Experiences with Swing Bed Operation Changes in Critical Access Hospitals During COVID-19

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Abstract

Purpose: Critical access hospitals (CAHs) play a crucial role in rural healthcare, especially during crises (e.g., the COVID-19 pandemic). This study addresses how changes in swing bed operations from spring to fall of 2020 influenced CAHs by focusing on their operations, staff experiences, and community engagement.

Sample: Fourteen staff from five CAHs in the US participated in this study.

Method: Descriptive, qualitative research design with semi-structured interviews.

Findings: During the first year of the COVID-19 pandemic, CAHs faced challenges in maintaining swing bed operations due to resource constraints and increased patient volumes, leading to changes in swing bed operation. The findings highlight four team approaches adopted by CAHs during the changes in swing bed operations: (1) implementing innovative patient care strategies, (2) providing support, (3) strengthening community bonds, and (4) empowering

community education. Staff developed innovative patient care strategies (e.g., using baby monitors) due to insufficient standardized protocols, equipment, and in-house care for severe cases. Telehealth became a critical tool to maintain patient care amidst staff shortages and patient reluctance to visit clinical settings. Community support, including local residents and retired healthcare professionals, played a crucial role in meeting the demands. Upper management highlighted cross-training, financial incentives, and role adjustments to address staffing shortages and enhance team unity. CAHs actively engaged in community education and support through various platforms to provide information on COVID-19, testing, and vaccinations.

Conclusions: Collaboration among CAH staff and strong community support facilitated effective resource management and a return to pre-pandemic operational levels. This study underscores the importance of CAHs in rural healthcare during crises and highlights the need for continued support and investment in these essential healthcare providers to ensure they can sustain operations and effectively respond to future health emergencies.

Keywords: Critical Access Hospital, swing bed, team approach, COVID-19 pandemic

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As of 2023, the United States had 1,366 rural hospitals designated as Critical Access Hospitals (CAHs; Rural Health Information Hub, n.d.); about 92% of these institutions incorporate post-acute care services through the utilization of swing beds (Malone et al., 2021; McMaughan et al., 2020). The term *swing bed* refers to the hospitals' capacity to accommodate patients necessitating post-acute care following an episode of acute care in the *same bed*. This capacity is particularly important in regions where access to skilled nursing beds is limited (Centers of Medicare and Medicaid Services [CMS], 2024). Studies illustrate the effectiveness of swing beds

in reducing readmission rates and facilitating shorter recovery periods (Leung et al., 2021; Temple, 2021), with additional evidence suggesting positive impacts on CAHs, including enhanced financial stability, sustained acute care services, and increased staffing flexibility (Temple, 2021; Slonim et al., 2020; Cuadros et al., 2021).

During the COVID-19 pandemic, the landscape of swing bed operations underwent significant changes. The CMS, which regulates CAHs' operations, responded to the public health emergency by expanding swing bed eligibility. From May 2020 to May 2023, the CMS waived the requirement that patients have a 3-day acute care hospitalization prior to "swinging" to post-acute, skilled nursing care. During this time period, the CMS also allowed CAHs to expand the number of swing beds without following standard approval processes (CMS, 2024; CMS, n.d.).

The impact of COVID-19 on rural communities increased during the first year of the pandemic, while it decreased for their urban counterparts. Nationally, during 2020, rural areas experienced a significant increase in COVID-19 mortality rates, peaking at over 50% and reaching a mortality rate of 35.52 per 100,000 people (Cuadros et al., 2021; Ullrich & Mueller, 2023). In contrast, COVID-19 mortality rates in urban areas markedly decreased, with a 30% decline from June to November 2020 and a mortality rate of 18.06 per 100,000 people (Cuadros et al., 2021). Similarly, Jiang et al. (2024) found from mid-2020, rural hospitals experienced higher inpatient utilization rates than urban hospitals. Urban hospitals did not show excess inpatient volumes during the same period of the pandemic (Jiang et al., 2024).

