Critical Access Hospitals' Community Health Needs Assessments and Implementation Plans: How Do They Align?

Flex Monitoring Team
Briefing Paper #39
October 2018

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HIGHLIGHTS

- The most commonly identified needs in the community health needs assessments (CHNAs) included **obesity, physical activity, and healthy eating; substance use; mental health services; tobacco use; chronic disease and diabetes; and access to primary care, specialty care and other services**.
- While these needs were commonly addressed in the implementation plans of study hospitals, **a substantially lower percentage of the hospitals proposed to address substance use, mental health services, and tobacco use** than the other commonly identified needs.
- It was **difficult to identify the extent to which the study hospitals engaged members of vulnerable populations** in their CHNAs or the quality and depth of their community engagement activities.
- Implementation strategies proposed by the study hospitals **emphasized medical rather than population-level factors affecting the community** and, in some cases, emphasized hospital-level facility and/or technology needs.
- Although the CHNAs and implementation plans aligned with IRS guidelines, **CAHs appear to need technical assistance related to the engagement of the community and vulnerable populations, prioritization of community needs, justification for those needs not addressed, and the use of the CHNA process** to fulfill both their community accountability obligations and their own internal strategic planning needs.

INTRODUCTION

The Medicare Rural Hospital Flexibility (Flex) Program supports the development of local systems of care with Critical Access Hospitals (CAHs) as the hubs, including initiatives to address local population health priorities.[1] This view of CAHs as central resources in rural systems of care is consistent with ongoing efforts by the Internal Revenue Service (IRS) to hold tax-exempt (501(c)(3)) hospitals, including CAHs, accountable for addressing unmet needs in the communities they serve.[2] Relevant IRS hospital accountability initiatives include the establishment of a mandatory community benefit reporting framework in 2007 and the Affordable Care Act (ACA)-mandated changes to the IRS tax code that require 501(c)(3) hospitals to conduct triennial community health needs assessments (CHNAs), develop implementation plans to address identified needs, and implement written financial assistance and billing policies.[3] Many community benefit and hospital experts view these regulatory requirements as an opportunity to encourage tax-exempt hospitals to target their spending in these areas to improve the health of the residents of their communities.[3-9]

The principal aim of this study was to provide a snapshot of how CAHs are using the CHNA process and information to address community needs. This brief examines community benefit data from the IRS Form 990, Return of Organization Exempt from Income Tax filings, CHNA reports, and implementation plans for a sample of 50 tax-exempt CAHs to understand how these hospitals are fulfilling their community obligations and the extent to which these reports are being used to support their population health improvement activities. The brief also describes opportunities for CAHs to strengthen their efforts to address unmet community needs, identifies resources needed to enhance CAH population health performance, and discusses how state Flex programs can support CAHs in meeting their community obligations and improving the health of their communities.

BACKGROUND

The IRS's 2007 revisions to Form 990 and the 2010 ACA-mandated changes to the tax code are the latest iterations in federal policy focused on the extent to which tax-exempt 501(c)(3) hospitals are returning benefits to the community in exchange for the tax benefits they receive.[3-5] The 2007 revisions (which became effective for Tax Year 2009) added Schedule H (Hospitals) to Form 990 to capture data on a defined set of hospital community benefit programs and services that provide treatment and/or promote health and healing in response to identified community needs.[10,11*] The goal is to enable the public and policymakers to compare the dollar value of the benefits returned by hospitals to their communities to the tax benefits they receive.[12]

In addition to data on charity care, uncompensated costs of serving vulnerable patients, Medicare bad debt, and traditional community benefit activities, Schedule H captures information on community building activities, which focus on social, economic, and other factors that influence health as opposed to more traditional, medically-oriented community benefit activities such as provision of charity and subsidized care, health fairs, and screenings. Community building activities may include physical improvements (e.g., walking trails, parks, playgrounds) and housing; economic development; community support; environmental improvements; leadership development and training for community members; coalition building; community health improvement advocacy; workforce development; and other activities.[12,13] The IRS will evaluate the community building data over time to determine if these activities should be formally counted as a community benefit. Schedule H also captures data on the hospital's triennial CHNA process, the needs identified through its CHNAs, and the methods used to address those needs.

