

Rural Community Health and Environment

WORKSHOP 3 SNAPSHOT





About

The American Hospital Association's Community Health and Environment initiative offers insights and resources to support hospitals and health systems and their strategic partners in addressing the health impacts of environmental conditions on their communities and patient populations. As part of this initiative, the American Hospital Association hosted a workshop in San Antonio with rural hospital and health system leaders.

Workshop participants engaged in activities to identify key health outcomes in rural communities, prioritize challenges and develop pragmatic ideas. Participants also discussed how to include activities to improve health outcomes influenced by the environment as part of community health assessments (CHAs) and community health implementation plans (CHIPs). This snapshot captures practical strategies and collaborative approaches discussed during the workshop.

Insights and strategies from other workshops convened as part of this initiative are available by visiting [AHA.org/community-health-environment/workshops](https://www.aha.org/community-health-environment/workshops).

Key Themes

During this Community Health and Environment workshop, six key themes emerged. These themes offer a foundation for actions to address challenges and complement existing community and population health work by hospitals and health systems in rural areas:

- Enhancing rural health connectivity.
- Optimizing rural hospital operations for environmental resilience.
- Bridging the digital divide in rural health care.
- Fostering engagement and building trust in rural communities.
- Strengthening partnerships.
- Navigating the broad array of environmental challenges in rural communities.

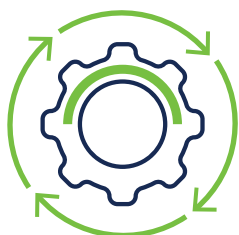


Enhancing Rural Health Connectivity

Rural communities are tight knit, but hospitals in these areas often face persistent challenges in ensuring patients receive local, timely and continuous care, particularly when hazards such as wildfires, flooding, storms and extreme temperatures disrupt transportation and access to care sites. Financial constraints and limited availability of health care specialists may lead patients to seek treatment at tertiary care centers. Many of these patients do not return to their primary care centers, placing further strain on finances of rural hospitals. Exploring ways to strengthen local treatment options and ensure access to clinicians and specialists before, during and after environmental disruptions can help maintain continuity of care.

TACTICAL TAKEAWAYS

- Analyzing data from patients and sources such as community health assessments may help hospitals identify which health care services patients most frequently are seeking elsewhere, revealing opportunities to enhance local health care.
- Strengthening collaborations with tertiary care facilities could help create structured follow-up pathways, ensuring that when patients receive specialty health care elsewhere as a result of an environmental hazard, they have an opportunity to return for continued treatment locally.
- Collaborating with local agencies and hospitals in neighboring regions to develop flexible staffing strategies could help maintain communities' access to health care during wildfires, floods, storms and road closures.



Optimizing Rural Hospital Operations

Rural hospitals and health systems face operational and infrastructure challenges that can be heightened by disruptions, including clinician shortages, utility interruptions and transportation barriers. Extreme weather events, wildfires and flooding can disrupt hospital functions, limit workforce availability and compromise patient care. Some hospitals are exploring contingency staffing models, improving coordination with local agencies and strengthening utility resilience to ensure operational continuity during disruptions.

TACTICAL TAKEAWAYS

- Strengthening coordination with utility companies may help hospitals prioritize power restoration and ensure continuity of care for patients reliant on medical devices.
- Collaborating with hospital services and facilities teams to assess and upgrade infrastructure — including, but not limited to, air filtration and ventilation systems — can strengthen protections for inpatient units against wildfire smoke and poor air quality.
- Developing contingency staffing models and transportation plans in collaboration with local agencies and regional health networks may help hospitals address clinician shortages and travel disruptions during extreme weather events.
- Addressing challenges of access to remote areas can alleviate some resourcing challenges. For example, OhioHealth Mansfield Hospital installed electric vehicle charging stations, offering free community charging and supporting hospital vehicles. The stations improved accessibility for EV-driving physicians and staff.



Bridging the Digital Divide in Rural Health Care

Limited broadband access, lower digital literacy and lack of personal technology devices — such as smartphones and computers — continue to hinder the adoption of telehealth, artificial intelligence-powered alerts and remote patient monitoring in rural communities, including during weather events that can impact health. Even where digital health solutions exist, many individuals may be unable to use them, creating potential gaps in care. Hospitals and health systems are exploring targeted education efforts and strategic partnerships to ensure digital health tools are accessible, effective and integrated into existing care models.