Several factors contributed to the negative impacts of COVID-19 on CAHs and rural hospitals compared to their urban counterparts. These included workload challenges and insufficient personal protective equipment, intensive care unit (ICU) beds, COVID-19 test kits, and ventilators for treating severe cases of COVID-19 illness (Schou, 2021; Wenninger et al.,

2023). Studies have shown that rural hospitals were disproportionately affected due to their limited resources and smaller healthcare workforce (Slonim et al., 2020; National Institute for Health Care Management [NIHCM], 2020). Additionally, 35% of rural hospitals experienced more than a 20% change in average daily volume during the pandemic, compared to only 13% in urban hospitals (Jiang et al., 2024; Bipartisan Policy Center, 2022).

Although prior studies describe challenges in CAHs and rural hospitals during the pandemic (Slonim et al., 2020; Schou, 2021; Wenninger et al., 2023; Thomas et al., 2021), they have not examined the impact that changes in swing bed operations had on (a) CAHs operations, (b) staff experiences, and (c) rural communities' access to healthcare. Thus, the aim of this study was to better understand how the altered swing bed operations in CAHs influenced CAH operations, staff experiences, and their communities during the COVID-19 pandemic.

Methods

Design

From December 2021 to May 2022, we conducted a qualitative descriptive study using semi-structured interviews in a convenience sample of five CAHs located in three states, most in the Midwest. These hospitals utilized swing beds for post-acute care and were part of multiple networks that provided resources to enhance their capabilities and share resources. This study was supported by a steering committee consisting of the designated point of contact for each CAH (senior administrator or a designee), a practice consultant working with more than 300 CAHs, a Chief Executive Officer of a 50 CAH network, and research team members. The committee members communicated through email and engaged in virtual (Zoom) meetings to review study procedures and recruit participants.

Setting and Sample

Convenience sampling was employed to select staff members from the participating sites, where leadership had agreed to participate. To identify potential participants, each CAH's point of contact provided a list of employees in each of the following categories: nurses, allied healthcare professionals (e.g., physical therapists, occupational therapists, case managers, social workers, dieticians, respiratory therapists), support staff (e.g., housekeepers, unit clerks, dietary assistants, certified nursing assistants, surgical technicians), providers (e.g., physicians, nurse practitioners, physician assistants), and administrative personnel (comprising one senior administrator and one staff member from finance/human resources). Within each category, a randomly selected sample of people were sent an email invite to participate in the study; two follow-up emails were sent. If no response the next person in each category was approached.

All study activities were approved by the Institutional Review Board at [Blinded], ensuring ethical standards were met throughout the research process. Informed consent was obtained from all subjects involved in the study.

Data Collection

Two team members collected data using an interview guide with semi-structured questions, developed by the team and tailored to the study's objectives. The first section focused on job titles, duration of employment, and tenure in their current positions. Subsequently, the guide investigated the hospital's responses to the COVID-19 pandemic, exploring the impact on work dynamics, changes in patient admissions, and modifications in hospital operations. Clinicians were asked about the quality of care and their hospital's use of swing beds during the pandemic. The guide concluded with questions about community outreach and the respondent's demographics. The

interview guide underwent pilot tests with researchers and graduate students not involved in the study. Feedback contributed to minor refinement to the guide.

Two team members conducted interviews virtually via Zoom, each lasting 45 to 60 minutes, and audio recorded them. The interviewer used field notes to capture emotions, biases, and insights. To ensure accuracy, each interviewer cross-checked the auto-generated Zoom transcripts against the recorded interviews, correcting any errors made by the automatic transcriptions. Finally, participants' names were anonymized to prevent disclosure of identifiable information in the subsequent analysis files.

