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Critical Access Hospital-Local Health Department Partnerships to Address Rural Community Needs

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KEY FINDINGS

- Critical Access Hospitals (CAHs) were less likely than rural and urban prospective payment system (PPS) hospitals to address patient-level social needs as well as collaborate with external partners on population and community health initiatives.
- The most common area of collaborative activity for CAHs involved efforts to address patients' social needs with approximately 50% or more of CAHs collaborating with public health organizations, other health care providers, local or state government or social service agencies, organizations addressing food insecurity, law enforcement or safety organizations, and behavioral health providers.
- The level of collaborative activity reported by CAHs on community health needs assessments (CHNAs) and efforts to address social determinants of health was lower than efforts to address patients' social needs.
- CAHs and local health departments (LHDs) reported collaborating on CHNAs but developing separate strategy/implementation plans.
- Based on interviews with CAHs and LHDs, three areas of activity (CHNAs, emergency preparedness planning, addressing emergent public health crises) provide an opportunity to encourage collaboration between CAHs and LHDs to address priority needs.

PURPOSE

Under the Medicare Rural Hospital Flexibility (Flex) Program Area 3, State Flex Programs (SFPs) are encouraged to work with Critical Access Hospitals (CAHs) and their communities to develop rural systems of care. This study used national American Hospital Association (AHA) survey data to examine the involvement of CAHs in collaborative community health networks that include local public health departments (LHDs), other health care organizations, social service agencies, and other community organizations. The study supplemented the AHA survey data with qualitative interviews with four pairs of CAHs and LDHs (one pair in each of four communities) to focus on the extent to which these collaborative partnerships developed joint strategies to address patient-level social needs and community-level social determinants of health. These interviews also collected information on partnership formation, organization and sharing of leadership and resources, the roles of different p artners, d ecision-making processes, challenges of working collaboratively, examples of successful collaboration, and lessons learned from participation. This policy brief provides important insight into ways in which SFPs can support multi-sector community networks involving CAHs and LHDs to improve the health of rural communities.

BACKGROUND

Residents of rural communities face significant health issues and health care access challenges, including higher rates of chronic disease, smoking, and physical inactivity; reduced access to specialty care; and longer travel distances compared to their urban counterparts.[1]

They also face a range of social challenges including housing instability, food insecurity, stress, poverty, and social isolation.[2]

Collaborative partnerships (also known as multi- or cross-sector networks), composed of diverse community organizations, can harness the efforts a nd resources of participants to address community-level population health issues that no single organization can address on their own.[3] However, recent work by the Robert Wood Johnson Foundation (RWJF) funded Systems for Action team suggests that multi-sector community networks lost strength in rural communities from 2014 to 2018, as participation declined among hospitals, health insurers, higher education institutions, and non-profits. Urban areas, in contrast, experienced an increase in network participation from these sectors.[4,5]

CAHs can play a significant role in addressing community problems by partnering with LHDs and other community providers and organizations. Internal Revenue Service (IRS) guidelines require tax-exempt hospitals, including CAHs, to conduct triennial community health needs assessments (CHNAs) and develop implementation plans to address needs identified in the CHNAs.[6] The guidelines further direct tax-exempt hospitals to obtain input from public health officials and other community stakeholders on their CHNAs and implementation plans. These requirements parallel the community needs assessment requirements for public health agencies seeking voluntary accreditation by the Public Health Accreditation Board, although they are based on different time cycles (three years for hospitals and five years for public health agencies).[6] The National Association of County and City Health Officials' Mobilizing for Action through Planning and Partnerships[7] and the RWJF's Culture of Health[8] frameworks also encourage the development of collaborative partnerships of different community organizations to address local population health and health challenges.

Although Flex Program funding cannot be used to develop and conduct CHNAs, the funds can be used to improve the health of rural communities under Program Area 3: Population Health Improvement. Previous Flex Monitoring Team (FMT) research has examined CAH CHNA activities and demonstrated that collaborative CHNA processes can provide a foundation to engage CAHs, public health, and community stakeholders in strategies to address community needs, and serve as building blocks for comprehensive community health improvement strategies.[9,10] In addition to conserving scarce resources, collaboration can build trust between organizations, identify overlapping interests, and lead to shared strategies on local health priorities.[6,11] The FMT's past work also highlights the successes and challenges faced by CAHs in developing collaborative partnerships, their importance as hubs for community health improvement, and the importance of sharing responsibility, leadership, resources, and credit with community partners.[11] Shared CHNAs can be a mutually beneficial opportunity for CAHs and LHDs to meet regulatory or accreditation requirements related to community accountability. Biannual hazard risk assessments and emergency preparedness plans are required of health care organizations by the Centers for Medicare and Medicaid Services Emergency Preparedness Rule[12] and the Joint Commission's Emergency Management standards,[13] and of LHDs by the Center for Disease Control and Prevention's Center for Preparedness and Response[14] and the Public Health Accreditation Board.[15]

