

ALLIANCE FOR A HEALTHIER SOUTH CAROLINA

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SOUTH CAROLINA CHNA LANDSCAPE ANALYSIS

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Introduction

BACKGROUND

In 2010, the Patient Protection and Affordable Care Act (ACA) required all nonprofit hospitals in the United States (U.S.) to conduct community health needs assessments (CHNA) and develop a corresponding implementation strategy or community health improvement plan (CHIP) at least every three years to maintain their 501(c)(3) status (Pennel et al., 2015, Rosenbaum, 2016). While institutionalization of these processes in nonprofit hospitals has increased CHNA implementation, methodologies for conducting CHNAs and CHIPs are not standardized and, therefore, vary across health systems (Ravaghi et al., 2023). Despite these differences, CHNAs provide insight into the health needs of communities and influence interventions and programming best suited to improve health outcomes. Research has shown that CHNAs commonly address factors outside of physical health needs (Ravaghi et al., 2023). More specifically hospitals conducting CHNAs often focus heavily on non-medical factors such as the social determinants of health (SDOH) which can include political, social, environmental, and/or economic determinants that affect health (The World Health Organization, 2022).

CHNAs have the potential to improve long-term health outcomes and help achieve greater health equity by identifying health needs and priorities to create target programs elevating health. However, evidence for their ability to improve community or population-level health outcomes remains mixed (Gruber et al., 2019; Ravaghi et al., 2023). While research on the linkage between health outcomes associated with CHNAs is lacking, research shows short-term impacts such as the development of health and social interventions, formation of partnerships, increased awareness of health and social issues, and engagement of policymakers (Ravaghi et al., 2023). A study of U.S. nonprofit hospitals showed that individual health needs identified through CHNAs were addressed by about 56-85% of hospitals in their implementation strategies, demonstrating efforts to improve population health (Franz et al., 2021). Additionally, CHNA findings have been shown to increase resource-sharing facilitation, access to services, and spending on health programs following study completion (Ravaghi et al., 2023). However, one study conducted in Texas after the first 3-year CHNA assessment cycle found that large population health improvements were unlikely (Pennel et al., 2016). More research is needed to determine the long-term effects of CHNAs, but evidence continues to suggest that CHNAs can fill data gaps related to population health, specifically providing in-depth knowledge of the SDOH that affects a community (Alberti, 2015). Understanding and collecting data on the SDOH affecting a community can contribute to improving overall population health; recent research on CHNA reports showed that 67% of hospitals and health systems listed SDOH as a prioritized community health need (Alberti, 2015).

CHNAs triangulate and synthesize data from healthcare providers, community members, and community stakeholders, adopting a population-based approach to health needs and challenges (Ravaghi et al., 2023). A population-based approach to health can promote community resilience, decrease overall negative health outcomes, reduce health inequalities, and move away from a top-down approach to providing health services to a community (Ravaghi et al., 2023). A top-down approach considers opinions from senior leadership, not those with lived experience or general community voices, when creating health programs or services (Ravaghi et al., 2023). The CHNA process can include multiple data collection methodologies, including both quantitative and qualitative data at the individual and community levels (Health Research & Educational Trust, 2016). Engaging hospital patients and general community members together can strengthen trust, increase collaboration and cohesion, and establish a more holistic understanding of health issues (Health Research & Educational Trust, 2016).

Local health departments (LHDs) can also play a key role in the CHNA process. Accreditation standards for LHDs require that they complete a CHNA with community partners. This is a great opportunity for collaboration between LHDs and hospitals to fulfill their requirements (Shah, 2018). An article from 2018 showed that among jurisdictions that had one or more nonprofit hospitals, about 76% of LHDs collaborated with hospitals on their health system's CHNA (Shah, 2018). Another study showed that LHDs serving larger jurisdictions were more likely to collaborate with hospitals than those serving smaller jurisdictions for data sharing and improved access to secondary data (Laymon et al., 2015). Collaboration between hospitals/health systems, community partners, and LHDs increases resource and information sharing and alignment of data (Health Research & Educational Trust, 2016). Greater convergence of health systems and public health entities like LHDs can lead to improved community health and cooperation towards addressing community health needs (Shah, 2018).