TACTICAL TAKEAWAYS

- Expanding virtual health services through partnerships with farming cooperatives and cooperative extensions may help provide better health monitoring for agricultural communities.
- Strengthening broadband and telehealth access in rural areas by collaborating with land-grant universities, local libraries and broadband initiatives could improve digital health literacy and access to virtual care.
- Integrating remote patient monitoring programs into existing care models may help in better managing chronic conditions affected by environmental factors and reducing ED visits.



Strengthening Engagement and Building Trust in Rural Communities

Hospitals and health systems are actively exploring community-driven engagement strategies to strengthen trust and ensure health interventions align with local values, particularly when addressing health impacts and trauma that people experience as a result of natural disasters, severe weather events and environmental hazards.

Many rural communities are accustomed to being self-reliant, which can lead to people delaying receiving needed health care services, underusing available resources and being hesitant to trust organizations and their outreach efforts. Rural hospitals and health systems can collaborate with local leaders and organizations to ensure community members understand and feel comfortable participating in preventive care initiatives, using digital health solutions and accessing services.

TACTICAL TAKEAWAYS

- Working with trusted local leaders, cooperative extension agents and faith-based organizations, hospital and health system teams can help facilitate conversations about environmental health risks and available health services.
- Using person-centered messaging rather than organization-centric outreach may decrease perceptions of external interference, making communities more receptive to programs aimed at mitigating the physical and mental health impacts of environmental incidents. Ensure messaging is easy to understand and posted in areas frequented by community members, such as local schools, stores, libraries and faith-based organizations.
- Identifying and supporting community champions — individuals who are already embedded in rural networks — may help garner broader acceptance of health interventions and improve participation in preventive care efforts.
- Recognizing the role of stigma in data collection and service use may help hospitals adjust outreach strategies to account for underreported needs when communities face environmental hazards, ensuring that health impacts are accurately captured in planning efforts.

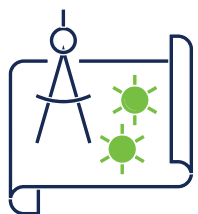


Strengthening Partnerships for Health and Sustainability

Rural hospital and health system teams can work closely with utility companies, local governments, cooperative extensions and emergency medical service providers to help strengthen environmental emergency preparedness and response, rural health care access and community resilience. Many hospitals are exploring collaborative models that leverage local resources, such as working with community- and faith-based organizations to better coordinate emergency response and with cooperative extension programs on health and environment initiatives.

TACTICAL TAKEAWAYS

- Working with utility companies may help hospitals ensure that the locations of medically vulnerable patients who rely on home-based medical devices are known and can be prioritized for power restoration after emergencies.
- Engaging cooperative extensions and state or national agriculture department programs could help improve food security during severe weather events and support other community health initiatives.
- Exploring alternative EMS transport models — such as community paramedicine and alternate destination policies. Collaborating with local businesses and agricultural boards to develop workplace health programs that address heat stress and air quality risks for employers' outdoor workers.



Navigating the Broad Array of Environmental Challenges in Rural Communities

Rural hospitals face a complex mix of environmental challenges that directly affect health care delivery. Wildfire smoke, extreme heat, soil, air and water quality issues and food insecurity all contribute to increased rates of respiratory diseases, chronic illnesses and mental health stressors. At the same time, economic pressures on agricultural workers and rural industries create additional barriers to care in rural communities.

TACTICAL TAKEAWAYS

- Integrating environmental health risks into community health assessments can help hospitals better anticipate how air quality, extreme heat and cold, and other disruptions contribute to chronic disease trends and health system utilization.
- Strengthening partnerships with cooperative extensions and agricultural agencies may help hospitals access important information on soil and air quality risks and collaborate on developing targeted interventions.
- Addressing the mental health impacts of environmental conditions and related economic instability through community-based behavioral health programs and crisis response strategies may help improve long-term health outcomes.
- Collaborating with local or state health departments and food systems organizations can help hospitals better understand and help address food insecurity in rural communities.