A review of the literature identified factors that contribute to successful collaborative partnerships: [16-18]

- A core partnership between hospitals and public health departments, around which other partners engage
- A shared vision, mission, and goals
- Strong leadership to recruit and engage partners, establish expectations for participation and operations, coordinate resources, manage conflict, set benchmarks, and monitor progress

- Timely and transparent communication among partners, community leaders, and stakeholders to build trust, encourage collaborative interventions, maintain progress towards shared goals, and recognize partner contributions
- Leveraging resources to implement, achieve, and sustain collaborative partnership initiatives

Using data from the AHA's Annual Survey of Hospitals, this brief describes the collaborative partnerships CAHs are engaged in, the organizations with which they partner, and the activities undertaken. Using data from interviews with CAH senior leaders and public health officials in four communities, it further explores the challenges and lessons learned from engaging in these partnerships at the local level.

METHODOLOGY

We used the AHA's 2021 Annual Survey of Hospitals data to examine the types of partner organizations, programs, and strategies that hospitals engage with to address community needs, and to compare the extent of CAH external partnerships with different organizations to the external partnerships of rural and urban prospective payment system (PPS) hospitals. Section F of the AHA survey asks hospitals to report on their strategies to address social needs and determinants of health such as housing, transportation, and social isolation. The survey also asks hospitals to report on the extent of their partnerships across 16 types of organizations by indicating whether they were "not involved," "work together to meet patient social needs (e.g., referral arrangement or case management)," "participate in the CHNA process," and "work together to implement community-level initiatives to address social determinants of health." The AHA survey instructions do not clearly define differences between social needs and the social determinants of health except to provide examples of activities to meet social needs such as referral arrangements or case management. This suggests that efforts to reflect social needs are primarily targeted to addressing needs at the patient level whereas efforts to address the social determinants of health occur at the broader community level. To classify non-CAH short-term acute care PPS hospitals as rural or urban, we used the 2010 Rural-Urban Commuting Area code zip code file released on August 17, 2020. In 2021, there were 1,354 CAHs, 823 rural PPS hospitals, and 2,322 urban PPS hospitals operating in the U.S. Because only a subset of hospitals responds to the survey each year, and the number of respondents varies across survey items, sample sizes are reported separately for each item reported (see Tables 1-3).

Between October 2022 and January 2023, we also conducted a series of open-ended interviews with staff from four CAHs and their LHDs. Using the AHA survey data, we identified four CAHs, one from each of the four U.S. census regions, which reported substantial engagement with their LHD and other partners to address community needs. To identify the LHDs associated with the four CAHs, we used hospital county location from the AHA survey and then conducted web searches and email and phone outreach. Staff from each CAH and LHD were interviewed separately to understand issues related to partnership formation, organization and sharing of leadership and resources, the roles of different partners, decision-making processes, challenges of working collaboratively, examples of successful collaboration, and lessons learned from participation. All interviews were recorded and transcribed for review by the study team. Team members individually reviewed the transcripts to identify key themes. After completing their reviews, the full team reviewed each other's work and reached a consensus on the key themes identified in this briefing paper. We also reviewed documents and reports from the CAHs and LHDs including CHNAs, strategy plans, community benefit reports, and annual reports.

[*] Rural PPS hospitals were classified using RUCA codes 4.0, 5.0, 6.0, 7.0, 7.2, 8.0, 8.2, 9.0, 10.0, 10.2, and 10.3. Urban PPS hospitals were classified using RUCA codes 1.0, 1.1, 2.0, 2.1, 3.0, 4.1, 5.1, 7.1, 8.1, and 10.1.

TABLE 1: Hospital and Health System Strategies to Address Social Needs by Hospital Type, 2021

Type of social need	CAH (%) (n=681)	Rural PPS (%) (n=459)	Urban PPS (%) (n=1,494)
Health behaviors	78.4	85.2	87.6
Transportation	68.4	76.3	86.3
Food insecurity or hunger	64.9	71.0	84.5
Social isolation	53.5	57.5	70.6
Housing	49.1	56.4	71.0
Interpersonal violence	47.6	64.9	73.4
Education	43.5	50.5	56.3
Utility needs	36.6	49.2	56.8
Employment and income	36.3	41.2	54.4
Other[†]	5.7	8.7	11.5

[†] Other strategies included efforts to improve access to primary and specialty care, care coordination, integrated care management, medication access, referral to social services and community resources, health challenges, childcare services, health literacy, insurance screening / enrollment, legal aid, maternal / child health, spiritual care, bereavement services, COVID clinics, and infectious disease services.

