Rural and Frontier Healthcare Coalitions:
A Preparedness and Response Snapshot

Background
In the 15 years since the Hospital Preparedness Program (HPP) was established, healthcare coalitions (HCCs) around the country have played a vital role in preserving the health and safety of communities during emergencies. HCCs create a community of experts to share best practices and help member agencies improve patient outcomes, reduce the physical and financial costs of a disaster, and build response capacity throughout the healthcare system. According to the Office of the Assistant Secretary for Preparedness and Response (ASPR), 96% of HCCs feel that HPP funding, guidance, and technical support have improved their ability to decrease morbidity and mortality during disasters. However, HCCs notably vary in their capabilities.

As a result, the National Association of County and City Health Officials (NACCHO) conducted key informant interviews with rural and frontier HCCs from nine states to document the responsibilities, capabilities, and challenges of coalitions in these areas. The findings from these interviews may be used by HCC coordinators, funders, and policymakers to inform future HCC research, guidance, and investments.

HCC Characteristics
Rural and frontier HCCs may be responsible for large, sparsely populated geographic areas; combinations of rural, metropolitan, and frontier settings; or primarily frontier areas. HCC membership is multidisciplinary and may include a combination of representatives from public health, emergency management, emergency medical services, hospitals, community health clinics, trade associations, and tribal health organizations.

Seven HCC key informants (78%) reported that a state or regional public health entity led the establishment of their coalition, while four key informants (44%) indicated that there had been a reorganization of coalition structure or service area within the last five years.

Preparedness and Response Roles
HCCs perform numerous activities to enhance jurisdictional preparedness and response capabilities, including the following:

- Creating and sharing resources for member agencies;
- Fostering and leveraging partnerships for preparedness planning;
- Providing training and conducting exercises;
- Providing technical assistance to enhance stakeholder preparedness programs; and
- Identifying and sharing best practices.

Rural and frontier HCCs have varying response roles depending on their jurisdictional capacity and needs. All key informants indicated that sharing information between HCC members and other stakeholders is a critical component of their work, and the HCC Development Toolkit provided by NACCHO has been instrumental in facilitating this process.

Stories from the Field: Southwest Colorado Healthcare Coalition
The Colorado Department of Public Health and Environment contracted with the Center for Integrated Disaster Preparedness at the University of Colorado to assist all regions in developing HCCs. Each HCC was given a HCC Development Toolkit, a strategic roadmap with step-by-step action items and templates for several HCC functions including membership information, hazard vulnerability analyses, and crisis standards of care guidance.
partners, maintaining situational awareness, and supporting resource coordination were responsibilities for their HCC. Five key informants (56%) said their HCC have a direct response role, while three (33%) indicated that responses are managed according to individual member plans, responsibilities, and needs. Two key informants (22%) reported that their HCC’s response role had not yet been defined; one of which also indicated that the HCC had coordinated facility evacuation and public health messaging for past responses. It should be noted that key informants varied in what they considered an HCC response to be. Additionally, some rural and frontier HCCs may often support incidents that create a surge due to limited jurisdictional capacity, even though the HCC may not consider such activities a “response.”

Key informants with a self-described direct HCC response role may also conduct one or more of the following activities:

- Deploying medical and response personnel and assets;
- Activating medical shelters;
- Dedicating HCC staff to support local emergencies and to report information to the HCC; and
- Activating a local emergency operation center (virtual/physical) or incident command post.

Strengths and Jurisdictional Benefits

Prior research has found that HCCs have several common benefits: community and regional partnership-building through the collaboration of like-minded professionals to achieve better health outcomes; providing educational and training opportunities to partners without access to resources or funding; increased engagement between clinicians, emergency management, the private sector, and public health; improved communication with the public; and increased ability to surge.¹ Findings from these key informant interviews validate that this is consistent in rural and frontier areas.

