Leaders a 'Seat at the Table' in Some States but Not in Others

Despite the complexity of establishing the carve-out, its final design with an emphasis on the involvement of SORHs proved critical in providing rural leaders in many states a 'seat at the table' during state public health decision-making that they often lacked:

"The big thing is that it allowed us to be at tables that we typically wouldn't ever be invited to at the Department of Public Health because it specifically has the carve-out for funding and specifically names the State Office of Rural Health as the partner that needed to be [at] the table for that. I think if there [had] just been a carve-out and no naming of the State Office of Rural Health, folks that did not have any understanding of rural needs, probably would have designed something to go out to rural communities and it may not have had the same kind of impact by having kind of those rural subject matter experts at the table of State Offices of Rural Health." (Massachusetts)

"I honestly think that if there had not been that mention of rural, it would have been harder for me to make that case." (North Carolina)

Critically however, being provided a seat at the table was not universal. Rural leaders in many states noted that they felt like an afterthought despite the inclusion of SORHs in the NOFO, only getting consulted on the pursuit of federal funds at the last minute due to the State Office of Rural Health requirement:

"I was initially very excited because there was an opportunity to get rural funds and an opportunity for the State Office of Rural Health to programmatically have an opportunity to decide which communities could get the funds based on work that we had just completed updating our State Office of Rural Health plan or our state rural health plan. I'm going to be very honest here. We sit within an agency that is [in] the state health department. It's very top-down as far as administration and the way things are managed. And so, I sent the call to the commissioner, he acknowledged it, and then nothing happened until the day before the letter of intent was due when I got a call late at night. I'm asking to put in the letter of intent, we did that and then the agency took it from there. So, my excitement was short-lived I guess because we got the minimum and not the maximum [level of involvement] or had no opportunity to provide any input into how the funds would be spent from that moment on." (Anonymous SORH respondent)

"We did not find out until the state let us know because I remember the guidance coming out and I remember reading it briefly thinking, "this was going to go through our state health department", and that always feels slightly detached from [us] because we're not based in our state health department. There's always a moment where we wait and see what's going to trickle down to us. And hence that's probably another nugget of why it's important to have a rural carve-out that specifically mentions State Offices of Rural Health because we're not all in the state mechanism. Some of us are nonprofits or academically based." (Arizona)

Funds are Being Used in Creative and Important Ways That Are Not Just Focused on COVID-19

Our conversations with rural stakeholders revealed that funds are being used in creative and interesting ways likely to benefit rural communities. Notably, while the primary purpose of the funds was to address COVID-19 disparities, our conversations with states demonstrated the flexible nature of the grant, which allowed recipients to address social determinants of health and to focus on local priorities. For example, state leaders noted:

"One of the things that they are doing is developing a Project ECHO [Extension for Community Healthcare Outcomes] hub within the center to do diversity training among providers in rural areas." (Utah)

"There is a transportation pilot for on-demand prescreened, high-need individuals that they're expanding to another ZIP code with these funds, which is high in the SVI [Social Vulnerability Index] . So that's a super activity that just started. And then the other is vaccine messaging." (Connecticut)

"We've partnered with a lady who runs Williamson County's paramedicine program. She is going to go in and help set up their programs within each of the communities, tell them what they need to be doing, how they need to structure it, provide consulting, and help them build the framework on which the community paramedicine programs will be built upon. On top of that, we have also provided each one of the communities with seed money that they can use in the form of a grant. [With] this, they will be able to use [the funds] to buy all the equipment, supplies, maintenance for the vehicles, and all that stuff for the next year to be able to make it successful and get it up and going." (Texas)

While diversity training, transportation, and paramedicine are all vital to rural health and could have connections to COVID-19, our results suggest that rural carve-out funds are being used in interesting and creative ways that could see external benefits to rural health beyond COVID-19.

Carve-Out Challenges

Some Rural Communities Lacked the Capacity to Manage New Funds

While many states are using carve-out funds in important and innovative ways, other states noted that they are struggling to manage funds provided by the carve-out due to insufficient capacity, especially in the midst of managing other funds provided to combat the COVID-19 pandemic. Many rural communities lack infrastructure and staffing. While funds can be helpful, the associated bureaucratic requirements tied to reporting, staffing, and other issues, paired with tight timelines, can create problems. This was best articulated by officials in Oregon and Tennessee:

"The one thing to keep in the bigger picture of COVID and the success of any grant program that came out is panic, politics, and reality. The panic got a lot of money flowing, the politics got a lot of money flowing, and the reality is it was like drinking out of a fire hose. There was so much money coming from the federal government and then state sources throughout this whole timeframe with some very unrealistic timelines about how long it was going to get that money out the door that I think our office and others were a little bit overwhelmed. They would probably come back to you in two or three, four years, maybe less to be able to say, "You know what? That was a great idea, but it didn't work out as far as the amount of money that came in, because you just can't implement some of these programs as quickly as people want. And we struggle with being able to staff up." (Oregon)