QUANTITATIVE RESULTS

Hospital Programs and Strategies to Address Social Needs: CAHs were less likely than rural and urban PPS hospitals to have programs or strategies in place to address the social needs of their communities (Table 1).

Despite performing well in some areas, CAHs lagged rural and urban PPS hospitals in all response categories. CAHs trailed rural PPS hospitals by a margin of 4.0% (social isolation) to 17.3% (interpersonal violence), and urban hospitals by 9.2% (health behaviors) to 25.8% (interpersonal violence). The most common needs addressed by CAHs included health behaviors (78.4%), transportation (68.4%), food insecurity or hunger (64.9%), and social isolation (53.5%). Fewer than 50% of CAHs reported strategies to address housing, interpersonal violence, or education-related programming. Just over one third addressed utility needs and employment and income issues.

External Partnerships for Population and Community Health Initiatives

CAHs were less likely than rural and urban PPS hospitals to engage with external community partners to implement population and community health initiatives (Table 2). Indeed, CAHs were more likely to report being "not involved" with all types of partners, with the only exception that a slightly larger proportion of urban PPS hospitals reported "no involvement" with K-12 schools compared to CAHs and rural PPS hospitals (22.0% versus 20.4% and 20.1%, respectively). CAHs were less likely than rural and urban PPS hospitals to report all types of partnership engagement except being slightly more likely to work with K-12 schools to meet patient social needs (43.2% versus 41.5% and 42.1%, respectively). Finally, CAHs reported similar levels of engagement with law enforcement/safety forces to meet patients' social needs as rural PPS hospitals (51.7% versus 51.3%).

TABLE 2: Percentage of External Partnerships for Population and Community Health Initiatives by Hospital Type, 2021

Collaborating Organization*	Does Not Collaborate (%)			Collaborates to Meet Patient Social Needs (%)			Participates in the CHNA Process (%)			Collaborates to Address Social Determinants of Health (%)		
	CAH	Rural PPS	Urban PPS	CAH	Rural PPS	Urban PPS	CAH	Rural PPS	Urban PPS	CAH	Rural PPS	Urban PPS
Health care providers outside your system	21.6	11.3	7.8	54.8	59.7	66.1	35.0	41.5	50.4	32.4	43.1	55.2
Health insurance providers outside of your system	47.8	37.6	22.2	41.4	47.6	60.3	12.2	18.1	24.9	14.3	22.3	34.6
Local/state public health departments/ organizations	12.0	5.3	5.1	55.5	61.7	64.8	43.8	51.8	56.0	46.4	55.7	62.4
Other local/state government or social service agencies	19.8	8.1	7.2	52.7	63.2	66.9	38.3	46.8	52.3	34.7	48.6	57.4
Faith-based organizations	26.3	22.6	13.6	45.3	51.0	61.4	35.5	40.5	51.3	26.3	33.7	47.4
Local organizations addressing food insecurity	22.6	17.2	10.3	49.3	54.5	69.1	38.4	43.3	50.8	31.4	41.8	53.0
Local organizations addressing transportation needs	29.1	21.1	13.5	47.7	56.6	70.8	30.8	35.9	39.7	23.8	33.0	36.1
Local organizations addressing housing insecurity	39.1	28.0	15.9	40.9	49.9	65.6	27.6	34.6	42.1	20.6	29.9	38.7
Local organizations providing legal assistance for individuals	61.0	51.2	33.6	29.0	34.7	53.1	15.4	20.5	24.9	10.8	12.5	21.6
Other community non-profit organizations	25.3	15.0	9.2	47.1	53.5	68.0	39.0	48.2	54.6	32.4	41.8	57.4
K-12 schools	20.4	20.1	22.0	43.2	41.5	42.1	40.0	43.7	43.4	37.7	40.9	50.0
Colleges or universities	44.3	26.1	19.3	29.3	34.9	42.6	27.7	39.9	48.0	21.9	39.5	47.0
Local businesses or chambers of commerce	22.2	13.6	16.5	37.1	39.6	39.4	44.6	50.7	50.7	28.2	37.8	40.7
Law enforcement/safety forces	19.3	14.7	15.5	51.7	51.3	52.3	37.5	41.6	43.6	31.0	38.3	42.8
Area behavioral health service providers	23.5	14.6	10.1	53.9	61.6	67.1	33.2	37.9	48.7	26.5	38.1	48.4
Area Agencies on Aging	34.1	29.0	18.9	44.8	47.2	55.2	30.6	31.9	42.5	20.0	29.7	43.1

*Sample sizes vary by type of collaborating organization and are reported in Appendix.