Data Analysis

We used the 6-steps thematic analysis framework established by Braun and Clarke (2006), which included (1) familiarizing with data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. In the initial step, research team members familiarized themselves with the data by thoroughly reading the transcripts and field notes multiple times. The interviews were entered into ATLAS.ti 9.0 to facilitate analysis. In the second step, the two team members independently coded all transcripts and met with the rest of the team to resolve any discrepancies. Moving to the third step, similar codes were grouped into themes. The fourth step involved reviewing and further defining these themes and ensuring coherence among codes, related themes, and the entire dataset. In the fifth step, the themes were refined according to the characteristics of each code. The final step focused on reporting, where the research objectives were revisited, and results were adjusted for presentation. While two team members conducted all interviews and initial coding, the entire team participated in revising the coding process, extracting themes, and refining data through frequent discussions until consensus was achieved.

Results

Fourteen staff completed interviews: seven nurses, four allied healthcare professionals, two providers, two administrative personnel, and one support staff member (Table 1). The number of participants from each of the five CAH ranged from one to five. Nurses, constituting the largest group, had an average age of 44 years, with the majority being female (80.0 %), exclusively non-Hispanic Caucasian, and holding a baccalaureate degree in nursing or above (80.0 %). Allied healthcare professionals, aged 47 on average, were entirely female, and half identified as non-Hispanic Caucasian. Support staff, with an average age of 35, were exclusively female and non-Hispanic Caucasian. Providers, averaging 47.5 years, were all female and non-Hispanic Caucasian. The administrative personnel were female and non-Hispanic Caucasian.

Table 1

Characteristics of Study Sample (N = 14)

Type	Characteristic	Mean (SD) or n (%)
Nurse (n = 5)	Age	44 (9.6)
	Female	4 (80.0)
	Non-Hispanic Caucasian	5 (100)
	Nursing Baccalaureate or higher	4 (80.0)
	Length in current CAH	5.1 (3.4)
	Length in current role	13.2 (13.3)
Allied healthcare professionals (n = 4)	Age	47 (9.0)
	Female,	4 (100.0)
	Non-Hispanic Caucasian	2 (50.0)
	Length in current CAH	4.8 (0.2)
	Length in current role	1.8 (1.3)
Provider (n = 2)	Age	47.5 (4.5)
	Female	2 (100.0)
	Non-Hispanic Caucasian	2 (100.0)
	Length in current CAH	6.8 (1.8)
	Length in current role	8.3 (5.3)
Administrative personnel (n = 2)	Age	55 (5.1)
	Female, n (%)	2 (100.0)
	Non-Hispanic Caucasian	2 (100.0)
	Length in current CAH	11.5 (4.8)
	Length in current role	7.5 (3.5)
Support staff (n = 1)	Age	35 (3.0)
	Female	1 (100.0)

Type	Characteristic	Mean (SD) or n (%)
	Non-Hispanic Caucasian	1 (100.0)
	Length in current CAH	5.1
	Length in current role	9.8

Note. SD, Standard deviation.

Team Approach: Strategic resource management and recovery in CAHs

Interviewed CAH staff reported that the swing bed patient census varied from 3 to 5 weekly before the pandemic. However, as the pandemic swept across the US in March 2020, all five CAHs had to temporarily change swing bed operations due to insufficient acute care patient beds, equipment (e.g., ventilators, personal protective equipment), and staff. In 2021, the CAHs gradually transitioned back to regular swing bed operations, reaching pre-pandemic levels by the time of the interviews. This study focused on the changes and challenges in operations during the first year of the pandemic.

At the outset of the pandemic, an increased number of patients with respiratory issues were admitted to CAHs. However, participants were initially unaware that these cases were related to COVID-19 infections. As one participant noted, "We were actually hit pretty quickly with COVID in March of 2020; we saw an influx of patients that were sick, and we couldn't explain why" (participant #1005). As more COVID-19 cases were confirmed across states and research on the origin of the infection continued, participants from these CAHs described how policies and protocols were updated at federal and state levels concerning treatment, isolation precautions, and the management of the increasing number of COVID patients. As one nurse noted, "our policies and protocols were changing constantly, which caused confusion on the frontline (participant #1005).