CHNA METHODOLOGY

CHNAs can be conducted in a variety of ways; however, a general structure is usually followed (Ravaghi et al., 2023). Initially, a leadership team or steering committee is formed, which includes hospital representatives, representatives of local organizations, community leaders, academic partners, health officials or leaders of LHDs, and individuals with lived experience (Ravaghi et al., 2023). This steering committee then works to identify the target community and how data will be collected. While a health system's definition of its community might include all counties it serves, it is free to define the community it serves in terms of geographic area or target populations if this is a better fit for the community's needs (Singh et al., 2015). It is important that once a community is defined, the data collection tools created are culturally relevant and accessible to the community's language and literacy needs (Ravaghi et al., 2023). Data collection can begin once comprehensive surveys, focus group guides, and interview guides are created. The collection of data is closely monitored, and both primary and secondary data can be utilized to begin informing health priorities/needs (Ravaghi et al., 2023).

Health systems may prioritize health needs based on the urgency of the need, the burden, its associated health disparities, or its ranked importance by community members and stakeholders (Health Research & Educational Trust, 2016). Qualitative data from focus groups and interviews highlights the burden, scope, severity, and urgency can be gathered from engaging health systems and community stakeholders (Health Research & Educational Trust, 2016). Data sharing during collection and prioritization to the community is important for continued collaboration and transparency around areas of need, creating pathways for more input in the ranking of priorities. After the completion of a CHNA, results are documented and communicated back to the community (Health Research & Educational Trust, 2016). CHNAs can be made public online or by sharing and presenting results at public forums or meetings with community members, leaders, and stakeholders (Internal Revenue Service, 2024; Ravaghi et al., 2023). Overall, the simplified step-wise outline of the CHNA process includes 1) defining the community the health system serves, 2) assessing the needs of the community and simultaneously 3) gathering input and information from community stakeholders, 4) compiling data into a written CHNA report, and 5) disseminating the CHNA report to the public (Internal Revenue Service, 2024).

IMPORTANCE OF COMMUNITY ENGAGEMENT IN THE CHNA PROCESS

Collaboration with community members creates a unified approach to the CHNA; when community members and stakeholders are engaged, strengths and resources can be combined, problems addressed are locally relevant, and community trust and ownership are fostered (Pennel et al., 2015). Engaging community voice promotes productive confrontation of health disparities, many of which stem from racial and ethnic discrimination (Ravaghi et al., 2023).

Many studies have evaluated the level of community engagement health systems have with community members and the impact their input has on the CHNA process (Pennel et al., 2017). The benefit of community engagement supplements information collected on health conditions and environmental factors when there is limited county-level data (Schutte et al., 2016). While community participation in the CHNA process is valuable, a 2017 mixed-methods study found that about 18% of hospitals made no effort to engage community members or stakeholders, and only 2% of hospitals showed extensive participation (Pennel et al., 2017). Another study discovered that only about half of participating hospitals collaborated with community stakeholders when developing a CHIP (Cramer et al., 2017). Reasoning for this variability and lower levels of community engagement could stem from a lack of definition in ACA requirements around community engagement (Ravaghi et al., 2023). Through a review of previous CHNA processes, it has been found that many U.S. CHNA projects incorporated a minimum level of community and stakeholder participation in their CHNA process (Ravaghi et al., 2023). Lack of engagement of community members is a missed opportunity for meaningful collaboration throughout the CHNA planning process and across assessments (Pennel et al., 2017). Additionally, a lack of community voice creates a bias in the quantitative information collected through CHNAs (Kirk et al., 2017). CHNA projects without strong, authentic partnerships between the health

system conducting the CHNA, community organizations, and community members have little evidence of positive outcomes from programs created through their CHNA (Kirk et al., 2017). Health systems have limited their inclusion of community voice and instead rely on previously collected data from LHDs or census-level data (Cain et al., 2016). With greater integration of community voices, future health promotion activities would be enhanced and target health issues from the ground up (Cain et al., 2016).

FRAMEWORKS FOR CHNA DEVELOPMENT

Many studies have examined how different frameworks or principles can be applied to improve CHNA processes and outcomes, and several researchers have investigated the results of using a community-based participatory research (CBPR) approach to conducting CHNAs (Akintobi et al., 2018; Kirk et al., 2017). The CBPR framework allows community members to remain engaged throughout the entire CHNA process, including the research design, data collection and analysis, and formation of action plans. Using the CBPR approach, representative data can be collected, which can also inspire new community-driven projects to advance health equity (Akintobi et al., 2018). The CBPR approach allows for increased impact and greater shared power for community members, and assessments conducted by a single organization or using top-down and individual-focused approaches can create biased results (Kirk et al., 2017). When CBPR is not used, CHNA practices can overemphasize individual behaviors instead of focusing on structural characteristics and policies that impact the health of communities (Kirk et al., 2017). A CBPR approach will center community voice and connect patients to health care through the lived experience of community residents (Alberti, 2015). Knowledge of lived experience can form greater connections for managing community and population health (Alberti, 2015). CBPR allows practitioners/clinicians and participants in the research process to be involved in an iterative process that can uncover the root cause of health problems (Ainsworth et al., 2013). Research on the CBPR approach as a framework for CHNAs revealed internal shifts within health systems that accommodated community inclusion and greater shared decision-making (Ainsworth et al., 2013).