Subsequent to the implementation of the IRS's community benefit reporting requirements, the ACA added Section 501(r) to the IRS tax code requiring tax-exempt hospitals to conduct triennial CHNAs to address concerns regarding the lack of transparency in how hospitals make decisions regarding their community benefit activities.[14] The ACA also required hospitals to implement and publicize written financial assistance, billing and collection, and emergency care

*All hospitals recognized under Section 501(c)(3) of the Internal Revenue Code are required to file an annual Form 990 (including Schedule H) with the exception of "dual status" government-owned hospitals.[15] These dual status hospitals are operated by municipal or county governments but have sought 501(c)(3) status often for the purpose of offering employee benefit plans that were historically unavailable to non-501(c)(3) organizations. The authority to waive the Form 990 filing requirement for these dual status government-owned facilities is provided under Rev. Proc. 95-48, 1995-2 C.B. 418.[11]

policies in response to concerns about aggressive hospital billing practices. Effective tax years beginning after March 23, 2012, all tax-exempt hospitals, including dual status government-owned hospitals,** must conduct triennial CHNAs and adopt an implementation plan to address identified needs.[10] Single status government-owned hospitals are exempt from the requirements of 501(r). The IRS has updated Form 990, Schedule H to capture information on the extent to which hospitals are complying with these requirements. Of the 1,321 CAHs in operation during 2014, 707 (54 percent) were identified through the American Hospital Association (AHA) Annual Survey of Hospitals as tax-exempt 501(c)(3) hospitals and were required to file a CHNA and related implementation plan.

As part of the CHNA process, hospitals must adopt an implementation plan explaining how they will address the specific needs identified and why, if appropriate, they have chosen not to address certain identified needs.[15] In conducting their CHNAs, hospitals are required to solicit and incorporate input from persons representing the broad interests of the community in identifying and prioritizing community health needs including: 1) individuals with special knowledge of, or expertise in, public health (e.g., public health nurses, staff in local or state health departments, and public health faculty in academic programs); 2) representatives from at least one state, local, tribal, or regional government public health department or State Office of Rural Health with knowledge, information, or expertise relevant to the health needs of that community; and 3) members of medically underserved, low-income, and minority populations. The CHNA report must be made easily available to the public including through the hospital's website. In the tax years between CHNAs, hospitals must describe the status of actions taken to address health needs identified in their implementation plans. As part of subsequent CHNAs, hospitals must solicit and consider written comments on their prior CHNA and implementation plan and evaluate the impact of any actions taken to address the identified significant health needs. The final rules also clarified that applicable health needs may include the need to address financial and other barriers to accessing care; prevent illness; ensure adequate nutrition; or address social, behavioral, and environmental factors that influence health.

As mentioned earlier, community benefit and hospital experts believe the IRS accountability requirements, particularly those involving community building activities, CHNAs, and implementation plans, to be among a number of converging forces driving hospitals to expand their portfolio of population health activities.[3-9] These include the ACA's focus on population health and preventive care, the growing recognition that acute medical care alone can only go so far in improving the health of our communities, the Institute for Healthcare Improvement's Triple Aim initiative, and the move to value-based reimbursement models (e.g., accountable care organizations or global budgets) that are realigning traditional hospital business activities to focus on enhancing the full continuum of care and maintaining the health of the broader population rather than focusing solely on the acute care needs of individual patients.[4] For the purposes of this paper, we used the Kindig and Stoddart[16] definition of population health as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group." This definition encompasses initiatives targeted to the general population as well as

**Dual status government operated hospitals are subject to the ACA-mandated changes to Section 501(r) of the IRS tax code.[10] The ACA, however, did not change the requirements regarding which organizations are required to file Form 990. Dual status government-owned hospitals must fulfill all other requirements of 501(r) that do not involve disclosure on the Form 990.

vulnerable population groups. This stands in contrast to the ACA's approach to population health which focuses on the health management (with an emphasis on primary and preventive care) of defined groups of people enrolled in accountable care organizations, patient-centered medical homes, or similar practice transformation initiatives.

Although it is beyond the scope of this study to assess compliance of the 50 study CAHs with the IRS tax code, it should be noted that there are risks to hospitals that do not comply with the requirements of 501(r) including a $50,000 excise tax penalty for failure to comply with the needs assessment and implementation plan requirements and the loss of 501(c)(3) status. The IRS is obligated to assess the compliance of all tax-exempt hospitals with these regulations every three years and report annually to Congress on the performance of tax-exempt, taxable, and government-owned hospitals on the levels of charity care provided, bad debt expenses, and the uncompensated costs of care. Senator Charles Grassley (R-Iowa), a principal architect of the revisions to Form 990 and the ACA-mandated changes to 501(r), remains intensely interested in the accountability of tax-exempt hospitals and has issued multiple letters to the IRS requesting updates on the status of the IRS oversight work on tax-exempt hospitals.[17,18] The 2016 response from the commissioner indicated that an initial group of 163 hospitals had been identified for examination in 2016,[19] and the IRS's Tax-Exempt and Government Entities FY 2017 Work Plan[20] indicates that it had completed reviews of 968 hospitals and referred 363 hospitals for field examination as of September 30, 2016. Although the results of these examinations have not been made public, two dual status government-owned hospitals received notices that their 501(c)(3) statuses had been revoked after the hospitals indicated that they either no longer needed or did not want the status.[21] One of them, a rural hospital in Louisiana, relinquished its 501(c)(3) status as it no longer provided a benefit to the facility and its Board of Governors decided that the cost of compliance with the CHNA requirements was too high.[22,23]