Participants from these CAHs mentioned that, during this time, CAHs temporarily changed operations of their swing bed programs in response to the increasing number of COVID patients. Patients had to stay in CAH beds longer, awaiting post-discharge placement in another facility

(e.g., rehabilitation, critical, or long-term care). Participants were concerned about increasing risk of complications due to delays in receiving necessary rehabilitative services and reduced the availability of beds for new acute care admissions. Additionally, participants noted that critically ill patients who required a higher level of care could no longer be transferred to large urban hospitals, because of their own increased volumes of COVID patients and therefore lacked sufficient beds and staff to accept additional patients. A participant commented, "I think the big thing was that we had acute patients that reached a level of criticality that we couldn't transfer. So, we couldn't transfer patients out to our tertiary centers because they were experiencing high volumes as well" (participant #1000). Consequently, CAHs had to keep these patients and increase their acute care services, including managing ventilator patients. Furthermore, skilled nursing facilities or nursing homes limited or did not accept post-acute patients from CAHs due to the risk of COVID-19 transmission within their facilities, insufficient resources, and the need to prioritize the care of existing residents.

As a result of changes to swing bed operation, keeping critically ill patients and those needing transfer to skilled nursing facilities, CAH staff had to adapt quickly and implement innovative strategies to handle the surge in COVID-19 patients with limited resources. Collectively, participants described four distinct team approaches to navigating resilience in strategically managing resources and facilitating operational recovery within CAHs: (1) collaborating to implement innovative patient care strategies, (2) coming together to provide support, (3) strengthening community bonds, and (4) empowering community education and support. These approaches are summarized in Table 2 and presented in greater detail below.

Table 2

Team Approach: Strategic resource management and recovery in CAHs, Codes and Exemplar Quotations

Team Approach	CAH Staff Quotations
Collaborating to implement innovative patient care strategies	We haven't had rotating prone beds here…To be able to prone these COVID patients who are intubated, we assembled a team to figure it out and learn how to actually…Flip these patients over onto their belly for a certain period of time and using physical therapy, occupational therapy… we've been manually turning. (participant #1000)
Coming together to provide support	"Since I typically work in surgery, and our outpatient floors were shut down at that time, I had the opportunity to contribute on the floor, which significantly helped alleviate staffing shortages." (participant #3005)
Strengthening community bonds	"We had great people in the community donating gloves, bringing hair coverings, and making masks… they just did everything for their community." (participant #3006)
Empowering community education and support	We have weekly updates, and sometimes we provide daily updates on our numbers. Additionally, we share videos with the community through social media, and they are also released to local media, including newspapers. This way, we can reach a broader audience. (participant #4004)

Collaborating to Implement Innovative Patient Care Strategies

CAH staff reported that their facilities developed innovative strategies to care for patients, even in the absence of standardized protocols and equipment for those requiring intensive care during the pandemic. They had to construct their own protocols through a multidisciplinary team approach and make necessary adjustments using the available equipment. As one nurse pointed out, "With labor and delivery units closed, we used baby monitors and videos to take care of patients who needed close monitoring and our ability to hear ventilator alarms" (participant #4004). Additionally, support staff created spaces for patient beds in response to the influx of COVID patients. A certified nursing assistant explained, "We were unable to transfer these patients, so we had to get creative in treating all of them. We even utilized bed storage areas or

added extra beds to create double patient rooms" (participant #3014). Furthermore, CAH staff facilitated the use of alternative communication methods, such as FaceTime, WhatsApp, or Zoom, for COVID patients requiring isolation to stay connected with their significant others and feel supported. Despite these efforts, the lack of physical interaction remained a significant challenge for patient well-being. A social worker emphasized, "They need some kind of interaction through touch, hug, or talk…. Seeing their loved ones through windows is not enough to battle COVID…" (participant #2000).