The most common area of collaborative activity for CAHs involved efforts to address patients' social needs. Although the AHA survey does not provide clear guidance on the differences between addressing social needs and the social determinants of health, the examples provided are focused on direct patient interactions including referral arrangements and case management. Thus, the higher level of "collaboration" for this level of activity is not surprising. The most common community partners CAHs engaged with to address patients' social needs included local or state public health organizations (55.5%), health care providers outside their system (54.8%), behavioral health providers (53.9%), other local or state government and/or social service agencies (52.7%), and law enforcement/safety forces (51.7%). The most common community partners to participate in the CAH CHNA process were local businesses or chambers of commerce (44.6%), local or state public health organizations (43.8%), K-12 schools (40.0%), other community non-profit organizations (39.0%), and local organizations addressing food insecurity (38.4%). Finally, the most common community partners CAHs worked with to address social determinants of health included local or state public health organizations (46.4%), K-12 schools (37.7%), other local or state government and/or social service agencies (34.7%), health care providers outside their system (32.4%), and other community non-profit organizations (32.4%).

FINDINGS FROM QUALITATIVE INTERVIEWS

The following section summarizes the results of individual interviews with leaders from four CAHs and their LHD partners. Although these findings are not generalizable, they do provide valuable insights into the difficulties and benefits of building collaborative partnerships. Table 3 provides an overview of study participants including the characteristics of each county served (population, land mass, and population density), a general description of the public health system structure in which the LHD operated, CAH ownership type and health system affiliation, and a general description of each collaborative network by region.

Community partnership frameworks: All four CAH-LHD pairs worked within collaborative networks to address community needs using a variety of organizational frameworks. Three of the partnerships were organized primarily by public health organizations. The Northeast example is housed in a public health district established by the state based on population size, county borders, and hospital service areas and overseen by a District Coordinating Council (DCCs).[†] The Midwest and West examples are based in county health departments. The South census region example is housed in a collaborative network (referred to as the Alliance) that operates as an independent 501(c)(3) organization. The Alliance was initially based in a county health department but was spun off as a separate tax-exempt organization to enable it to better pursue external grant funding to support its activities. Staff from the CAH and LHD continue to serve on the Alliance's leadership team and subcommittees. This is the only formal independent organization among the four examples.

The collaborative networks located in the Northeast and West have adopted guidelines that outline their vision, mission, and participation requirements, and have established steering committees to provide general oversight and topic-specific subcommittees to create action plans and implement interventions to address priority needs. Staff from the CAHs and LHDs

[†] DCCs are headed by a District Public Health Liaison appointed by the State's Center for Disease Control and Prevention's (CDC's) Statewide Coordinating Council for Public Health (SCC), a statewide body of public health stakeholders for collaborative public health planning and coordination. DCCs operate under a committee and by-laws established by the SCC but are not formally structured as a stand-alone organization. DCCs are expected to participate in appropriate in district-level activities and to ensure that essential public health services are provided for in each district (MRS Title 22, §412. Coordination of Public Health Infrastructure Components). The CDC ensures the invitation of a group of participants representing the diverse public health, health care, social service, and stakeholder organizations unique to each DCC.

TABLE 3: Overview of CAH-LHD Study Participants

U.S. Census Region	County Characteristics*	Public Health System	Critical Access Hospital	Description of Collaborative Network
Northeast	- Population: 67,255 - Land mass: 6,672 sq mi - Density: 10.1/sq mi	Public health district established by the state and overseen by a District Coordinating Council	Freestanding not-for-profit	Using county data from a shared statewide CHNA report, the CAH and LHD develop their own plans to address priorities identified in the report and collaborate with local and county stakeholders on health promotion and improvement activities.
South	- Population: 79,864 - Land mass: 709 sq mi - Density: 112.6/sq mi	County health department	System affiliated not-for-profit	A non-profit health alliance coordinates community partners in a shared CHNA and four subcommittees/ workgroups: fairness; economic stability and resilience; healthy eating, active living; and access to comprehensive services.
Midwest	- Population: 9,176 - Land mass: 402 sq mi - Density: 22.8/sq mi	County health department	System affiliated not-for-profit (church operated)	The CAH and LHD partner with other organizations on a shared CHNA, a county wellness coalition, and emergency preparedness coalition.
West	- Population: 11,237 - Land mass: 2,103 sq mi - Density: 5.3/sq mi	County health department	Freestanding not-for-profit	The CAH and LHD partner with multi-sector organizations on a community action collaborative and an emergency planning committee.

