Health Equity Volume 6.1, 2022 DOI: 10.1089/heq.2022.0076 Accepted July 30, 2022

Health Equity



Open camera or QR reader and scan code to access this article and other resources online.



PERSPECTIVE Open Access

What Cuts in Federal COVID-19 Funding Could Mean for Rural Communities

Sienna Ruiz, ¹ Uzoma C. Okere, ¹ Michelle Eggers, ¹ Catina O'Leary, ² Beth Prusacyk, ¹ and Ashley J. Housten ^{1,*}

Abstract

The COVID-19 pandemic has widened the health disparities between urban and rural communities as rural populations face more limited health care capacities and worse COVID-19 outcomes than their urban counterparts. When this article was written, congress was debating continuing federal funds for free COVID-19 testing, vaccines, and treatment. In this article, we discuss the potential consequences rural communities may experience should such funding fail to be approved. Peer-reviewed literature and our research indicate these budget cuts could harm rural communities' financial distress, risk of severe disease outcomes, and trust in health care systems, making continued funding for public health resources critical for vulnerable rural communities.

Keywords: COVID-19; rural populations; rural health disparities

Perspective

Throughout the COVID-19 pandemic, rural communities have faced significant challenges providing and accessing adequate health care delivery and health resources to combat the spread of COVID-19. Rural hospitals have struggled to admit patients into crowded intensive care units, provide necessary treatments such as oxygen due to low supply, and find and maintain staffing to properly tend to patients. High rates of uninsured low-income patients and long distances to hospitals or health centers in rural areas have exacerbated challenges related to care delivery and treatment resources. Rural residents with severe cases of COVID-19 may be forced

to choose between driving the long distance to the nearest hospital or treating their case at home.

They may make the multiple hour drive to the nearest hospital or health clinic only to find the emergency room is not taking more patients or is sending patients to locations even further away. Even before the pandemic, many rural areas from Mississippi to Idaho were dealing with crumbling health infrastructures as hospitals and other health centers closed due to financial difficulties, which left rural residents without a place to go when they were sick or injured. Such closures have only increased during the pandemic, further isolating rural communities that have been disproportionately more

[©] Sienna Ruiz et al., 2022; Published by Mary Ann Liebert, Inc. This Open Access article is distributed under the terms of the Creative Commons License [CC-BY] (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



¹Division of Public Health Sciences, Department of Surgery, Washington University School of Medicine, St. Louis, Missouri, USA. ²Health Literacy Media, St. Louis, Missouri, USA.

^{*}Address correspondence to: Ashley J. Housten, OTD, MSCI, Division of Public Health Sciences, Department of Surgery, Washington University School of Medicine, 600 S. Taylor Avenue, St. Louis, MO 63110, USA, E-mail: ahousten@wustl.edu

vulnerable to high death rates and financial distress throughout this time.⁶

At the time of writing, the federal government is debating additional COVID-19 funding that will cover testing, vaccines, and treatment. If such funding is not approved, patients may have to front the costs of these critical public health tools that were previously free to individuals. As we have seen since the beginning of the pandemic, new COVID-19 variants have led to new waves of cases. In anticipation of the next wave, it is critically important to ensure there is adequate coverage of tests, vaccines, and treatment.

Knowledge of one's COVID-19 status, dissemination of low-cost preventive care through vaccination, and providers' ability to administer treatments that may improve disease outcomes can give individuals and communities the tools to protect themselves and their communities. For example, individuals can use these tools to know when to isolate themselves if they are positive while local governments can plan to recommend masking if testing indicates rising cases.

Failure to subsidize these public health tools would add to the negative impacts of the federal government's shutdown of the uninsured program wherein the Health Resources and Service Administration (HRSA) discontinued reimbursements for medical providers who distribute COVID-19 testing, vaccines, and treatments for uninsured Americans. ¹⁰ Although the HRSA website provides information on resources uninsured patients may use if they are in need of COVID-19 testing and care, the dissolution of reimbursement stands to deny uninsured people easy access to critical care during a pandemic.