CAH staff reported the effective use of telehealth during the pandemic in response to increased COVID cases and staff shortages. Although telehealth existed prior to the pandemic, its use increased during the pandemic as many patients were hesitant to visit clinical settings but needed to see healthcare providers. Telehealth emerged as a strategic option for patients to maintain their health during the pandemic. One provider stated, "Telehealth was not actively used like this before the pandemic, but it has been during the pandemic" (participant #3006). CAHs collaborated with their marketing and IT departments to increase its accessibility, advertising the benefits of telehealth through their website and social media. While CAH staff expressed significant concern about delivering a high level of care to critically ill patients with limited resources, they also highlighted their innovative and resilient strategies developed through the utilization of existing resources and collaboration with various clinicians to provide comprehensive care.

Coming Together to Provide Support

Administrators within CAHs implemented staffing changes to enhance effectiveness in meeting the demands of the increased number of sick patients during the pandemic. They initiated cross-training for nurses, enabling them to perform roles in different units where they had not

worked before. As one nurse noted, “We had an extremely limited number of ICU nurses and providers with experience in working with ventilator patients. So, we trained med-surg nurses to take care of patients on ventilators” (participant #1005). Another mentioned, “I’ve been continuously pulled back and forth and sometimes worked in multiple, different units a day” (participant #4000). Some CAH staff reported that individuals in non-clinical roles were also performing different duties. A social worker mentioned, “I go to patients’ rooms to discuss their unique needs and provide support. If units are too busy and the call light rings, I answer them to assist staff on the floor. They are extremely busy, and I could help them” (participant #2000). Another added, “Although I am the ER nurse manager, I come down and take care of patients. Anyone in a leadership role is also a nurse, so I make rounds and care for patients if needed” (participant #3001).

CAH staff noted that the COVID-19 pandemic helped them recognize each other’s roles and contributions. All participants from these CAHs described how their workload and difficulty increased during the pandemic. One provider stated, “My workdays have turned into 16 hours a day… It’s more than doubled, and I see more patients” (participant #3006). Some participants reported exhaustion due to increased workloads and short staffing. A nurse expressed, “We are keeping patients for a much longer period than we normally would…it can be tiring and stressful …” (participant #4000). However, participants described that they were able to endure these tough times because their efforts or sacrifices, such as taking extra shifts or mandatory overtime were recognized by upper management through financial incentives.

Additionally, CAH staff emphasized that COVID strengthened their unity as a team, fostering a sense of camaraderie. A nurse said, “We work very well together in our hospital. We don’t really differentiate between departments. We are all here to care for our patients, so we are

here to step up" (participant #4004). Another added, "That's when you get into the rural setting, I mean. Everybody is pulling for everybody" (participant #3004).

Strengthening Community Bonds

CAH staff shared that many of them had roots in their communities, fostering a deep familiarity with the people they served. These individuals were not just patients; they could also be family friends, church members, or neighbors. As one nurse expressed, "What personally affected me was taking care of people that I go to church with, and my family knows… so it's not like you can easily leave work… you go out in the community, and you see the same people and family members" (participant #2000). The connection between CAH staff and their communities was robust, and the challenges brought by COVID contributed to building an even stronger relationship.

Communities rallied to support their healthcare workers, offering food, supplies, and thank-you cards. A provider noted, "A little mom opened a coffee shop…you know, they were bringing coffee for all of us… They had words of encouragement on it. Children were making us cards and putting them up around the hallways…Oh, it was just absolutely phenomenal" (participant #1000). Even retired healthcare professionals stepped up to support the way they knew best. A nurse shared, "Some nurses in our community that were retired came out from their houses and started vaccinating people" (participant #3004). The bond between CAH staff and their communities not only endured the challenges but emerged stronger, reflecting a shared commitment to navigating the pandemic together.

Empowering Community Education and Support

CAH staff invested time and resources in providing sufficient education to their communities during the pandemic. Recognizing the vulnerability of their communities in terms of information

about the pandemic, access to care, and technology, staff members took proactive steps. A social worker highlighted, “There was also a fear throughout the community, where they didn't want to come in if they weren't sick because they were afraid they would end up with COVID. So, patients just chose not to report into the clinics or see anybody during that time” (#2000). To address this, CAH staff employed various platforms, including newspapers, billboards, community health seminars, online videos, and social media, to educate the public about COVID-19 infections, confirmed cases, testing, and vaccines. A nurse stated, “They did a lot of advertising on Facebook. They worked with another community hospital to host vaccination and clinics. Our staff was very involved in that, and I know that our clinic did more educating and that kind of thing, so there was a lot of involvement” (participant #5001).