"Drinking from a fire hose issue is not helpful for rural communities. Smaller amounts of longer-term funding are better than bigger amounts of short-term funding." (Tennessee)

This feeling that emergency pandemic-focused federal funds resulted in a situation in which rural communities had to "drink from a fire hose" with large funding amounts and short timelines was seen in many states. State leaders cited it as one of the most prevailing challenges in their work fighting COVID-19 in rural communities.

Sustainability is a Key Concern for State Leaders Implementing the Carve-Out

Although issues tied to capacity were common, rural leaders more consistently pointed to sustainability issues that can serve as a lesson to learn for future carve-outs. They noted that even as the carve-out has provided a necessary influx of funds, the funding is short lived at only two years (as it is COVID-19 specific), making it difficult to sustain new staffing or programs developed through the grant initiative. This idea was perhaps best articulated by an official at NOSORH in regular communication with states implementing the rural carve-out:

"It's a two-year influx of funding without any sustainability planning to go along with them. So, you can't start hiring staff and building your capabilities. You'd have to stick with the stuff you've got, add this to their workload like they didn't already have enough, with no additional funding from their offices. And then they've got to turn around and punch the money out. It's not like they can hire somebody because there's no long-term strategy for investment." (NOSORH)

In fact, stakeholders in various states were apprehensive about the short-term nature of this funding which is a deterrent to sustainability:

> *"We've shifted our focus a bit in that we are looking at sustainability for these programs as opposed to just the short term. So now as an office, my role is to see how we can help these folks sustain their program versus just, "here are your funds for two years, or here are your funds for only one year." (Montana)*

Time was a Major Concern for All

The final major challenge seen thus far tied to the carve-out is a lack of time related to the initiative. At the federal level, many CDC officials felt rushed in the creation of the NOFO due to their need to get COVID-19 funds to states as quickly as possible in the midst of an ongoing pandemic:

> *"Honestly, I do think just given the timeframe that we had and the tight timeline we were on, I think we did a great job of getting it out and developing a process and a formula in a way to help address rural communities in a great way. I think if anything I would say, it would have been great if we had more time, to have more conversations, and think about things a little bit more. I don't want to say a little bit more in detail, but just had more time engaged and had more conversations about ways that we can improve things." (CDC)*

While many of the individuals interviewed as part of this project felt like things were moving too quickly and that more time would have been useful, one stakeholder at the CDC argued that things were occurring too slowly, especially considering the need to quickly disburse funds to combat the pandemic:

> *"I think that things take too long in government. I don't see why it takes [so long]. I think it takes somewhere around nine months to a year to write a Notice of Funding Opportunity and get it out the door. I think that's ridiculous, personally. But I played a very small part in this whole thing. So, I don't know the whole transaction and the bureaucracy that goes along with it. But I do think that sometimes trying to be very strategic and purposeful and thinking things through that government sometimes falls into the pit hole. Perfect being the enemy of what you're trying to achieve, and in the end, things taking too long." (CDC)*

It is Too Early to Evaluate the Impact of the Carve-Out

While our analysis was able to uncover important information about the carve-out's development, creative ways funds are being used, and challenges faced thus far, stakeholders across the country noted that it is far too early to know the true impact of the rural carve-out on rural communities. Given delays in setting up contracts and getting funds disbursed to local community groups, projects were only just getting underway in many states at the time of our interviews in Spring 2022. Even leaders at the CDC noted that it could be quite a while until much is learned:

> *"Not before the fall* [of 2022]. *So, there's information available in terms of work plans, what the recipients plan to do with their funding, and how it aligns with the different strategies that are defined in the grant. But their progress reporting won't be in before the fall. And even then, if you're looking at it, we are talking about process monitoring mostly is what I'm expecting to see in the fall. In terms of the impact that would be even farther out probably." (CDC)*
>
> *"So, I have heard a little bit about it, and I do know that CSTLTS, our colleagues that are primarily responsible for the administration of the funds, are actively analyzing a lot of the data that they're getting program-wise. They have an up-to-date and current sense of what's being done by the people." (CDC)*

Discussion

Using detailed interviews with stakeholders involved in the rural carve-out at the CDC, FORHP, NOSORH, and in SORHs, this brief has highlighted the implementation and impact of the CDC's COVID-19 rural carve-out of funds. While the grant program is still ongoing, preliminary results from this research suggest a positive response from stakeholders across the country. By explicitly noting SORHs in the funding call, many rural leaders have been given a 'seat at the table' in state public health decision-making that they have previously lacked. Notably, this has allowed for funds to be used in interesting and creative ways that are already benefiting rural communities. Interestingly, while the carve-out was explicitly designed to combat COVID-19, funds in some states are being used in other creative ways which could enhance the overall impact of the grant program.

