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Vaccine hesitancy threatens rural communities and their health care: **This is an emergency**

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New research indicates that existing vaccinations provide [significant protection against hospitalization and death](#) while hospitals and primary care facilities tackle the aftermath of the most recent COVID-19 surge. This is encouraging as [more than 80% of Americans](#) 5 years or older have received at least one dose of the COVID-19 vaccine. This vaccination rate, however, has not been achieved uniformly. Differences in politics and state leadership may account for the wide variation across the nation. Rurality may also play a pivotal role. [As of March 17, 2022](#), 64% of metropolitan populations were fully vaccinated, compared to just 50% in rural areas.¹

The persistence of this lag could continue to leave these communities more vulnerable to current and potential future variants. This brief explores COVID-19 vaccine hesitancy in rural communities, as well as some of its potential impacts, and offers policy recommendations. Data analyzed² in this brief was collected by the [Larry A. Green Center \(Center\)](#) between July 2021 and December 2021, as America was dealing with both the Delta and Omicron variants of COVID-19.

Vaccine hesitancy has remained prevalent in rural areas and continues to challenge patients and practices

In earlier 2021 surveys, more rural primary care (PC) clinicians reported that vaccine hesitancy among unvaccinated patients was higher and harder to counter compared to their urban peers (65% vs. 51%). A survey in December 2021 similarly saw rural respondents state their patients have decreased interest in COVID-19 vaccines (25% vs. 16%). This shows that the hesitancy in rural communities has continued to be present despite current efforts and needs to be addressed on an ongoing basis.

Hesitancy toward the vaccine is not unique to patients and seems to be shared by many health care workers as well. In August 2021, more than twice the percentage of rural respondents indicated that employee vaccination rates were below 50% (25% vs. 11%). Perhaps connected, three months later, vaccine hesitancy among rural practice members was 68% more likely to create more internal tension than in urban practices (52% vs. 31%).

The persistence in rural-based vaccine hesitancy foreshadows that these communities will remain at risk for larger surges and worse [outcomes](#) from COVID-19. Other complicating factors could additionally strain rural health systems, including the recent [Supreme Court decision](#) allowing vaccine mandates for health care workers to continue. Rural regions with more employees who are uninterested in vaccination may face termination, leaving those health systems with even greater staffing shortages and an increased reliance on contract labor to emergently fill positions at a [higher price point](#).

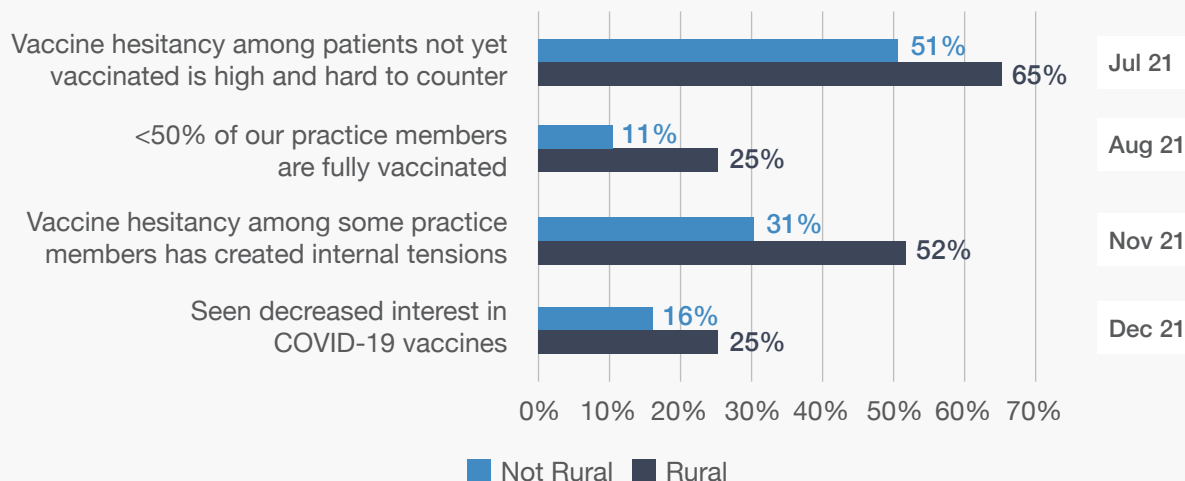
"I am starting to lose empathy for patients who refuse the COVID vaccinations, and while I have not given up trying to discuss their concerns/hesitancy, I am close to giving up those discussions because you can only waste so much time banging your head against the same wall, over and over with no result."