*2022 county population estimates from census.gov. 2011 county land mass in square miles from census.gov land area file.

typically served on both the steering committee and sub-committees, which met regularly. The Midwest example was described as more informal and issue-specific with the CAH participating in plans to address identified needs. All four CAH-LHD pairs reported using consensus-based decision-making processes to enable members to arrive at mutually agreeable solutions.

Key Themes from Interviews: Several recurrent themes emerged during our CAH and LHD interviews. For example, interviewees emphasized the importance of participants leaving their personal egos and organizational agendas "at the door" to focus on how best to prioritize community health issues and deploy limited resources in the most effective and efficient manner. Interviewees noted the value of conducting regular outreach and recruitment of new member organizations to ensure broad and up-to-date representation of community stakeholders. One interviewee noted that geographic closeness or co-location of public health and partner hospitals can be of immense value, allowing for more frequent informal interactions among staff members, relationship building, and deeper inter-organizational connections. Another interviewee emphasized that rural community partnerships often benefit from long-standing relationships, both professional and private, among professionals who over

time may have occupied multiple roles across local health and social service organizations (or within a single organization), gaining familiarity with available services and community health challenges. For example, among our interviewees, one hospital administrator had formerly worked for the local volunteer EMS agency; the lead emergency management official in one county was also the acting fire chief and head of EMS; one public health administrator had previously worked as a nurse in the local CAH; and one hospital staff member worked in the local nursing home.

Regarding barriers and challenges, interviewees noted the difficulty of coordinating times for busy partners to meet. They further noted that while virtual meetings can be helpful, the remote nature of such meetings can be a barrier to cultivating more meaningful connections among organizational representatives. Another challenge noted by interviewees is high staff turnover and the resulting loss of institutional knowledge as well as burnout, and the stagnation of partnership activities. Additionally, limited financial resources and a reliance on grant funding are persistent challenges for rural CAH-LHD partnerships as it can be challenging for small organizations with limited resources to dedicate annual funding to partnership activities. One interviewee noted that demonstrating partnership efficacy and success with one grant can lead to compounding success with future grant opportunities. One organization had a grant writer on staff who contributed time to the collaborative network, but for many interviewees the pursuit of grant funding involved staff from multiple organizations who took responsibility for monitoring requests for proposals, notifying each other about funding opportunities, and collaborating on the response. The financial circumstances of one collaborative network were unique in that the partnership benefited from a state endowment grant that supported its work for the first six years. Another LHD interviewee thought their CAH partner could do a better job engaging the LHD in efforts to pursue grant funding, meet related community engagement requirements, and ensure the post-grant sustainability of initiatives.

Another common theme that arose during interviews was the need for collaborative activities to be beneficial to all parties to secure and maintain partner engagement. Three activities or events repeatedly surfaced in our discussions with CAH and LHD staff that provided opportunities for substantive and mutually beneficial collaboration: the development of shared CHNAs; regulatory requirements for emergency preparedness planning and implementation; and shared obligations for COVID-19 management and mitigation during the Public Health Emergency (PHE). CAH-LHDs can leverage these regulatory obligations and emergent issues as opportunities to bolster inter-organizational collaboration are discussed in the following section.

Community health needs assessments and implementation plans: Two of the four CAH-LHD pairs provided input into one another's CHNA processes. For the Northeast pair, local efforts to address local needs are based on a triennial shared CHNA report developed through a collaborative process involving the State's Center for Disease Control and Prevention, several major health systems, and other state partners. The state data team assembles and analyzes county-level quantitative and qualitative data to prepare a statewide report as well as country reports that present the data and health priorities. These reports are widely disseminated to hospitals, public health districts, and other interested community partners to be used in their own planning processes. Currently, the CAH, with input from the LHD, uses the county-level data to develop its required implementation plan to address priorities identified in the shared CHNA report and collaborates with local and county stakeholders on health improvement activities. Despite a lack of formal coordination across the county to address priority issues, the LHD representative noted that partner discussions concerning gaps in local substance use services had led to the development of a medication assisted therapy program in the county.

In the West, the CAH-LHD pair conducted separate CHNAs but implemented complementary activities to address prioritized community needs. The CAH and

LHD provided input into the efforts of their partner's CHNAs. The CAH collaborated with its State Office of Rural Health on its required triennial assessment cycle while the LHD worked with a coalition, of which the CAH was a member, on a five-year cycle. The CAH created its own implementation plan but also participated in some of the coalition's action groups such as the cancer coalition. As members of the coalition, the CAH's cancer center offered specialized oncology services while the health department provided cancer prevention messaging, screening, and referrals. Coalition members raised funds to assist individuals undergoing cancer treatment; offered support services such as counseling, education, and boutique services (wigs, caps, scarfs); and increased awareness of and access to local cancer prevention and treatment options.