DATA AND APPROACH

The goals of this project were to examine the alignment between the IRS Form 990 Schedule H filings, CHNA reports, and implementation plans for a random sample of 50 tax-exempt CAHs; to better understand how these hospitals are fulfilling their community obligations; and to explore the extent to which CAHs are using their community benefit reports, CHNAs, and implementation plans to inform their population health strategies and activities. Using the universe of 707 nonprofit CAHs, we generated a random sample of 50 tax-exempt CAHs who filed IRS Form 990 alone rather than as part of a system. We specifically identified and excluded hospitals that filed their IRS Form 990s as part of a system filing.[***]

These 707 CAHs represented 54 percent of all 1,321 CAHs with the majority of the sample located in the Midwest U.S. census region (371). The remaining tax-exempt CAHs were located in the Northeast (65), the South (149), and the West (122). The Northeast has the highest percentage of tax-exempt CAHs at 97 percent and the lowest number of CAHs overall compared

[***] To obtain a list of study hospitals, we generated a randomly ordered list of the 707 tax-exempt CAHs. We downloaded each Form 990 starting at the beginning of the list using an iterative process. As we reviewed each Form 990, we added each single filing hospital to the study population and excluded each system filing hospital as we encountered them. We followed this process until we reached a study population of 50 CAHs. As Form 990 data are not available as an electronic public use file, we are unable to determine how many of the 707 tax-exempt CAHs were part of a system filing.

to the other three census regions. Within the remaining three census regions, 59 percent of the CAHs in the Midwest are tax-exempt with the balance consisting of government-owned and for-profit facilities. The South and the West have relatively similar percentages of tax-exempt CAHs at 44 percent and 43 percent respectively.

As noted earlier, the Form 990 reporting requirements apply only to 501(c)(3) hospitals and specifically exempts dual status government-owned hospitals. However, the ACA-mandated changes to 501(r) apply to both 501(c)(3) and dual status government operated hospitals. As the AHA Annual Survey of Hospitals does not contain an indicator for dual status hospitals and hospitals are identified based on their primary ownership/organizational structure, it is not possible to determine how many of the government-owned hospitals operate under a dual status.

IRS filing due dates are based on each hospital's fiscal year and Form 990 must be filed by the 15th day of the fifth month following the close of the hospital's fiscal year.[15] Once submitted, the Form 990 filing must be reviewed and approved by the IRS and it may take 12 to 18 months before it becomes available to the public through the IRS or through websites such as Guidestar, the Foundation Center, the Economic Research Institute, or Pro Publica.[24] We downloaded the initial CHNA reports and implementation plans for the first CHNA cycle (tax years beginning after March 23, 2012) and downloaded the corresponding IRS Form 990 filings from Guidestar that aligned most closely with the adoption dates of their CHNAs. Based on these requirements, our database contained IRS 990 filings for tax years 2012 (4 CAHs), 2013 (41 CAHs), and 2014 (5 CAHs) based on the close of their fiscal years. The majority of the sample hospitals completed CHNAs within their 2013 fiscal years. We transcribed the relevant financial data from the Form 990s into a Microsoft Excel database for analysis. We analyzed Form 990, Schedule H data for the 50 sample hospitals, generating descriptive measures discussed and shown in the tables throughout this paper.

In addition to analyzing the Form 990 data, our team obtained and reviewed the CHNAs and implementation plans for all 50 sample hospitals to identify common themes and strategies. We also conducted semi-structured telephone interviews with administrators and staff from four of the sample hospitals. The interview participants were selected based on the thoroughness and depth of activity described in their CHNAs and implementation plans. To provide geographic diversity we selected one CAH from the Northeast, South, West, and Midwest census regions. These data were further supplemented by, and compared to, the content of the CHNAs, implementation plans, and interviews.

Analysis of CAH IRS Form 990, Schedule H Data on CHNAs and Implementation Plans

Conducting CHNAs

Schedule H collects data on the processes used by hospitals to conduct their needs assessments. Key elements of the CHNA process include identification of the hospital service area, the use of quantitative and qualitative data to identify community needs, and the solicitation of input from individuals with expertise in public health. In terms of service areas, the majority of study hospitals examined utilization patterns to identify specific communities, counties, or zip codes where their patients were admitted from or to which they were discharged. In terms of

process, 74 percent of our study CAHs conducted key informant or focus group interviews with community, public health, and/or health system stakeholders; 76 percent reported the use of secondary data from a variety of sources including the U.S. Census Bureau, state data, County Health Rankings, and/or the Behavioral Risk Factor Surveillance System; and 58 percent conducted email or mail surveys of community members to obtain their input on community health needs, or contracted with an outside group to conduct the survey on their behalf (Table 1). In terms of collaborative activities, 40 percent reported collaborating with local public health departments to undertake their CHNAs and 16 percent reported working with their state Offices of Rural Health.