Rural primary care clinician, Oregon,
August 2021

"Politics has led to a high level of mistrust of the medical community where I live. And I just don't know how to reach those patients. They refuse to have a conversation about vaccination or masking. I keep trying because I know it is important but it is hard and often feels hopeless."

Rural primary care clinician, Texas,
August 2021

COVID-19 vaccine hesitancy persisted through multiple surges in rural communities



COVID-19 surges caused substantial stress for both rural health systems and clinicians

From July to December 2021, rural PC clinicians consistently reported higher levels of unsustainable stress on their health systems. For example, rural respondents were at least 40% more likely to report a recent “surge” in October 2021 (51% vs. 72%) and almost 30% more likely to report an “increase in COVID-19” in December 2021 (54% vs. 70%).

This burden is being compounded by reports of rural respondents being 40% more likely to be “running out of resources” (55% vs. 32%) and 50% more likely to state that access to specialty care “is limited” for their patients (60% vs. 40%). Such strain is reportedly also forcing almost a quarter of rural respondents to work outside of their scope of training and comfort zone more often – twice as often as urban respondents (24% vs. 12%).

Lack of resources, inability to access specialty care, and clinicians working outside their level of comfort all place patients at risk of receiving sub-optimal care and create the perfect environment for medical errors to happen – a devastating occurrence for patients, clinicians, and health systems alike.

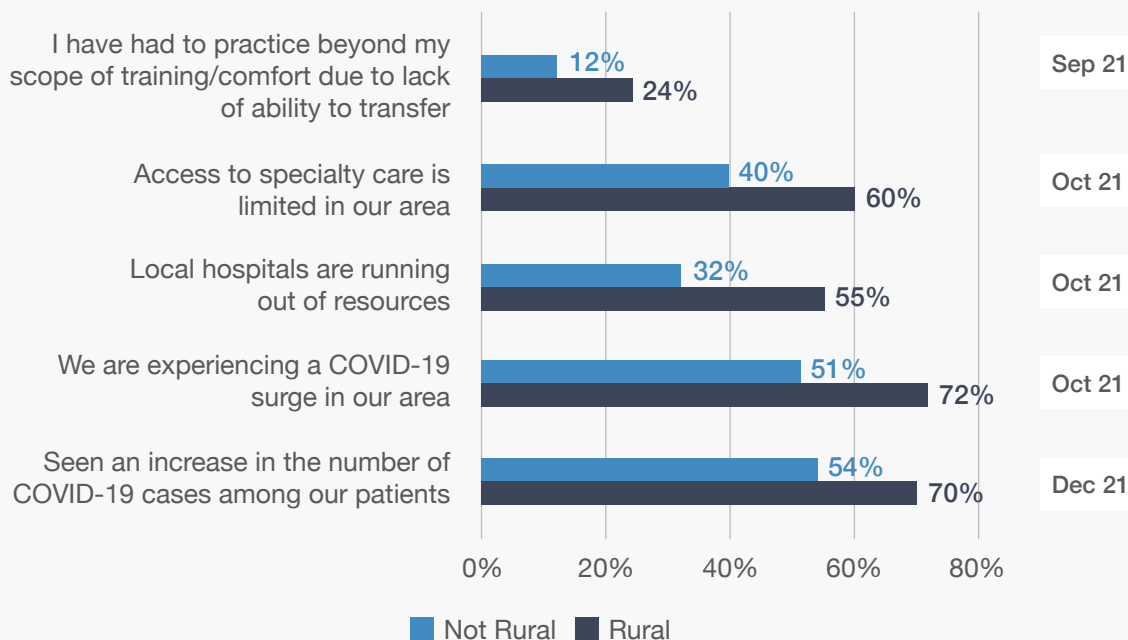
“Our area is now facing and dealing with a COVID surge as bad or worse than that in FL and TX last month. Our small Critical Access Hospital is full and we in primary care, the only primary care agency in our rural area, [are] overwhelmed. We are losing staff for various stress related reasons, from burnout to unwillingness or inability to comply with the vaccine mandate. We have lost so many nurses recently that we may not be able to continue functioning as we have for so long.”

Rural primary care clinician, New Hampshire, October 2021

“COVID has allowed us to take on many of the roles traditionally performed in the hospital or with specialists. People rely on me a lot more now for casting, minor outpatient surgery, conscious IV sedation, and care delivery at home.”