Other approaches to CHNAs include a rural community group model (RCGM) (Becker, 2015) and using a web-based tool to evaluate CHNAs (Kuehnert et al., 2014). In the RCGM study, researchers found increased engagement by utilizing local leaders as trust and word-of-mouth referrals are often highly valued in rural communities (Becker, 2015). The study that used the web-based tool recommended that public health researchers and practitioners create reliable tools that would allow them to compare different approaches, processes, and organizational structures more easily for different CHNAs and improvement plans (Kuehnert et al., 2014). Ensuring reach to rural populations is paramount in CHNA community collaboration; community input, specifically including rural populations, fosters a bottom-up approach to decision-making (Becker, 2015). Research on CHNA conducted in rural areas in Georgia revealed access to care, specifically specialty care and mental health care, as one of the greatest barriers for rural community members (Cherry et al., 2017). For programming that is effective and properly tailored to the needs of rural populations, individuals' voices must be included in research to determine gaps and co-create new programs that are welcomed and trusted by community members (Cherry et al., 2017).

NEED FOR STANDARDIZATION

Currently, there is no standardized process for developing and conducting CHNAs; for example, a study of health systems' CHNAs in Florida revealed little standardization across the state, with each CHNA using its own methodology (Gruber et al., 2019). While the ACA guidelines provide minimum standards for non-profit hospitals, there remain differences in the level of community engagement, involvement of external stakeholders, data collection tools used, and the evaluation of the CHNA process (Pennel et al., 2017; Ravaghi et al., 2023). Analysis of over 90 CHNA reports demonstrated only 28% of health systems involved the general community in their CHNA (Pennel et al., 2017). Another study reported that only 44% of CHNA processes used participatory approaches and other techniques to include community members in the CHNA process (Ravaghi et al., 2023). Additionally, the depth of participation in CHNA activities was measured, with only about 10% of studies reporting broad and deep community participation (e.g., community involvement in designing implementation strategies to improve health outcomes) (Ravaghi et al., 2023). Finally, a 2015 study found that hospitals were less likely to respond to community health needs through investment in community health initiatives but were more likely to respond by providing clinical care services in the hospital (Singh et al., 2015). Variability in CHNA methodologies and strategies to address CHNA findings demonstrate a need for standardization (Gruber et al., 2019).

Furthermore, it is difficult to measure the impact of CHNAs, and findings remain mixed on the ability of CHNAs to improve individual health outcomes or population health (Gruber et al., 2019; Ravaghi et al., 2023). The difficulty in measuring the impact of CHNAs suggests a need for greater standardization of the CHNA process and a set of valid performance measures to measure the effects of CHNAs (Soto & Smith, 2015). These performance measures would track program implementation following a CHNA and measure progress in improving health outcomes or mitigating health-harming factors (Soto & Smith, 2015). Currently, health systems with stronger ties to their communities also demonstrate increased spending for community health improvement (Cramer et al., 2017). A study of 1,500 tax-exempt hospitals in 2013 assessed CHNA implementation patterns and examined their relationship to greater progress within a community; in the year after completing a CHNA, only one-third of hospitals were found to be far along in the implementation process to address community health needs (Cramer et al., 2017). This difference in timeline also points towards a greater need for standardization so that the CHNA process can be beneficial in each community it is tied to.

CHIP

After the completion of a CHNA, a CHIP can be used for program creation and implementation within a community (Laymon et al., 2015). A CHIP is a systematic effort to address the health priorities identified by the CHNA, and provide coordinated strategies for health systems, local governmental agencies, LHDs, and community organizations to address health priorities in a community (Laymon et al., 2015). CHIPs are implemented community-wide with the goal of improving a population's health; thus, communities must consider their own circumstances to tailor appropriate strategies (Durch et al., 1997; Rosenbaum, 2016). Importantly, CHIPs use an evidenced-based approach to apply the findings of the CHNA (Durch et al., 1997). CHIPs commonly target upstream SDOH in designed strategies, including improvements of a community's environment or physical structures such as housing, park and trail development, transportation improvement, and increasing walkability and safety for pedestrians (Rosembaum, 2016). From a comprehensive CHNA, systems-level changes can be made through a collaborative CHIP (Ravaghi et al., 2023). Literature suggests hospital or health system leaders, community members, and community partners involved in their community's CHNA should maintain collaboration and open communication through the creation of a CHIP to ensure applied plans address the needs of all stakeholders (Ravaghi et al., 2023). CHIPs are the actions behind CHNAs, and by understanding both processes thoroughly, alignment can be improved and better serve communities (Singh et al., 2015).