The other two CAH-LHD pairs conducted shared CHNAs. In the South, the collaborative network (referred to as the Alliance) coordinates a shared triennial CHNA and develops a strategic plan based on the CHNA findings. The action plans to address priority needs are developed and implemented by members of four subcommittees: fairness, access to comprehensive health services, economic resilience, and healthy eating/active lifestyle. The CAH also develops its own implementation plan which outlines how the hospital's staff and resources will contribute to achieving the Alliance's strategic plan. One of the Alliance's strategies to improve access to comprehensive health services is to pursue system and service alignment to achieve fair and successful birth outcomes for women and infants. To achieve this strategy, they created a cross-sector initiative supported by external foundation funding. This initiative seeks to build upon local efforts to improve birth outcomes by addressing root causes and aligning services. At the local level, participants include the LHD, the CAH, primary care providers, community health care providers, the county department of social services, and community members from the at-risk population. To promote service alignment across the county, partners share an organizational vision and set of priority outcomes, a data and measurement system, and a governance structure with defined roles and relationships. The partners are actively working towards establishing a financing structure that incorporates incentives and mechanisms to ensure accountability.

The Midwestern CAH-LHD pair aligned the LHD's needs assessments with the CAH's three-year cycle to minimize the data collection burden on CAH and public health staff. To conduct the assessment, the CAH-LHD pair collaborated with a county wellness coalition, nursing home leaders, fire department, law enforcement, ambulance and support services, and community members. Previously, the LHD developed its own implementation plan, but in the 2019 cycle they adopted the CAH's implementation plan which focused on addressing obesity, diabetes, and cardiovascular disease. For the 2022 CHNA cycle, the LHD interviewee noted it was challenging to coordinate with the CAH given the hospital's internal challenges which included staff layoffs. The CAH CEO confirmed that the hospital's participation in the 2022 CHNA process was of limited value given the COVID-19 pandemic-related financial and operational challenges the hospital was navigating.

Emergency preparedness planning and implementation: The CAH-LHD pairs in the Northeast, Midwest and West reported involvement in emergency pre-paredness coalitions that included other community partners such as emergency management programs, fire departments, Emergency Medical Services (EMS), law enforcement, nursing homes, K-12 schools, community colleges, and local businesses. To sustain emergency preparedness initiatives, one member of the Midwest coalition donated their grant writer's time to work with partner organizations to prepare and submit joint funding applications. The coalitions reported preparing for the types of emergencies their county is most likely to encounter. For example, the Midwest emergency preparedness coalition' planning focused on the mitigation of chemical spills given the frequent rail transport of pesticides through the community and conducted an active shooter training drill. The CAH-LHD pair in the West reported developing a

collaborative emergency preparedness plan but struggled to engage partners in tabletop exercises[‡] to practice executing the plan. The coalition in the Northeast had most recently planned for how they would manage increasing cases of COVID-19.

COVID-19 management and mitigation: Amidst the uncertainties of the COVID-19 public health emergency (PHE), all four communities looked to their local CAH and LHD to provide leadership and mobilize community partners to collaborate on public education, testing, mitigating transmission, and implementing widespread vaccination programs. During the height of the PHE, partners reported sharing organizational policies and procedures, staff, supplies, equipment, and facility space for testing and vaccinations. The LHD in the Midwest reported that the community college provided space for a backup hospital and upgraded its electrical wiring to meet potential demand. Partners in each community met and communicated regularly throughout the PHE to review changing guidelines, identify gaps, and troubleshoot challenges.

Although the PHE fostered greater collaboration among community partners, it also tested the partnerships. The CAH CEO from the West described how the PHE created conflict among partners due to competition for limited resources, inexperience managing a PHE response, inadequate surge capacity due to staffing shortages, and tensions within the community due to miscommunication and anti-government sentiment. Differences between the CAH's and LHD's approaches to leadership over the course of the PHE further strained the relationship. The CAH's administration and board of directors felt they presented a unified message regarding COVID-19 mitigation, whereas the county commissioners and Board of Health did not. The CAH took a strong stand on the need for vaccination, testing, masking, and isolation to meet regulations and the LHD focused primarily on education and contact tracing. At one point during the height of the PHE, the CAH CEO decided that attendance at the Board of Health meetings was no longer constructive. Despite differing approaches, the CEO noted that the strong collaborative history among the partners and open lines of communication aided in weathering the challenges of the PHE.