Furthermore, limiting the availability of low-cost testing, vaccines, or treatments to uninsured individuals and communities at large could impede people's trust in health care organizations, which is already low throughout the country, 11 which could in turn increase COVID-19 vaccine hesitancy or skepticism in the effectiveness of various preventive measures.

The potential impacts of the suspension of federal COVID-19 funds could be detrimental for rural communities. Medical systems that are already struggling to administer vaccines and provide necessary treatments could encounter greater barriers to care. ^{12,13} For rural residents, who are more likely to be low income than their urban counterparts, ¹⁴ paying for treatment and vaccination out of pocket could further harm families' financial well-being. Compared with urban residents, rural residents are also more likely

to be older,¹⁵ have higher rates of comorbidities,^{16,17} and experience various vulnerabilities related to health and social factors including lack of medical insurance and difficulties paying rent, among other issues such as low educational attainment or work in high-risk environments.¹⁸

These factors place rural residents at greater risk of more severe COVID-19 outcomes and financial stress, ^{19–21} both of which have the potential to worsen in the absence of federal funding and exacerbate disparities between rural and urban residents. Despite the difficulties experienced by rural health systems and the vulnerabilities presented by rural populations, some progress has been made in rural areas as more testing sites opened and vaccination campaigns continue. ^{18,22} Discontinued federal funding could threaten this progress.

Data from our study shed light on the COVID-19related beliefs of rural residents, many of which the federal spending cuts could undermine. We surveyed 58 participants between November 2020 and March 2021 with 27 from an urban area and 31 participants from a rural area. We found rural residents in our sample were more likely to trust in the efficacy of active measures (e.g., getting treatment from a medical provider for COVID-19 or wearing a mask) than avoidant measures (e.g., avoiding crowds or restaurants). They also expressed belief in a greater magnitude of threat posed by COVID-19 than participants in our urban sample. When asked how great of a threat they felt COVID-19 posed to their family, 58.1% of participants in our rural sample responded "A great threat" compared with 18.5% of our urban sample.

In addition, 83.9% of our rural sample found the pandemic to be a great threat to their community compared with 48.1% of our urban sample with the same response. Although our sample is small, with limited generalizability, and the surveys were distributed during an earlier phase of the pandemic, our findings mirror those of other studies. These studies have found people living in rural areas may believe in the efficacy of various public health measures and in high levels of threat for their community while being less likely to engage in preventive health behaviors. ^{23,24}

This paradox, wherein rural residents may believe in health measures and threats while not following preventive advice, requires more resources be dedicated to rural areas so that trusted local stakeholders can encourage rural residents to take the necessary measures for the safety of themselves and their community. Stakeholders, from nurses and physicians to local government officials, can tailor public health programs to align with rural residents' beliefs on preventive measures by emphasizing the proactive nature of testing and vaccination.

Ensuring that COVID-19 treatment will come at no cost to patients could increase trust in health care providers, who can serve as reliable sources for information on the pandemic, potentially counteracting the role misinformation may play in influencing beliefs on health measures. If the federal government ceases covering COVID-19 health resources, rural communities will be deprived of tools to increase trust in reliable sources such as health care providers or local leaders. Cessation of federal funding could push this paradox in the wrong direction, causing rural communities to act counter to their beliefs in the pandemic and increase their risk of disease contraction.

Although federal funding may have a greater impact on much needed aid to rural populations, other structural solutions for rural health should be implemented as well. Systemic problems such as understaffed and underfunded hospitals, limited providers and treatment options, and de-emphasis on primary care require systemic solutions such as expanded insurance programs, federal funding for rural hospitals, increased transportation resources, and greater recruitment for providers to serve rural areas.