CAHs prioritized ensuring that their communities sought care if they exhibited symptoms related to COVID infections, emphasizing the safety of hospitals. Another nurse stated,

> I really just think it was kind of a matter of time and people getting a little bit more comfortable with them. I think our hospital did great... Trying not to really advertise but letting our community know that we were doing everything to keep everyone as safe as possible. So, I think that they did a great job of doing that to make people more comfortable coming in (participant #1000).

Collaborating with local health departments, many CAHs set up drive-through COVID testing and vaccination sites. A nurse described their partnership, “So we worked hand in hand with our local health department. We did community vaccination tents, they had a huge tent set up, we had multiple nursing stations, and we gave vaccines remotely” (participant #4000). Additionally, some CAHs operated COVID testing and vaccine clinics, with the majority of staff either volunteering or working to provide testing and vaccines for their communities.

Discussion

In this study, we identified four team approaches in managing resources strategically in CAHs during the COVID-19 pandemic. Despite the limitations inherent in our study design and sample size, our findings support and extend earlier research as described below.

Our study aimed to better understand how the altered swing bed operations in CAHs influenced CAH operations, staff experiences, and their communities during the pandemic. We found CAH staff resiliently addressed the absence of protocols, equipment, and resources during the pandemic, utilizing creative solutions for patient care during the pandemic. Their adaptability extended to embracing alternative communication methods and telehealth, reflecting commitment to comprehensive care despite resource challenges. Prior research also emphasizes the importance of resilience in rural areas, underscoring the need for local healthcare teams to invest time in analyzing the strengths and opportunities within their healthcare networks (Carey et al., 2013; Meyer et al., 2020; O'Sullivan et al., 2020). This process involves addressing any existing gaps, particularly since rural settings are highly needs-based and flexible, unlike the fixed models often seen in urban settings (O'Sullivan et al., 2020). Fixed models refer to standardized, rigid healthcare practices and protocols that are less adaptable to varying patient needs and local circumstances (O'Sullivan et al., 2020). The significance of this distinction becomes more pronounced in response to emerging pandemics and localized conditions (Meyer et al., 2020; O'Sullivan et al., 2020). Other research also suggests resilient healthcare teams, composed of competent professionals, should prioritize delivering services aligned with the specific needs of the population (O'Sullivan et al., 2020; Peters, 2020). This strategy seeks to alleviate the considerable financial, cultural, and emotional burdens that rural individuals might face when required to travel for treatment beyond what is essential for higher-level care (O'Sullivan et al., 2020). Adding to

this research, our findings underscore the importance of interdisciplinary teamwork and creative solutions in optimizing healthcare outcomes and accessibility, especially in the face of resource constraints and dynamic challenges.

Our study revealed that despite challenges such as increased workloads and staffing shortages during the pandemic, CAH staff emphasized their unity as a team, highlighting a strong sense of collaboration and mutual support by taking on various roles within the rural healthcare setting. Earlier studies have reported similar challenges in rural hospitals, demonstrating stressors related to caregiving responsibilities, the impact of the COVID-19 pandemic, and feelings of depression and frustration associated with chaos in the care environment (McConnell et al., 2022; Robinson et al., 2022; McIntyre & Roy, 2023; Qian et al., 2023). Specifically, during the pandemic, McEvoy et al. (2024) found that among 1,313 rural healthcare workers, 16.1% experienced depression, 14.7% had anxiety, and many faced high burnout levels, with a median score of 46.4 on a scale of 0 to 100. However, our findings highlight how staff members felt supported, collaborated seamlessly across departments and job titles to perform diverse roles, addressing the surge in patient numbers during the challenging period. Although cross-training has been a common practice in CAHs and other rural hospitals (Logan, 2022; Somerville et al., 2023; Henning-Smith et al., 2017), during the pandemic it became even more critical and widespread as found in our study. Staff not only performed their usual cross-trained duties but also adapted to new and expanded roles quickly to meet the unprecedented demand for acute care services. For example, social workers and case managers took on supporting tasks related to maintaining clinical flow, and administrative personnel stepped into clinical roles, including basic patient care, to alleviate the burden on clinical staff. This increased level of cross-functional collaboration required rapid skill acquisition and flexibility to ensure comprehensive patient care. This adaptive staffing