Despite the clear benefits of the carve-out and the high levels of support for the program, as a new program design, the carve-out has understandably faced challenges which can serve as lessons in the development of future carve-outs. Its implementation has been technically complex, and some rural communities have lacked sufficient capacity to implement the funds as intended. This issue has been exacerbated by the short timeline of the program, with many state leaders noting that smaller amounts of long-term funding would be preferable to larger amounts of short-term funding. Our work also identifies sustainability as a key challenge of the COVID-19 rural carve-out. SORHs and local communities have been unable to hire personnel needed to meet the funding timeline, jeopardizing the effectiveness of this carve-out.

Of course, it is critical to acknowledge that this first ever large-scale rural carve-out was implemented in the midst of a public health emergency that brought with it a host of challenges to all stakeholders involved. As such, it is difficult in some cases to disentangle whether challenges observed are due to the design of the carve-out itself or due to the unprecedented nature of the pandemic in which the carve-out was released. For example, some of the administrative burden that SORHs and community leaders felt could have been more manageable if they were not simultaneously managing other streams of pandemic-associated funds. This complication necessitates additional rural carve-outs outside the context of the COVID-19 pandemic to better assess which of the challenges faced are attributable to the program design versus the pandemic. Furthermore, we must recognize that as an in-progress grant program without clear success stories to share yet, participants are inherently more likely to report the challenges they have faced.

Implications

For the past several years, rural health advocates have pushed for the use of carve-outs in broader funding mechanisms to ensure that rural America is not left behind in funding initiatives. The CDC COVID-19 rural carve-out represents one of the first ever opportunities to test whether rural carve-outs are a viable path forward for rural health funding. While it is too soon to draw any definitive conclusions with the program still underway, our research finds significant support for the CDC carve-out across participating stakeholders. Perhaps more importantly, stakeholders universally supported the implementation of future rural carve-outs as well. More than just providing funding, the carve-out appears to have changed the behavior of state public health leaders and provided a 'seat at the table' for many rural leaders to ensure that funds are used in ways that will most benefit rural communities. The funding has also given them the financial resources to undertake creative approaches to address COVID-19 in their communities.

Despite the clear benefits of the carve-out thus far, it is important to acknowledge that there have been multiple challenges that future carve-outs can learn from to better enable program success. First , while the carve-out has provided a seat at the table for some, other rural leaders were left on the sidelines and only consulted as a formality or at the last minute. Continuing to refine language in funding calls to ensure that state leaders bring rural experts into the process early appears to be necessary. Second, funders need to do more in the future to recognize administrative capacity limitations of many rural communities. Implementing the carve-out at the local level, managing state bureaucratic processes, meeting federal reporting requirements, and managing other rural grants and

programs simultaneously is proving to be a herculean task in some under-resourced communities, particularly given the condensed timeline of the grant program and other streams of COVID-19 funding they are managing. Finding ways to reduce the administrative burden on certain rural communities in future carve-outs would be valuable.

Future carve-outs also need to more carefully consider sustainability within the grant programs they are creating. Many stakeholders noted concerns about setting up ambitious new programs without any guarantee that funding will be maintained after two years, no matter how successful they prove to be. Others did not feel comfortable hiring new staff for such a short program or worried about the impression it would leave on communities to develop a program for them to rely on, and then quickly remove the program. Given this concern, future carve-outs should identify ways to sustain programs that prove successful and should aim to set up programs that last longer than two years. The unique nature of the pandemic-era program likely pushed the grant program developers towards the short timeline, but the experiences of states suggests that outside the context of public health emergencies, longer timelines and explicit plans for sustainability would be valuable.

Finally, future carve-outs should do more to balance the size of the funds provided and the timeline in which the funds can be used. Multiple stakeholders suggested that they would prefer smaller amounts of long-term funding as opposed to large amounts of short-term funding. This shift could help to alleviate concerns about administrative capacity and sustainability and could prove vital to the long-term success of using carve-outs to fund health initiatives in rural America. Of course, it is important to recognize that many of these limitations are reflections not just of the funding mechanism itself, but also of the unique context of the COVID-19 pandemic. For example, timing concerns and sustainability are inherently complicated by the emergency situation created by the pandemic, and future rural carve-outs may be less prone to these issues.