Table 1: CHNA Data Collection and Collaboration of the 50 Study CAHs

Approach	% Yes
Use of secondary data from publicly available sources	76%
Conduct key informant or focus group interviews with stakeholders	74%
Conduct email or mail survey of stakeholders	58%
Collaborate with local public health entities	40%
Collaborate with state offices of rural health	16%

In general, the study hospitals conducted CHNAs that reflected the IRS guidelines by using quantitative and qualitative data, including input from public health and community experts, and engaging community stakeholders, business leaders, and providers. It is hard to assess, based on the initial rounds of CHNAs, how well providers engaged public health experts and community members. In some cases, the community engagement activities consisted of one-time community forums or meetings, and the composition of those attending was not described. In others, community stakeholders and members of vulnerable population groups were substantively engaged as members of advisory panels providing input on the identification of needs and strategies.

Identifying and Addressing Community Health Needs

Through their CHNAs, the study hospitals identified a wide range of needs across their respective communities in areas focused on health conditions and behaviors, clinical care, and, to a lesser extent, social and economic factors. They are also required to develop an implementation plan detailing those needs that they propose to address and identifying those needs that they will not address. Table 2 provides a comparison of needs identified in the study hospitals' CHNAs to the needs that they proposed to address in their implementation plans.

Common health issues identified in the CHNAs of 25 percent or more of the study hospitals included obesity, physical activity, and healthy eating; substance use issues; access to care; mental health conditions; chronic diseases and diabetes; and tobacco use. Under access to care, the CHNAs most commonly identified the need for expanded access to primary and specialty care services (including obstetrical and gynecological services) and, to a lesser extent, access to outpatient services, palliative care, after hours services, home care, hospice, dialysis, occupational health, access to specialists, long term care, and weekend pharmacy services. Generally, the needs

that the study hospitals proposed to address within their implementation plans reflect the needs identified in their CHNAs. A lower percentage of the study hospitals addressed behavioral health issues (e.g., substance use, mental health services, and tobacco use) compared to other commonly identified problems such as obesity, physical activity, healthy eating or access to care. This may be due to the long standing barriers to addressing behavioral health in rural communities such as stigma, limited access to specialty behavioral health services, difficulties in recruiting behavioral health providers, and the challenges of developing economically viable services.[25]

The range of needs identified through the CHNAs also aligns relatively well with the composition of community benefit expenses reported on Form 990 Schedule H (data not shown), and with the findings of previous studies of community benefit expenses discussed earlier. The needs identified focus primarily on disease and health care delivery issues impacting individual patients with comparatively limited discussion of the broader community or population-level health needs.

The CHNAs of the study hospitals also identified a variety of social and economic issues including domestic violence and violent crime, disparity issues (such as hunger and food insecurity, gender and racial disparities, low literacy rates, and low high school graduation rates), poverty, homelessness and access to affordable housing, social support and cohesion concerns, and employment issues. These are challenging problems to address and generally require long term resources and collaborative partnerships not easily available to small rural hospitals. Not surprisingly, the study hospitals were less likely to adopt strategies to address these often intractable long term problems. Similarly, although several CHNAs identified environmental problems including transportation gaps and water quality issues, few hospitals proposed implementation strategies to address transportation gaps and the water quality issue went unaddressed.

While the alignment between the needs identified in the CHNAs and the implementation plans of the study hospitals is quite good, there are situations in which the percentage of hospitals proposing to address certain needs exceeded the percentage of hospitals that identified the problems in their CHNAs. This occurred with chronic disease, senior health care and aging services, promoting the health of women, infants, and children, and primary care and specialty provider recruitment. One primary explanation for this observation is that the needs prioritized in CHNAs conducted collaboratively with local health departments, other providers and stakeholders, and the hospitals appeared to more broadly reflect the combined needs of the collaborative partners rather than the hospitals alone. As a result, the implementation plans included additional needs not specifically identified in the CHNAs but added by the hospitals as part of their prioritization process. Another explanation is that, for some of the study hospitals, the CHNAs and implementation plans appear to have been developed as two separate documents (rather than as a consolidated document) by different participants and may, as a result, reflect the different priorities and choices made by two groups.