All key informants expressed the value of leveraging the close-knit community and pre-existing relationships found in rural and frontier communities to achieve stakeholder buy-in and community support for HCC preparedness and response activities. Strengthened partnerships also facilitate improved coordination and resource sharing during an incident. The HCC’s collaborative planning environment supports greater awareness of available resources, enhances operational coordination, and provides an opportunity for stakeholders to work through common challenges together. One key informant indicated that trainings within their community also provide additional dollars for the jurisdiction through partner attendance (e.g., hotel reservations).

Key informants described their members as dedicated and innovative problem-solvers that use every resource at their disposal to preserve the health and safety of their communities. Unconventional solutions, such as considering convenience store coolers as a resource for mass fatality planning, are often utilized to address HPP requirements. Key informants also described the importance of HCC coordinators having face-to-face interaction with members to share information and maintain relationships; some reported using HCC staff to provide direct technical assistance and support for member preparedness programs, which consequently increased stakeholder buy-in.

Stories from the Field: The Southeastern Idaho Healthcare Coalition

The Southeastern Idaho Healthcare Coalition partnered with MBA students from the Idaho State University to identify how an earthquake, one of the top hazards for the area, would impact four local counties. The assessment captured transportation, utility, economic, and building losses and provided cost estimates for how much it would take to rebuild from the disaster. The HCC then used these findings as an educational resource for local communities.

Barriers

Despite the important role that rural and frontier HCCs play in their jurisdictions, many challenges affect the HCC’s ability to coordinate healthcare system readiness and response.

Lack of Capacity

Key informants described inadequate funding levels and availability of resources (e.g., personnel, medical assets) as a major limitation to their response capabilities. Current funding levels in these areas may not allow for dedicated HCC staff to coordinate coalition activities or replenish essential response roles. Jurisdictions may rely on volunteer-only emergency medical services providers and may have limited definitive and specialty care services.

One key informant explained, “A really small incident in rural or frontier community could lead to a medical surge situation… [One county is very small and has around] five volunteer EMT/paramedic/firemen. The county had an accident [in which] there were a couple of fatalities and 10 people injured. It was an overwhelming response for them.”

Five key informants (56%) expressed that urban and rural HCCs should have separate requirements due to differences in capabilities. Key informants also expressed that HPP requirements may not be coordinated by the HCC, but rather the jurisdiction as a whole or other entities are responsible for fulfilling that function.
Technology Constraints

Key informants also described that their jurisdictions have significant vulnerabilities to power and system outages without access to alternative systems. This may include having a singular cellular provider in a jurisdiction and no radio interoperability between HCC partners or neighboring jurisdictions. Members may not be familiar with communication technology due to staff turnover or infrequent or inconsistent use. Conducting regular drills or exercises can help maintain member knowledge of communication systems and processes.

One key informant described the significant communication barriers that exist within their state. “We have very spotty cell phone communication in this state... They are building cell phone towers, but they only work with one provider...We have high winds of 70-80 miles per hour. Our winds cause the internet to go out, so you can’t always rely on the computer.”

Geographic/Transportation Barriers

Geographic isolation is a major coordination and response barrier for rural HCCs and particularly for frontier HCCs. Resource sharing and deployment can take significant periods of time (e.g., six hours) and transportation routes may be rendered completely inaccessible due to seasonal weather events or other hazards. In some instances, facilities may not be connected by roads or the closest facility with the infrastructure to support a surge may only be available outside of the state. For some key informants, this results in a reliance on air transport to achieve the best patient outcomes. HCC members also experience large transportation-related costs, including spending significant time commuting to HCC meetings and, in some instances, having to pay for lodging due to the distance traveled.

One key informant described how emergencies can differ in rural and frontier areas: “There were [large portions of the] state that were burned [by wildfires]--millions of acres and affecting multiple counties...It became a public health issue when there were tens of thousands of people without power...Because of the geographic location, those people had no drinking water because their wells don’t work without power. That’s not going to happen in [an urban area].”