DISCUSSION

Our analysis of the 2021 AHA survey data suggests that CAHs are less likely than rural and urban PPS hospitals to have programs or strategies in place to address the health and social needs of their communities as well as to report engagement with external community partners to implement population and community health initiatives. Although CAHs lagged rural and urban PPS hospitals across all response categories, they reported efforts to address a range of common rural community needs. Despite the presence of fewer programs and partnerships compared to rural and urban PPS hospitals, CAHs are working to engage stakeholders across health care, social services, emergency response, community development, and other key areas.

Given the lower observed levels of CAH engagement in community partnerships compared to rural and urban PPS hospitals, SFPs can explore opportunities to support CAH and LHD efforts to develop more robust collaborative relationships, address health-related social needs, and improve the health and social outcomes of rural residents. Given the significant role hospitals play in their communities, CAHs are well positioned to function as conveners and provide critical leadership, staffing, and resource support for nascent partnerships.[11]

Although the CAH-LHD pairs we interviewed described interesting programs and community health improvement efforts, they also acknowledged opportunities to develop a more unified response to the health and social needs of their communities. SFPs can support the maturation of CAH-LHD partnerships and

[‡] A tabletop exercise is an activity in which key emergency management personnel are gathered to discuss, in a non-threatening environment, simulated emergency situations.

related community health improvement activities by helping CAH administrators narrow the focus of their community health improvement efforts to a limited number of priority areas, rather than focus on broad, high-level aspirational goals. SFPs can help CAH administrators develop stronger linkages with local and regional partners and implement evidence-based interventions with realistic and achievable goals.[19] As discussed earlier, CAH and LHD interviewees emphasized the importance of three key opportunities to foster greater collaboration and coordination among partners: the development of shared CHNAs and implementation plans; emergency preparedness planning and implementation to fulfill hospital and public health regulatory requirements; and reviewing lessons learned from COVID-19 PHE management and mitigation efforts to improve local response capacity.

Studies suggest that LHDs that collaborate with hospitals on their CHNAs are more likely to be involved in joint implementation planning, and such involvement is associated with higher levels of hospital investment in community health improvement initiatives.[4] Despite the implementation of IRS guidelines in 2012 that encourage greater collaboration between hospitals and LHDs in the CHNA process, our analysis of 2021 AHA data showed that only 43.8% of CAHs reported participation in a shared CHNA with their local or state public health department. To encourage greater collaboration throughout the CHNA and implementation process, CAHs and LHDs should review and participate in each other's CHNA reports and the development of shared implementation/public health improvement plans.[20] They should identify priority community needs around which they can explore shared interventions based on individual strengths and resources. Similar expectations establish by the Public Health Accreditation Board and the IRS regarding community needs assessments represent an opportunity to stimulate stronger collaboration, shared measurement systems, and coordinated community health improvement efforts between hospitals and LHDs.[21]

Another opportunity for SFPs to support collaborative engagement between CAHs and LHDs relates to the regulatory requirements for emergency preparedness planning and implementation. The Federal Office of Rural Health Policy recognized the need for collaborative engagement in this area by noting that rural public health departments and hospitals may lack the capability and resources to respond adequately to emergencies, leaving communities at-risk.[22] They suggested that rural residents explore a "whole community" emergency preparedness planning process and engage community members in tasks and responsibilities based on their knowledge, strengths, resources, and abilities.[22]

The COVID-19 PHE (the third opportunity to support collaborative action) underscores the importance of a collaborative approach to emergency preparedness and planning and suggests an opportunity to examine the local response to the PHE and make necessary adjustments to be better prepared for future contagious disease outbreaks. Similarly, events such as train derailments also call for collaborative action as the National League of Cities estimates that there will be over 1,000 derailments each year with half carrying potentially hazardous substances.[23] SFPs can work with CAHs, LHDs, and other community partners to improve emergency preparedness planning at the local level and increase capacity to respond to contagious diseases, chemical spills, terrorist events, mass shootings, and natural disasters. The Rural Health Information Hub provides numerous resources to assist SFPs, CAHs, LHDs, and rural communities in this area of activity, including a Rural Emergency Preparedness and Response Toolkit.[24]

SFPs can play an important role in helping CAHs access, interpret, and track data on the health needs of their communities; set quantifiable targets for health improvement; benchmark key indicators; identify strategies to improve community health; and evaluate health improvement initiatives.[11] Supporting hospital-community connectedness through more sophisticated

data collection and integration mechanisms may facilitate strategic investments in community health.[25] Process and outcome measures that focus on the performance of evidence-based program activities can ensure mutual accountability for the actions that hospitals and other stakeholders take to achieve their partnership's population health goals.[21] These measures can also support SFPs in measuring the impact of their initiatives to support the collaborative engagement of CAHs, LHDs, and other community stakeholders.