EXAMPLE

Workshop-Generated Resilient Rural Communities Tactic

The following concept emerged from a short brainstorming session focused on addressing community health challenges and the environment. Through this exercise, attendees identified an opportunity to leverage AI and digital health tools to improve chronic disease management and reduce preventable ED visits in rural communities.

The Problem

Extreme heat and other environmental conditions have significant health implications for individuals with cardiovascular disease and other chronic conditions. Challenges include:

- **Lack of real-time intervention.** Patients may not recognize how the environment affects their heart health and may delay seeking care.
- **High ED utilization for preventable conditions.** Without proactive management, many patients seek emergency care for avoidable complications, increasing strain on hospital capacity.

Community Health Intervention

Develop a mobile app with AI-powered alerts and geotracking capabilities to improve chronic disease management and reduce avoidable hospitalizations.

- **AI-powered patient alerts.** Send personalized notifications to patients with heart disease based on environmental conditions, reminding them of risks and potential actions (e.g., hydration reminders, cooling center locations).
- **Geotracking for high-risk patients.** Use patient location data and electronic health record integration to identify those at high risk due to frequent ED visits, preexisting conditions or environmental exposure.
- **Improved disease management.** Provide accessible, easy-to-understand education on how environmental conditions affect cardiovascular and respiratory diseases and offer real-time recommendations for adjusting daily behaviors based on temperature, humidity or air quality levels.

Community Health Impact

- Improved patient understanding of chronic disease self-care and environmental health risks.
- Reduced preventable ED utilization for lower-acuity health conditions, preserving emergency resources.
- Minimized patient loss by keeping care at local hospitals instead of tertiary centers..

Hospital and Health System Benefits

- **Lower readmission rates.** Improved chronic disease management reduces preventable hospitalizations.
- **Enhanced operational efficiency.** Fewer low-acuity ED visits allow hospitals to focus on higher-need patients.
- **Stronger patient engagement.** Proactive communication builds trust and continuity in rural health care services.



Assumptions and Risks

- **Technology access.** Patients need smartphones and internet access to receive alerts, which may be limited in some rural areas.
- **Leadership and clinician buy-in.** Effective implementation requires support from hospital and health system leaders and engagement from providers.
- **Data privacy considerations.** Geotracking features must align with HIPAA regulations and patient consent policies.

Example Initiatives

- **Mayo Clinic Health System's Mobile Health Clinics.** To address challenges for residents in rural Minnesota and Wisconsin in accessing specialized health care services, Mayo Clinic Health System introduced mobile health clinics equipped with AI-powered diagnostic tools. Traveling directly to underserved communities, these mobile clinic teams provide preventive exams and specialist consultations both in person and virtually, enhancing timely care and chronic disease management and supporting efforts to reduce unnecessary ED visits.
- **UCHealth's Virtual Health Center.** The center uses AI to continuously monitor patients' vital signs, enabling early detection of conditions such as sepsis. Earlier detection of issues in patients leads to timely interventions and improved patient outcomes. UCHealth's network extends throughout Colorado, southern Wyoming and Nebraska, and the Virtual Health Center also supports remote patient monitoring for chronic conditions like diabetes, allowing clinicians to adjust treatments in real time based on data from wearable devices.

Top Takeaways for Leadership

- **Leverage data to align hospital strategies with community needs.** Using environmental and health data together — including tracking which health services patients are seeking outside their primary care center during hazard events — can help identify trends, strengthen emergency preparedness and response, and guide collaborations and partnerships for preventive interventions. Collaborating with public health agencies, local agriculture boards and broadband initiatives can further expand rural hospitals' ability to address community members' health challenges and ensure access to care.
- **Strengthen community engagement and trust through listening sessions.** Hosting listening tours and community asset mapping exercises as part of the CHA process can help rural hospitals and health systems better understand local concerns, build trust, strengthen community engagement and tailor health interventions to align with community priorities.
- **Expand partnerships to address workforce and transportation challenges.** Exploring partnerships with regional health networks, EMS providers and local employers can help rural hospitals improve patient access to clinicians and specialists, develop contingency staffing models and reduce patient referrals out of the community.

For more information on AHA's Community Health and Environment initiative, visit
www.aha.org/community-health-environment.