DEVELOPMENT OF A CHIP

After a CHNA is completed, the development of a CHIP can begin. CHIPs can vary in organization and nature of efforts, but they are not limited to addressing traditional health issues; they often include collaborative efforts by community-wide stakeholders to address environmental, economic, housing, and land use issues in addition to health-related priorities (CDC, 2024). The distinguishing characteristic of CHIPs is that it relies heavily on collaboration and continued community engagement to improve health outcomes (Schott, 2024). The general steps to develop a CHIP include 1) recruiting community members, 2) developing a shared mission and vision in alignment with community needs and the overarching health systems' goals, 3) clearly prioritizing identified health issues from the CHNA, 4) creating groups to own each identified health priority and manage goals and strategies, and 5) tracking and reporting progress of health improvement (Schott, 2024). It is vital to form a long-term coalition that represents diverse organizations with agreed-upon goals for community health improvement; this coalition will serve as the planning and execution committee for the CHIP and should include individuals that represent the health system and a variety of community stakeholders (Durch et al., 1997). This coalition can then create a community health profile and define specific performance measures to ensure progress accountability (Stoto & Smith, 2015). The creation of a community health profile is largely achieved through the CHNA process (Durch et al., 1997). Health priorities identified during the CHNA can be used to create specific improvement plans and identify activities to target the health priorities (Stoto & Smith, 2015). CHIPs require analyzing identified health priorities/issues, knowledge of the inventory of health resources, a developed health improvement strategy, performance indicators, and monitoring of the process and outcomes (Durch et al., 1997).

Research on previous CHIPs found that strong collaboration between partners, including the broad community, was an important facilitator of CHIP development (Hatton et al., 2024). This collaboration requires trust and openness, and even mistrust between one partner towards another can impede efforts to address community health priorities and to center the SDOH in improvement plans (McCullough et al., 2016). Successful CHIP development and continued collaboration will center health equity and continue to engage community members as much as possible (Hatton et al., 2024).



Methods

STUDY PURPOSE

This project will consist of three phases: Phase I: Cross-comparison of health systems' CHNA reports, Phase II: Qualitative interviews with CHNA-responsible health system staff, and Phase III: Qualitative interviews with C-Suite health system executives.

The main objective of Phase I of the study was to create an inventory of and conduct a cross-comparison review of CHNA reports to better understand how health systems across the state of South Carolina implement and conduct their CHNA and CHIP processes. The main objective of Phase II was to conduct qualitative semi-structured interviews with health system staff responsible for the CHNA and CHIP to better understand individual system methodologies, engagement of internal and external partners, and barriers and facilitators of success. The main objective of phase III was to conduct qualitative interviews with C-Suite health system executives to better understand their knowledge and involvement in the CHNA and CHIP process, as well as investigate how health systems align CHIP priorities and strategies with the health system's overall goals. Information from all phases will be used to inform the development of recommendations for data collection tools and community engagement strategies to create a standardized approach to conducting hospital CHNAs.

STUDY RECRUITMENT

Seven health systems from across the state of South Carolina were identified to participate in this study. The health systems were identified through their participation in a pilot of a statewide CHNA learning collaborative. This study was reviewed by University of South Carolina's Institutional Review Board (USC IRB) and determined to not be subject to IRB oversight. To recruit participants in the study, the research team met with each health system over Zoom to introduce themselves, provide an overview of the study, and discuss their potential involvement in the project. Once health systems agreed to participate, they were asked to provide their CHNA methodology and tools, which consisted of survey instruments, focus group guides, interview guides, and final CHNA and CHIP reports.

Six out of seven health systems shared their materials with the research team. These health systems were AnMed, Bon Secours, Lexington Medical Center, the Medical University of South Carolina (MUSC), Prisma Health, Self Regional Healthcare, and Spartanburg Regional. Lexington Medical Center and MUSC completed a collaborative CHNA, so their documents were treated as a single CHNA for the purposes of the study. According to the ACA guidelines, AnMed, Bon Secours, Lexington Medical Center, MUSC, Prisma Health, and Self Regional Healthcare are required to conduct a CHNA every three years. Spartanburg Regional is not required to conduct a CHNA. They complete the CHNA voluntarily as part of the work of the Road to Better Health Coalition. This initiative engages stakeholders in Spartanburg County to improve the health of its residents.