Rural primary care clinician, Michigan, August 2021

Continued COVID-19 surges placed unsustainable stress on rural clinicians and health systems



Pandemic effects leading to increased mental strain for rural primary care clinicians, while facing limited access to mental health services

The relative lack of mental health services in rural communities for patients and clinicians alike [existed long before COVID-19 arrived](#) and puts rural clinicians at greater risk for burnout. Unfortunately, the pandemic does not appear to be changing this as rural practices were about 34% less likely to add mental health resources to their practices since the pandemic began (19% vs. 29%). This access challenge could have a greater toll on rural clinicians who have been facing similar mental stress due to the COVID-19 pandemic like their urban peers.

In July 2021, about 30% more rural respondents indicated they struggled to maintain clear thinking (29% to 20%). Later surveys show that about 6 in 10 rural clinicians reported depression or post-traumatic stress disorder (PTSD) symptoms (62% vs. 58%), and that their exhaustion was at an “all time high” (59% vs. 60%).

These types of rates of mental health strain seriously threaten the well-being of these individuals and their health care systems. Without better support and access to resources, the continued mental stress could lead to high and persistent levels of burnout, thereby increasing the likelihood that these clinicians leave medicine entirely.

“We need more resources for mental health counseling.”

Rural primary care clinician, Virginia, October 2021

“Mental health care is severely limited and we need more inpatient beds. Rural practices continue to be understaffed both in clinicians as well as nursing staff leading to burn out.”

Rural primary care clinician, Washington, October 2021

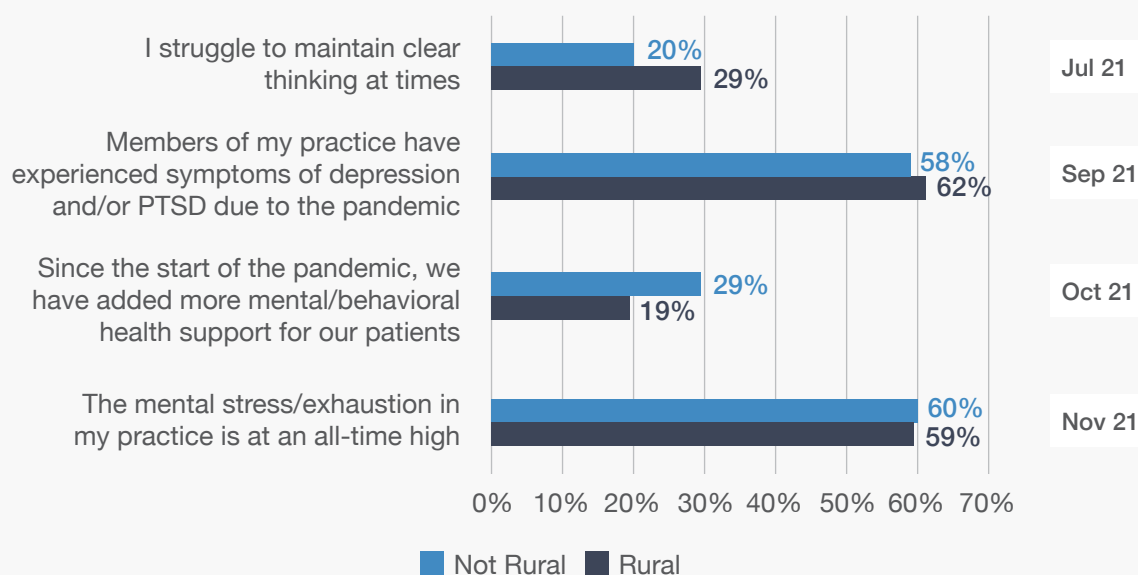
“I decided to retire.”

Rural primary care clinician, Illinois, December 2021

“I am emotionally traumatized and experiencing severe burnout. I would quit if I was able. It feels like someone designed a process to ruin primary care, and the process is underway.”