Table 2. Identified Community Health Needs of the 50 Study CAHs

Identified Needs	Identified in CHNAs	Addressed in Implementation Plans
Health Conditions and Behaviors		
Obesity, physical activity, and healthy eating	72%	70%
Substance use	62%	38%
Mental health services	60%	36%
Tobacco use	26%	14%
Chronic disease	24%	32%
Diabetes	18%	16%
Cancer	16%	10%
Senior health care (aging services)	16%	18%
Promoting the health of women, infants, and children	12%	22%
Newborn health and prenatal care	12%	8%
Oral health	12%	6%
Cardiovascular disease	10%	0%
Injuries and violence	4%	2%
Risky behaviors	4%	4%
Environmental and occupational health	2%	2%
Native American Health	2%	0%
Clinical Care		
Access to care – primary care, specialty, and other services	58%	62%
Lack of knowledge of health care resources	24%	14%
Prevention and wellness	24%	8%
Cost of care and uninsured services	18%	18%
Primary care and specialty provider recruitment	16%	20%
Reproductive health and teen pregnancy (family planning)	8%	8%
New hospital, facility, technology, and, quality improvement	8%	8%
Improvements to emergency preparedness, and readiness	6%	6%
Enhanced emergency services	2%	2%
Social and Economic Factors		
Domestic violence and violent crime	10%	0%
Disparity issues	10%	0%
Poverty	8%	0%
Homelessness and access to affordable housing	6%	4%
Social support and cohesion	6%	4%
Employment	2%	2%
Environmental Factors		
Transportation	14%	8%
Water quality	2%	0%

Development and Execution of Plans to Address Health Needs Identified through CHNAs

Based on data reported using Form 990, Schedule H, 40 percent of the CAHs in our sample indicated they addressed all the needs identified in their most recent CHNA. Another 50 percent did not address all identified needs (data not shown). Ten percent did not respond to this question as the 2014 Form 990 contained an alternative question requesting hospitals to report if they had adopted an implementation plan to meet the significant community needs identified through the CHNA process. All five hospitals responded affirmatively to this question. The change reflects the fact that hospitals are not required to address all needs identified through their CHNAs. Instead, they are asked to explain why they have not addressed any specific needs in their implementation plans (which are required to be attached to their annual Form 990 filing). They were also asked to provide this information in narrative form in Section C of the 2014 Form 990. Similar information was requested of hospitals in the narrative sections of the 2012 and 2013 Form 990s.

Form 990 also includes a series of questions to help understand how hospitals are moving to address the needs identified in their CHNA and how they are complying with the implementation plan requirements under 501(r). Seventy percent of the study hospitals reported that they had executed implementation plans that address prioritized community health needs, 64 percent had adopted a budget for services that addressed identified community health needs, 54 percent had included a community benefit section in their operational plans, and 52 percent had collaborated with others in the community to execute a community-wide plan. These responses indicate a significant number of the study hospitals were actively committed to addressing the needs identified in their CHNAs by executing their implementation plans, committing resources to support their implementation activities, incorporating community benefits into their operational plans, and collaborating with others to implement initiatives to address identified needs.

Summary of Implementation Plans Adopted by Study CAHs

The implementation plans varied greatly in the level of detail provided on the needs hospitals chose to address or not address and the strategies used to address them. A number of hospitals described only their chosen priority needs rather than the full range of needs that may have been identified through their CHNA processes. Table 3 summarizes and briefly describes the strategies proposed by the study hospitals to address identified needs (Table 2). Table 3 organizes these strategies into four categories reflecting the general purpose of the proposed initiatives. These four categories reflect initiatives to address population health needs; internal hospital needs; community and capacity building; and community oriented education, wellness, and support programs. Many of the identified strategies overlapped different areas, and this overlap is reflected in the table.

The most commonly proposed strategy areas (by more than 50 percent of study hospitals) included the provision of health-related education, community programs, wellness activities, collaborative solutions to identified community issues, coalition building, the provision of screening services, and initiatives to address access issues. These areas typically reflected the

common needs identified in their CHNAs and implementation plans. Table 3 provides examples of strategies in each of these categories.

These strategies generally reflect the IRS's community benefit framework with its focus on education, community-oriented programs, and wellness. This alignment with the IRS's community benefit framework allows tax-exempt CAHs to maximize their reported community benefit spending. Many of these activities, however, are examples of one-time initiatives that are not connected to an overriding, population health-focused strategy. The challenge with these types of one-time activities is that they can be difficult to distinguish from a marketing activity that provides more benefit to the organization (in terms of recruiting patients) than the community.[3,14,26,27] Factors that must be assessed to determine if these proposed activities provide a true community benefit or primarily promote the hospital and its services include where they are held, the populations targeted, the content of their programming, and the extent to which they connect vulnerable participants to services or programs they might otherwise be unable to access.