Given the many potential needs in most communities, SFPs can play a significant role in helping the CAHs in their state identify key partners and prioritize the health and social issues impacting community members. SFPs can also provide ongoing technical assistance to CAHs by sharing information on established collaborative partnership models and successful examples of CAH-LHD collaboration. Importantly, SFPs can optimize the use of scarce Flex Program resources by creating structured opportunities for knowledge sharing, including learning cohorts that focus on the development of sustainable community partnerships. SFPs can also provide a space for SFP and CAH staff to share Flex-specific information and insights related to partnership development and the use of evidence-based programs to target priority health needs.[11] SFPs can help CAHs build more collaborative activities into their traditional community benefit programs and offer grant writing support in the form of grant development training and consulting opportunities for CAH administrators and staff. SFPs may consider targeting independent CAHs to provide additional support and TA as these organizations often have more limited capacity to pursue grant opportunities or develop evidence-based collaborative community strategies than their system-owned peers.

LIMITATIONS

The results of our descriptive analysis represent only those hospitals that responded to the survey items under consideration and do not account for differences between responding and nonresponding hospitals. Although constructing survey weights for nonresponse was beyond the scope of this analysis, we compared responding and non-responding hospitals by select characteristics including ownership type (i.e., non-profit/governmental vs. for profit), level of rurality, census region, and average daily census (data not shown). We identified some differences between the two groups. For example, a smaller percentage of responding hospitals were in the South and West census regions than in the Midwest and Northeast (for all hospital types). Respondents were also more likely to operate as non-profit organizations (for rural and urban PPS hospitals) and less likely to be in isolated rural areas (among CAHs and rural PPS hospitals). As it is unclear whether and to what extent these differences may contribute to nonresponse bias and potentially affect our results, caution should be exercised in their interpretation as generalizability may be limited.

Similarly, our interview sample was limited to four CAH-LHD pairs, so while the findings offer broad insights for State Flex Programs and CAH administrators interested in understanding and strengthening hospital partnerships to address rural community needs, the small number of interviews does not allow for generalizability. Finally, the AHA survey provides self-reported information on the types of activities hospitals are engaged in. It did not allow us to assess the scope or content of their activities in the reported activity areas.

CONCLUSION

CAH-LHD partnerships must be continuously nurtured. Communities look to CAHs and LHDs to provide leadership to address community health needs. Accordingly, it is important for CAHs and LHDs to partner with one another and other community organizations in a collaborative and consistent manner. CAHs and LHDs can work together to set expectations for the partnership and identify strategies to ensure their collaborative activities reduce silos and enhance coordination of services and resources throughout their service areas. The four CAH-LHD pairs are working towards this end. All had developed some level of structural partnership with activities aimed at addressing community need. However, the pairs often struggled to address priority needs in an integrated and strategic fashion and, instead, tended to work in parallel with one another. The CAH-LHD pairs emphasized that collaborative activities must be seen as mutually beneficial for partners to initiate and sustain their engagement. Towards this end, we identified three areas of opportunity to encourage substantive collaboration between CAHs and LHDs – shared CHNAs and implementation plans, emergency preparedness planning and implementation, and development of community-focused strategies to address emergent public health crises using the lessons learned from the COVID-19 PHE. Given the importance of robust collaboration between CAHs, LHDs, and other community organizations to better serve their communities, these three areas of activity suggest potential projects for SFPs to support community collaboration and engagement under the population health program area.

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APPENDIX: Sample Sizes for AHA Survey Questions on External Partnerships for Population and Community Health Initiatives by Hospital Type, 2021

Collaborating Organization	CAH (n)	Rural PPS (n)	Urban PPS (n)
Health care providers outside your system	760	494	1,517
Health insurance providers outside of your system	741	481	1,475
Local/state public health departments/organizations	761	494	1,496
Other local/state government or social service agencies	757	492	1,494
Faith-based organizations	749	486	1,499
Local organizations addressing food insecurity	755	483	1,509
Local organizations addressing transportation needs	753	488	1,494
Local organizations addressing housing insecurity	747	485	1,494
Local organizations providing legal assistance for individuals	730	473	1,481
Other community non-profit organizations	749	486	1,498
K-12 schools	748	487	1,476
Colleges or universities	743	479	1,478
Local businesses or chambers of commerce	746	487	1,475
Law enforcement/safety forces	749	491	1,492
Area behavioral health service providers	651	417	1,312
Area Agencies on Aging	641	411	1,286