Furthermore, although COVID-19 cases have declined, public health experts predict the disease will continue to spread and may take large tolls on health systems.²⁵ However, it will likely be disadvantaged populations, such as those in rural areas, who will continue to bear the brunt of this disease in terms of mortality, cost, and spread,⁶ and cuts in federal funding would deny COVID-19 resources to those who need it most.

Disclaimer

The content is solely the responsibility of the authors and does not necessarily represent the official views of the funding agencies.

Author Disclosure Statement

No competing financial interests exist.

Funding Information

This research was supported by the Institute for Public Health at Washington University School of Medicine (A.J.H. and C.O.).

References

- Slonim AD, See H, Slonim S. Challenges confronting rural hospitals accentuated during COVID-19. J Biomed Res 2020;34(6):397–409; doi: 10.7555/JBR.34.20200112.
- Fielding-Miller RK, Sundaram ME, Brouwer K. Social determinants of COVID-19 mortality at the county level. PLoS One 2020;15(10):e0240151; doi: 10.1371/journal.pone.0240151.
- Kanter GP, Segal AG, Groeneveld PW. Income disparities in access to critical care services. Health Aff 2020;39(8):1362–1367; doi: 10.1377/hlthaff.2020.00581.
- Stone W. In Rural America, Patients Are Waiting for Care—Sometimes with Deadly Consequences. NPR [Internet]. February 10, 2022 [cited April 18, 2022]. Available from: https://www.npr.org/sections/health-shots/ 2022/02/10/1078134622/in-rural-america-patients-are-waiting-for-care-sometimes-with-deadly-consequence [Last accessed: April 18, 2022].
- Lozano J, Ellingson K. The Other Texas Drought: Rural Healthcare in Jeopardy as Hospitals Shutter [Internet]. Frontline. 2021 [cited April 18, 2022]. Available from: https://www.pbs.org/wgbh/frontline/article/rural-health-care-texas-drought/ [Last accessed: April 18, 2022].
- Knocke K, Malone T, Thomas S, et al. COVID-19 disproportionately impacts more vulnerable rural hospitals and communities. Health Serv Res 2021;56(Suppl 2):84; doi: 10.1111/1475-6773.13840.
- Association of American Medical Colleges. Senate Delays Vote on Supplemental COVID-19 Relief Package [Internet]. AAMC. 2022 [cited April 18, 2022]. Available from: https://www.aamc.org/advocacy-policy/washington-highlights/senate-delays-vote-supplemental-covid-19-relief-package [Last accessed: April 18, 2022].
- Cancryn A. White House Warns Free Covid Treatments Are at Risk as Subsidies Run Out [Internet]. Politico. 2022 [cited April 18, 2022]. Available from: https://www.politico.com/news/2022/03/16/white-house-covid-funding-congress-00017886 [Last accessed: April 18, 2022].
- Tolbert J, Artiga S, Kates J, et al. Implications of the Lapse in Federal COVID-19 Funding on Access to COVID-19 Testing, Treatment, and Vaccines [Internet]. KFF. 2022 [cited April 18, 2022]. Available from: https:// www.kff.org/coronavirus-covid-19/issue-brief/implications-of-the-lapsein-federal-covid-19-funding-on-access-to-covid-19-testing-treatmentand-vaccines/ [Last accessed: April 18, 2022].
- Health Resoure and Service Administration. HRSA COVID-19 Uninsured Program Claims Submission Deadline FAQs [Internet]. Official Web site of the U.S. Health Resources & Services Administration 2022 [cited April 18, 2022]. Available from: https://www.hrsa.gov/coviduninsuredclaim/ submission-deadline [Last accessed: April 18, 2022].
- Chan HF, Brumpton M, Macintyre A, et al. How confidence in health care systems affects mobility and compliance during the COVID-19 pandemic. PLoS ONE 2020;15(10):e0240644; doi: 10.1371/journal.pone.0240644.
- 12. Sharma S, Badami V, Rojas E, et al. ICU mortality in patients with coronavirus disease 2019 infection: Highlighting healthcare disparities in rural appalachia. Crit Care Explor 2021;3(10):e547; doi: 10.1097/cce.00000000000547
- Wood DA, Aleem A, Davis D. Providing Access to Monoclonal Antibody Treatment of Coronavirus (COVID-19) Patients in Rural and Underserved Areas. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 [cited April 18, 2022].
- Melvin SC, Wiggins C, Burse N, et al. The role of public health in COVID-19 emergency response efforts from a rural health perspective. Prev Chronic Dis 2020;17:E70; doi: 10.5888/pcd17.200256.
- Kaufman BG, Whitaker R, Pink G, et al. Half of rural residents at high risk of serious illness due to COVID-19, creating stress on rural hospitals. J Rural Health 2020;36(4):584–590; doi: 10.1111/jrh.12481.
- Lakhani HV, Pillai SS, Zehra M, et al. systematic review of clinical insights into novel coronavirus (CoVID-19) pandemic: Persisting challenges in U.S. rural population. Int J Environ Res Public Health 2020;17(12):4279; doi: 10.3390/ijerph17124279.
- Shah P, Owens J, Franklin J, et al. Demographics, comorbidities and outcomes in hospitalized Covid-19 patients in rural southwest Georgia. Ann Med 2020;52(7):354–360; doi: 10.1080/07853890.2020.1791356.
- Smittenaar P, Stewart N, Sutermaster S, et al. A COVID-19 Community Vulnerability Index to drive precision policy in the US [Internet]. medRxiv;2021 [cited April 18, 2022]. 2021.05.19.21257455. Available from: https://www.medrxiv.org/content/10.1101/2021.05.19.21257455v1 [Last accessed: April 18, 2022].