Activities that are part of an overarching population health-focused strategy are likely to have a greater impact on the health of a community than one-time community events and programs.[27] Health fairs provide an example of this issue. Health fairs held in vulnerable communities, that provide services or resources of value to vulnerable individuals, provide a pathway for participants without a usual source of care to access primary care and other services, and/or follow up with participants to ensure that they are addressing identified problems are a clear example of a population health-focused community benefit. One-time health fairs that primarily provide information or education that could easily be accessed elsewhere, heavily promote the hospital and its services, and are held in locations or at events that primarily target affluent individuals who already have access to care may be more accurately classified as a marketing activity than true community benefit.

In order to assess the extent to which the proposed strategies align with the intent of the IRS's community accountability requirements, it is important to understand their purpose. Strategies targeting population and community health needs align well with the IRS's community benefit framework. Strategies that expand access to primary care, specialty care, mental health, and substance use services; develop buprenorphine clinics; implement telehealth and chronic care management programs; and address the high costs of care for uninsured individuals provide clear benefits to communities as do programs oriented to the needs of vulnerable populations including seniors, infants, children, and adolescents.

Strategies that address internal hospital organizational or marketing needs, such as planning for the construction of a new hospital building or to renovate existing space, pursuing provider recruitment and pipeline activities to staff their hospitals and other clinical programs, and developing emergency response plans (a hospital and provider regulatory requirement), are important but not necessarily in keeping with the intent of the ACA-mandated CHNA and implementation guidelines which seek to promote greater hospital attention to community health needs.

Table 3. Summary of Implementation Strategies Adopted by the 50 Study CAHs

Strategy Area	%	Examples of Strategies
Population Health Needs		
Programs	62%	Programs addressing prevention, treatment, wellness, or health improvement
Access issues	56%	Support development of primary care, mental health, substance use, hospice, and Rural Health Clinic services; provider recruitment; and subsidized health services
Prevention	46%	Prevention programs targeting chronic conditions and high-risk behaviors including diabetes, tobacco and substance use, lack of exercise, and poor eating habits
Worksite wellness	24%	Development of programs for hospital staff and community employers
Reduce alcohol and drug access	16%	Education on prescribing guidelines for providers, development of prescription drug disposal programs, education on alcohol issues for restaurants and wait staff
Telehealth	16%	Implementation of telehealth technology and development of clinical services
School services	14%	Agreements to provide treatment, screening, and prevention in schools
Senior services	10%	Support for education, screening, prevention, and social supports in senior settings
Community health teams	6%	Support for and staffing of community health teams for elderly and other vulnerable populations
Care management	6%	Development of care management services within hospital clinics and programs
Buprenorphine Treatment	4%	Development of buprenorphine programs and encouraging providers to seek waivers to prescribe buprenorphine
Internal Hospital Needs		
Assess and plan	38%	Internal and external assessment and planning efforts to address identified needs
Recruitment and pipeline efforts	34%	Internal recruitment, external recruitment for community providers, and programs to encourage high school students to consider health care careers
Resource directories	24%	Development of print and online directories of local health and social services
Financial assistance	18%	Patient support from outreach workers, financial assistance coordinators, and specific financial assistance programs
Facility issues	4%	Planning for a new hospital building and/or renovations of existing space
Community and Capacity Building		
Collaboration	60%	Development of collaborative solutions to local problems and needs
Coalition building	60%	Administrative or financial support for and participation in community coalitions
Community building	32%	Support for local health or employer alliances; construction of wellness centers or walking trails; development of food resources and community gardens; provision of grants to schools; subsidization of YMCA memberships for low income individuals; rural health advocacy efforts; development of housing resources; creation of emergency response plans; development of a community communication website/hotline; and efforts to address community economic issues
Grant writing support	20%	Grant writing to support internal hospital activities and provision of resources to support external programs
Transportation	8%	Development of and/or financial support for transportation programs

Community Oriented Education, Wellness, and Support Programs		
Education	84%	Community and school-based programs and events to discourage risky (e.g., alcohol use) and encourage positive (e.g., healthy eating) behaviors
Wellness	60%	Implementation of packaged wellness programs, one day events, and classes
Screening services	58%	"One-time" screening programs focused on chronic conditions as well as programs connected to services that serve as referral patterns
Health fairs and special events	34%	Health fairs focused on a variety of health care topics as well as events designed to promote physical fitness such as road races or walks
Support groups	20%	Hosting space for weight loss groups, parenting groups, twelve step programs, etc.