approach highlighted a collective commitment to patient care with limited resources within the rural healthcare setting, extending previous studies by demonstrating the enhanced role and importance of cross-functional teamwork during the pandemic.

Our study also identified a distinctive bond between CAHs and their communities. This could be explained by understanding the unique attributes of rural residents, such as limited health insurance, high rates of chronic conditions, and restricted access to care (RTI Health Advance, 2023), leading CAH staff to provide person-centered care, where patients feel valued and have high satisfaction with their care (Baernholdt et al., 2013). Furthermore, we found that CAH staff demonstrated a proactive engagement in community education, employing local platforms and collaborative initiatives tailored to the specific needs of rural populations during the pandemic.

By examining the impact of altered swing bed operations, our study fills a critical gap in understanding the operational and community dynamics within CAHs during a public health crisis. Our findings illustrate how innovative strategies, strong teamwork, and community engagement can enhance healthcare delivery in rural settings.

Limitations

This study has limitations, primarily due to the small sample size (N = 14) across the five CAHs explained by exhaustion among staff engaged in patient care, coupled with a reluctance to participate in repetitive interviews and surveys during the COVID-19 pandemic. It's important to note that the data were collected from December 2021 to May 2022, indicating the COVID-19 pandemic was ongoing. Second, the limited sample size may have impeded achieving saturation for specific healthcare professionals, emphasizing the need for future research to investigate differences in resilient approaches across groups. For instance, exploring how physical therapists demonstrate resilience in patient care compared to unit clerks. Third, the sample of CAH staff

lacks diversity, as the majority were female and non-Hispanic Caucasians, which is reflective of the general demographics of rural healthcare staff (Fahs & Rouhana, 2021). However, understanding how different racial and ethnic groups use resilience strategies in emergent situations is crucial because diverse perspectives can reveal unique strengths and challenges that might not be apparent in a more homogeneous group. Therefore, future research should involve a larger and more diverse group of CAH staff to thoroughly examine resilient approaches, especially among racial and ethnic minorities, to develop more inclusive and effective strategies.

Conclusion

Strategically employing limited resources and navigating economic and situational challenges with resilience are crucial elements to mitigate the impact of a pandemic. In this study, rural participants highlighted the importance of team approaches during the COVID-19 pandemic. The findings underscore the significance of team dynamics to address the multifaceted needs of patients, communities, and coworkers in CAHs. Highlighting the need for readiness for future disasters, the study emphasizes the importance of proactive preparation and adaptive strategies.

Looking ahead, it is imperative for healthcare systems, especially those in rural settings, to proactively prepare for future disasters and pandemics. This preparation includes developing and refining comprehensive disaster preparedness plans that integrate the lessons learned from the COVID-19 pandemic. Emphasizing the role of collaborative and adaptive teamwork, as illuminated by our study, should be a key component of such preparedness efforts. Ensuring that healthcare systems are ready for the next disaster is essential; this readiness will enhance resilience and protect community health.

Further research is warranted to validate these findings in larger and more diverse samples, providing a solid foundation for evidence-based strategies to enhance resilience and preparedness

in rural healthcare settings. By focusing on these proactive measures, rural healthcare systems can be better equipped to face future challenges and continue providing crucial care under any circumstances.

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Conflicts of Interest

The authors have no conflicts of interest to declare.

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