Rural primary care clinician, Michigan, December 2021

Rural communities faced similar mental strain as their urban peers during COVID-19 pandemic but with fewer resources



Policy recommendations

Rural communities nationwide have experienced continued hesitation toward the COVID-19 vaccines despite the fact that studies have shown they [reduce mortality](#) and decrease [hospitalizations](#). Larger rural unvaccinated populations will leave these communities – and clinicians – at higher risk for more serious COVID-19 surges and disease severity in the future that will continue to overextend their health systems. These issues merit urgent attention for the present crisis, as well as the next one. Possible solutions include:

Ways to mitigate vaccine hesitancy and decrease strain on local health systems:

- 1 Create local Rural Vaccine Hesitancy Task Forces composed of relevant community stakeholders, leveraging training such as through [Harvard's SAVE program](#) (Sprint to Accelerate Vaccination Equitably) to help members tackle vaccine hesitancy in their communities. The SAVE program engages rural community-based groups in weekly seminars with Harvard faculty to identify and solve vaccination barriers. For example, this Task Force would have increased knowledge about when and where to utilize [rural mobile vaccine clinics](#) to ensure accessibility and convenience for the local community.
- 2 Incentivize individuals to get vaccinated through economic incentives that are tied to support of local businesses that have been impacted by the pandemic. A community-led ["Chamber Bucks" program](#) would reward vaccine recipients – as well as booster recipients – with gift certificates redeemable only at participating local businesses. Local small businesses can also [take advantage of new tax credits](#) for those allowing paid time off for employees to get vaccinated.
- 3 Support community engagement between trusted local community members (e.g., clinicians, health systems, public health workers, faith and business leaders, among others) to ensure accurate information is communicated to hesitant populations. One example of this is a Northwest Oklahoma county receiving [a 1 million dollar grant](#) to allow them to empower local, trusted community spokespeople to encourage communities to get vaccinated. A second example is [a clinic in Wisconsin](#) that partnered with a health technology company to disseminate recent data and recommendations to thousands of community members in customized emails that will hopefully resonate with those individuals. Empowering local, trusted messengers may help mitigate the growing distrust of national news stations or federal agencies seen in some communities. A list of current government grants to support these efforts can be found [here](#).
- 4 Advocate for the restoration of the [Rural Health Clinic Vaccine Confidence \(RHCVC\) Program](#). This initiative financially supported vaccine outreach in rural communities, equipping clinicians on the ground with improved vaccine access, storage expansion, education programs, vaccine promotion, and coordination with new community partners. This program's application window for the 2021-2022 time period is currently closed. This program should be re-evaluated, updated, and re-funded to continue this important task.

Ways to address mental health strain:

- 1 Connect rural clinicians to online mental health services that can be used easily and privately, notwithstanding challenges with rural broadband coverage. Examples include:
 - [American Medical Association Toolkits](#) – Different educational programs that can be utilized by leaders within local clinics and health systems alike to identify stressors in their work place and to navigate a sustainable plan for individual and organizational resilience.
 - [Stress First Aid](#) – A toolkit written by experts in PTSD to help individuals identify stress reactions that occur in the lives of health care workers and to form healthy interventions.
 - [PeerRxMed](#) – A free online platform designed for clinicians to connect them to other individuals to foster new support networks, weekly "check-ins," and conversations to help prevent burnout.

2 Take advantage of grants and other funding opportunities for rural communities.

- The [Rural Health Information Hub](#) contains a list of different grants and funding opportunities that providers or health systems can take advantage of to improve their practices' and local populations' mental well-being and resilience.

About this survey

The Larry A. Green Center survey is distributed in partnership with the Primary Care Collaborative. The survey assesses the response and capacity of primary care during the COVID-19 pandemic as reported by primary care clinicians. Over 35 surveys of front-line clinicians have been conducted since March 13, 2020. Results for each survey are published at www.green-center.org/covid-survey. The data analyzed in this brief include surveys fielded during the periods of July 9-13 (survey 29), August 13-17 (survey 30), September 10-14 (survey 31), October 8-12 (survey 32), November 12-16 (survey 33), and December 10-14 (survey 34). Of the surveys analyzed in this brief (29-34), the average total respondents totaled n=824. Rural respondents made up on average about 23% (n=186), and their "not rural" counterparts made up the other 77% (n=638).

Suggested citation

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References

¹ Fully vaccinated in this brief refers to completion of any COVID-19 vaccine series. It does not require a booster vaccine.

² The data analyzed in this brief include surveys fielded during the periods of July 9-13 (survey 29), August 9-13 (survey 30), September 10-14 (survey 31), October 8-12 (survey 32), November 12-16 (survey 33), and December 10-14 (survey 34). Of the surveys analyzed in this brief (29-34), the average total respondents totaled n=824. Rural respondents made up on average about 23% (n=186), and their "not rural" counterparts made up the other 77% (n=638).