DISCUSSION

Our review of the 50 study CAHs indicates that most used a number of generally accepted best practices to conduct their CHNAs.[28] These best practices included defining their service areas by specific geographic boundaries; using secondary data from state and national sources; conducting surveys of local stakeholders and community members; and collaborating with local public health organizations and, to a lesser extent, state offices of rural health. It was difficult to determine the extent to which some of the study hospitals substantively engaged members of the community and other public health stakeholders in the process. Further, it was not clear how accurately the study hospitals defined their communities. Many identified geographic areas (e.g., communities, zip codes, or counties) but did not provide a justification for the definition. As hospitals are expected to address the unmet needs in their defined service areas as well as engage vulnerable residents, this definition of community is important. Hospitals should avoid taking responsibility for the needs of areas that they do not serve so that they can focus their efforts on their actual service areas. At the same time, the IRS guidance clearly states that hospitals should not define their communities so tightly as to avoid the needs of vulnerable residents within their legitimate service areas.

In terms of community engagement, a number reported holding community forums to solicit input into community priorities, but it was not clear whether individuals from vulnerable populations or representing their interests were engaged in those meetings. Similarly, a number of hospitals described the use of printed and/or electronic surveys to gather information on local health needs. Many of these surveys were distributed to patients using the hospital and its facilities, through community agencies, or via the hospital's website. While these are useful sources of qualitative information, the study hospitals generally did not have a process to ensure that the sample receiving the survey instruments represented the diversity of the communities as a whole.

We also observed that some of the implementation plans completed as part of the CHNA process only described strategies to address their top priorities and did not justify why the hospital was not addressing other identified needs (as directed in the IRS CHNA guidelines). As discussed earlier, given the IRS's obligation to review every 501(c)(3) hospital's compliance with 501(r) every three years, this could potentially raise an audit risk for tax-exempt CAHs' community accountability activities. As with their community benefit filings, many of the

strategies focused on medical rather than population level factors affecting the community. Also, a number of strategies focused on internal hospital needs rather than community needs. Examples of these internal hospital strategies included recruiting additional providers to staff hospital services, upgrading hospital facilities, implementing an electronic medical record, seeking designation for a primary care clinic, or developing materials to publicize hospital services. While many of these strategies will benefit the community as a whole, they are more oriented toward the hospital's immediate needs than those of vulnerable populations within the community.

Additionally, many of the strategies focus on educational activities and/or events such as health fairs, screening programs, or fitness events such as road races and walks. Again, these activities have some benefit for the community but many straddle the line between a true community benefit and a hospital marketing effort.

The data from this study show that some of the study hospitals are moving more purposefully to address upstream determinants of health through community building initiatives such as coalition building, advocating for community resources or needs, local economic development, and supporting the establishment of wellness centers, community gardens, housing resources, and transportation services. The Appendix provides links to resources from the CDC, the Robert Wood Johnson Foundation, the Community Toolkit, the Association for Community Health Improvement, and others to assist CAHs in selecting and implementing evidence-based tools and programs to address local health needs.

The Role of State Flex Programs in Supporting CAH Efforts to Identify and Address Local Needs

State Flex Programs can play an important role in supporting CAHs to identify and address the community and population health needs of their service areas under Program Area 3b: Enhancing the Health of Rural Communities through Community/Population Health Improvement. State Flex programs and their partners (i.e., Flex program and SORH staff, the Technical Assistance and Services Center, the Flex Monitoring Team, or consulting organizations) can support CAHs by providing technical assistance on using CHNAs for both internal and community/population health planning; using data and surveys to inform the CHNA process; and improving hospital engagement of and collaboration with public health experts, other community providers and organizations, and community stakeholders. They can also serve as external reviewers to provide unbiased feedback to hospitals on their CHNA reports and implementation plans and their alignment with the IRS guidelines spelling out hospital responsibilities under 501(r), as well as identify and disseminate evidence-based population health programs to assist hospitals in implementing substantive efforts to address upstream factors contributing to health and illness in rural communities.

Finally, state Flex programs can play an important role by facilitating and supporting collaborative efforts to address common population and community health issues shared by cohorts of CAHs in their states. As noted, the study hospitals identified numerous common needs through their CHNAs including the need for mental health and substance use treatment, obesity, lack of exercise, and chronic health conditions such as diabetes. State Flex programs can

play an important role in identifying evidence-based strategies to address common needs and facilitate the engagement of appropriate local and regional stakeholders in the implementation of chosen strategies. The level of collaboration may vary from joint activities between CAHs and community organizations such as schools, faith-based communities, or social service agencies to partnerships between CAHs and other hospitals on a regional or statewide basis. This would facilitate broader implementation of evidence-based strategies to address common needs (see Appendix), provide a CAH learning community to share best practices and strategies to address collective needs, improve organizational leadership and capacity in the areas of community accountability and population health, and optimize the use of scarce Flex and hospital resources. The CHNA reports and strategy plans can provide valuable information to state Flex programs on the community and population health needs of their CAHs, and inform the states' internal program planning efforts. State Flex programs would benefit from periodic reviews of their hospitals' triennial CHNA documents as well as their implementation plans and updates. Importantly, the CAHs would benefit from external review and feedback while state Flex programs would benefit from a clearer understanding of the needs of communities served by CAHs, as well as the strategies used to address those needs.