Ultimately, despite these challenges, the CDC's COVID-19 rural carve-out appears to be having a positive impact on rural communities across the country and could serve as a useful template for future carve-outs. By building on the success of this initial grant program and making changes to improve rural leaders access to public health decision-makers, administrative capacity, and sustainability, rural carve-outs could hold promise to improve rural health and to reduce disparities in health access and outcomes between urban and rural communities.

References

1. Souch JM, Cossman JS. A Commentary on Rural-Urban Disparities in COVID-19 Testing Rates per 100,000 and Risk Factors. *The Journal of Rural Health: official journal of the American Rural Health Association and the National Rural Health Care Association*. 2021;37(1):188-190. doi:10.1111/jrh.12450

2. Huang Q, Jackson S, Derakhshan S, et al. Urban-rural differences in COVID-19 exposures and outcomes in the South: A preliminary analysis of South Carolina. *PloS one*. 2021;16(2):e0246548. doi:10.1371/journal.pone.0246548

3. Cartwright K, Gonya M, Baca L, Eakman A. "We're Such a Small Community": A Qualitative Study of COVID-19 Pandemic Experiences in Rural New Mexico. In: Kronenfeld JJ, ed. *Health and Health Care Inequities, Infectious Diseases and Social Factors*. Emerald Publishing Limited; 2022:41-57. *Research in the Sociology of Health Care*.

4. Callaghan T, Lueck JA, Trujillo KL, Ferdinand AO. Rural and Urban Differences in COVID-19 Prevention Behaviors. *The Journal of Rural Health: official journal of the American Rural Health Association and the National Rural Health Care Association*. 2021;37(2):287-295. doi:10.1111/jrh.12556

5. Summers-Gabr NM. Rural–Urban Mental Health Disparities in the United States during COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy*. 2020;12(S1):S222-S224. COVID-19: Insights on the Pandemic's Traumatic Effects and Global Implications. doi:10.1037/tra0000871

6. Peters DJ. Community Susceptibility and Resiliency to COVID-19 Across the Rural-Urban Continuum in the United States. *The Journal of Rural Health: official journal of the American Rural Health Association and the National Rural Health Care Association*. 2020;36(3):446-456. doi:10.1111/jrh.12477

7. Michael Meit, Crystal Barter, Sally Buck, Mark Woodring. Rural Carve-out Funding. 2021. NRHA Policy Brief. https://www.ruralhealth.us/getmedia/f967c117-85c6-4d69-ae81-62176aaaa42e/NRHA-Policy-Brief-Rural-Carve-out-Funding_1.aspx

8. Pierce RP, Stevermer JJ. Disparities in use of telehealth at the onset of the COVID-19 public health emergency. *Journal of Telemedicine and Telecare*. 2020:1357633X20963893. doi:10.1177/1357633X20963893

9. 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) (2022).

10. CDC-RFA-OT21-2103. National Initiative to Address COVID-19 Health Disparities Among Populations at High-Risk and Underserved, Including Racial and Ethnic Minority Populations and Rural Communities Department of Health and Human Services Centers for Disease Control - OSTLTS. 2021.

11. Timothy C, David JW, Katharine N, Delia D, Anoop G, James B. Immigrant health access in Texas: policy, rhetoric, and fear in the Trump era. article. BMC Health Services Research. 06/01/ 2019;19(1):1-8. doi:10.1186/s12913-019-4167-1

12. Fereday J, Muir-Cochrane E. Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. International Journal of Qualitative Methods. 2006/03/012006;5(1):80-92. doi:10.1177/160940690600500107

Timothy H. Callaghan[1], Gogoal Falia[2], Earl Greer[2], Maya Ramy[2], and David Washburn[2]

[1]Department of Health Law, Policy, and Management, School of Public Health, Boston University, Boston, MA 02118

[2]Department of Health Policy and Management, School of Public Health, Texas A&M University, College Station, TX 77843-1266

Suggested Citation: Callaghan TH, Gogoal F, Greer E, Ramy M, Washburn D (2023). Analysis of an Innovative Approach to Target Rural Communities in Public Health Funding. Policy Brief. Southwest Rural Health Research Center. Available at: https://srhrc.tamu.edu

This study was supported by the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement #U1CRH30040. The information, conclusions, and opinions expressed in this brief are those of the authors and no endorsement by FORHP, HRSA, or HHS is intended or should be inferred.

Southwest Rural Health Research Center
Texas A&M School of Public Health
212 Adriance Lab Road
MS 1266
College Station, TX 77843

For more information, contact Tasha Johnson:
Phone | 979.436.9512
Email | nyjohnson@tamu.edu

PUBLIC HEALTH TEXAS A&M UNIVERSITY