- Adesogan O, Lavner JA, Carter SE, et al. COVID-19 Stress and the Health of Black Americans in the Rural South. Clin Psychol Sci 2021;1–18; doi: 10.1177/21677026211049379.
- Mueller JT, McConnell K, Burow PB, et al. Impacts of the COVID-19 pandemic on rural America. Proc Natl Acad Sci India Sect B Biol Sci 2021; 118(1):2019378118; doi: 10.1073/pnas.2019378118.
- Peters DJ. Community susceptibility and resiliency to COVID-19 across the Rural-Urban Continuum in the United States. J Rural Health 2020;36(3): 446–456; doi: 10.1111/jrh.12477.
- 22. Winterbauer E, Levy PD, Calhoun D, et al. Qualitative review of promising practices for testing vulnerable populations at off-site COVID-19 testing centers. Healthcare 2021;9(1):100519; doi: 10.1016/j.hjdsi.2021.100519.
- Beck AM, Piontek AJ, Wiedenman EM, et al. Perceptions of COVID-19 mitigation strategies between rural and non-rural adults in the US: How public health nurses can fill the gap. Nurs Rep 2022;12(1):188–197; doi: 10.3390/nursrep12010019.
- 24. Chauhan RS, da Silva DC, Salon D, et al. COVID-19 related attitudes and risk perceptions across urban, rural, and suburban areas in the United States. Findings 2021;23714; doi: 10.32866/001c.23714.

25. World Health Organization. Weekly epidemiological update on COVID-19—12 April 2022 [Internet]. 2022 [cited April 18, 2022]. Available from: https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19—12-april-2022 [Last accessed: April 18, 2022].

Cite this article as: Ruiz S, Okere UC, Eggers M, O'Leary C, Prusacyk B, Housten AJ (2022) What cuts in federal COVID-19 funding could mean for rural communities, *Health Equity* 6:1, 658–661, DOI: 10.1089/heq.2022.0076.

Abbreviation Used

HRSA = Health Resources and Service Administration

Publish in Health Equity



- Immediate, unrestricted online access
- Rigorous peer review
- Compliance with open access mandates
- Authors retain copyright
- Highly indexed
- Targeted email marketing

liebertpub.com/heq