CONCLUSIONS

All hospitals, including CAHs, face increasing pressure to develop and implement substantive population health strategies.[2] This pressure is being driven by advanced payment models such as accountable care organizations, recognition that acute health care alone will not substantially improve the health of rural residents, and the IRS' expectation that tax exempt hospitals are accountable for addressing the unmet needs of their communities in exchange for the tax benefits they receive. The Flex Program reflects this growing emphasis as population health is a core program area along with quality, financial, and operational performance improvement.

With the growing emphasis on population health, the Flex Program is ideally positioned to deliver essential leadership and support to improve CAH performance in this vital area of activity through the provision of rural-relevant tools, technical assistance, and other resources to support their efforts. This support is analogous to the role the Flex Program has played in advancing quality improvement among CAHs where it focused on engaging CAHs in quality improvement initiatives, developing an infrastructure and technical assistance capacity to support CAHs in this area, creating rural-relevant quality measures through the Medicare Beneficiary Quality Improvement Program, and disseminating quality improvement tools and resources for use by CAHs.

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APPENDIX: COMMUNITY BENEFIT, CHNA, AND IMPLEMENTATION PLAN RESOURCES

Association for Community Health Improvement (ACHI): ACHI

The ACHI, an affiliate of the American Hospital Association and the Health Research and Educational Trust, focuses on the needs of community health, community benefit, and population health professionals. ACHI provides educational resources and tools, professional development, and networking opportunities.

Catholic Health Association of the United States (CHA): Community Benefit Overview

CHA provides links to tools, reports, and forms to assist organizations in fulfilling their community benefit and CHNA requirements.

Center for Community Health and Development at the University of Kansas: Community Tool Box

The tool box provides information and resources on the skills for building healthy communities.

Centers for Disease Control and Prevention (CDC): Community Health

The CDC provides links to resources and tools focused on a wide range of community and population health topics.

Community Preventive Services Task Force (CPSTF): Guide to Community Preventive Services

The Guide to Community Preventive Services is a collection of evidence-based findings of the CPSTF and includes interventions to improve health and prevent disease in a range of settings.

Community Benefit Connect (CBC): CBC

CBC supports nonprofit hospitals by building a learning community of practitioners engaged in community benefit planning, implementation, reporting, and evaluation.

Flex Monitoring Team (FMT): Community Benefit and Population Health

As the evaluation team for the Medicare Rural Hospital Flexibility Program, the FMT provides access to materials and resources on the community benefit, CHNA, and population health activities of CAHs. The FMT also provides state and hospital level data on CAH financial, quality, and population health performance through its CAH Measurement and Performance Assessment System (CAHMPAS) portal.

Institute for Healthcare Improvement (IHI): Triple Aim for Populations

IHI provides links and resources to assist hospitals and communities to address the Triple Aim by improving the health of the population, enhancing the experience and outcomes of the patient, and reducing per capita cost of care for the benefit of communities.

National Association of County and City Health Officials (NACCHO): Community Health Assessment and Improvement Planning

NACCHO provides resources to support the assessment of the accreditation of Local Health Departments and the community benefits provided by them, and includes sections on community benefit, CHNAs, and collaboration between hospitals and health departments.

National Network of Public Health Institutes (NNPHI): Community Health Assessment (CHA) and Community Health Improvement (CHIP) initiatives

NNPHI's network of public health institutes supports partnerships in CHA/CHIP initiatives (or strategic CHNA and implementation planning) and provides technical assistance and resources while working in partnership with people, local health departments, and communities.

National Rural Health Resource Center: Technical Assistance and Services Center (TASC)

TASC, as the technical assistance contractor for the Medicare Rural Hospital Flexibility Program, provides direct technical assistance, educational programs, a population health data portal, and other resources to state Flex Programs and CAHs on a range of topics including CHNAs and population health.

Public Health Institute (PHI): Health Care and Population Health and Healthy Communities

PHI provides links to studies and resources to support the CHNA process including a 2012 report on the proceedings of a public forum and interviews with experts sponsored by the Centers for Disease Control and Prevention entitled Best Practices for Community Health Needs Assessment and Implementation Strategy Development: A Review of Scientific Methods, Current Practices, and Future Potential.

Robert Wood Johnson Foundation: County Health Rankings (CHR)

CHR provides access to county level data, tools, educational materials, and evidence-based programs to improve the health of communities.

University of Missouri, Columbia: Center for Applied Research and Environmental Systems (CARES)

CARES provides basic data on counties and states through an online data retrieval and download system to support the CHNA process.