Member Participation

Key informants also described challenges in maintaining partner engagement, getting HCC members to attend meetings, and achieving buy-in from HCC member executives. HCC member organizations have high turnover, their staff have multiple roles, and they may not have dedicated emergency management staff. This hinders involvement in HCC activities and requires coalition staff to invest additional time and resources to integrate new member representatives.

One key informant said, “I saw that with the [Centers for Medicare and Medicaid Services] emergency preparedness requirements, many of the long-term care facilities in rural settings came to the table to [meet the membership requirement], and now that they have, they are not as likely to [return], so the [number of meeting attendees] have started to decline...I think that’s a barrier to changing the mindset of some long-term care facility leadership that preparedness is a continuous cycle and you can’t just write a plan and set it on a shelf, but you need to continue to train your staff and exercise it and improve it.”

Opportunities

The findings of these key informant interviews emphasize the need for further investigation into relevant solutions for rural and frontier HCCs. Many of the challenges expressed by key informants validate prior research findings and illustrate the experiences and challenges of HCCs across the country. Therefore, investing in these areas would have benefits for HCCs across the nation, regardless of type.

For Healthcare Coalitions

Rural and frontier HCCs may utilize the train-the-trainer model to address capacity issues and improve the preparedness and response capabilities of HCC members. Trained members may then be able to share the knowledge gained with other community partners to build their preparedness programs. To mitigate transportation related-costs and travel burden, HCCs are encouraged to consider investing in and utilizing Web-based meeting tools (e.g., ZOOM) and teleconferences for coalition meetings. Further efforts to identify solutions to transportation barriers in resource deployment, patient movement, and other response-related functions for isolated geographic areas is needed. Key informants indicated that enabling HCC staff to travel to partner agencies to provide technical assistance in preparedness planning and support information-sharing between coalition meetings and during responses can help support member capabilities, enhance incident coordination, and integrate members who miss HCC meetings into coalition planning.

One key informant described the success of Web meetings for their HCC: “This past year, we implemented a web conferencing option into our meetings so that members wouldn’t need to drive a potential two hours to and from our meetings. This has increased our attendance on the eastern side of the region.”

In addition, communication devices, such as radios and satellite phones, can help overcome gaps in cellular coverage; however, successful implementation may depend on the availability of funds for maintenance and procurement. Further success of these systems relies on key stakeholders adopting them to
ensure interoperability and ongoing training on established communication systems to maintain staff familiarity.

Lastly, key informants described that HCCs could improve stakeholder engagement by providing a value or service to HCC members. Offering physical resources is one option, but information sharing, creating and disseminating existing tools from other agencies, such as ASPR-TRACIE, NACCHO, and Kaiser Permanente, could benefit partners who were unaware of these resources or have previously found this information to be inaccessible. Members and organizational executives may not see the value of preparedness until the return on investment is clearly demonstrated or until they understand the impacts of a disaster for their organizations through education or direct experience.

For Funders and Policymakers
Funders and policymakers can support HCCs through improved guidance and targeted investments in the four areas outlined in this summary. Funders and policymakers across federal, state, and local levels can also contribute to the development, use, and promotion of information and communication systems for areas with limited technology infrastructure. These systems should also integrate with the capabilities of healthcare entities, which may be more advanced than those of HCCs. Improving the information sharing and communications capabilities of a jurisdiction will better equip HCCs to share vital information during an emergency and make timely decisions that will improve patient outcomes. Funders and policymakers should also investigate the scope of HCC involvement as response entities and integrate these findings into future guidance. Technical assistance resources that are specifically designed for their use and aligned to their needs will be better received and utilized by rural and frontier HCCs. Lastly, federal policymakers should consider updating HCC guidance and requirements to accommodate the varying capabilities of rural, frontier, and urban HCCs.

References

Tools and Resources
• ASPR TRACIE
• NACCHO Toolbox

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