DATA COLLECTION & ANALYSIS

Phase I

A cross-comparison of data collection methods, instruments, and final reports was conducted to assess similarities and differences between health systems' implementation of their CHNAs and CHIPs. To complete this cross-comparison, the team thoroughly examined each report and used tables and spreadsheets to compare report content. After creating comparison tables, each report was read a second time to ensure critical information was not missed. Methods of data collection, health variables on which data were collected, primary and secondary data sources, identified health priorities, and engagement of community and/or academic partners in the CHNA/CHIP process were compared.

Phase II & III

During Phase II of the study, semi-structured qualitative interviews were conducted with health system representatives who led the development of the CHNA and CHIP for their respective health systems. Based on the results from Phase I, the research team developed a semi-structured qualitative interview guide designed to gain rich information on each health system's CHNA and CHIP processes, specifically focusing on chosen methodologies, internal processes, engagement of internal and external partners, and barriers or facilitators of success.

To identify and schedule interviews, individuals who participated in the initial recruitment meeting were asked via email to identify the appropriate participant(s). To facilitate this process sample interview questions were provided in advance. Zoom interviews were then scheduled with the identified representatives. Recordings of the interviews were then transcribed verbatim prior to analysis. The research team then developed a coding framework through a collaborative and iterative process that included reviewing a sample of interview transcripts in advance. Once the framework was developed, a member of the research team coded the data using NVivo 14. One of the lead researchers' personnel then reviewed the coding to ensure accuracy based on coding definitions. Once all interviews were coded and reviewed for accuracy, thematic analysis was used to identify additional themes and representative quotes.

The final phase of the study consisted of brief interviews with C-Suite executives from 6 health systems. The brief interview guide was developed in a collaborative process using lessons learned and themes from the phase II interviews. To identify the appropriate representative for these interviews, participants from phase II of the study were contacted by email to connect the study team with the C-suite representative.



Results

PHASE I: COMPARISON OF CHNA METHODOLOGIES & REPORTS

Cross-comparison of the health systems' final reports demonstrated some similarities as well as clear differences in their identified health priorities. Six of the seven health systems that had an initial meeting with the research team on Zoom provided their CHNA materials and final reports: AnMed, Bon Secours, Lexington Medical and MUSC, Prisma Health, Self Regional Healthcare, and Spartanburg Regional.

Table 1 below depicts a comparison of identified health priorities by the health systems. Behavioral and mental health was the only health priority commonly identified by all six health systems. The second-most common health priorities, access to care and obesity, were found in four out of the six reports. Access to care was identified by Bon Secours, Lexington Medical and MUSC, Self Regional Healthcare, and Spartanburg Regional. Obesity was identified by Bon Secours, Lexington Medical and MUSC, Prisma Health, and Self Regional Healthcare as a health priority. AnMed was the only health system to indicate community education, SDOH, and substance use as priorities. Bon Secours was the only system to identify housing/homelessness and aging as health priorities. Lexington Medical and MUSC prioritized clinical preventive services such as routine disease screening, scheduled immunizations, and preventative care. Self-Regional Healthcare was the only system to prioritize high blood pressure, while Spartanburg Regional was the only health system to identify chronic health conditions and resilient children and families as health priorities.

Table 1. Cross-Comparison of CHNA Final Report Identified Health Priorities

Health Priority	AnMed Health	Bon Secours	Lexington Med/MUSC	Prisma Health	Self Regional	Spartanburg Regional
Access to Healthcare		✓	✓		✓	✓
Community Education	✓					
Housing & Homelessness		✓				
SDOH	✓					
Behavioral & Mental Health	✓	✓	✓	✓	✓	✓
Clinical Preventive Services			✓			
Substance Use	✓					
Chronic Health Conditions						✓
Diabetes	✓				✓	
Heart Disease & Stroke	✓			✓		
High Blood Pressure					✓	
Lung disease						
Obesity		✓	✓	✓	✓	
Cancer					✓	
Resilient Children & Families						✓
Aging		✓				

Table 2 depicts the sample size and different data sources, including quantitative and qualitative data, used by each of the health systems. Five out of six health systems utilized surveys. There was a large variety in the number of surveys collected. Bon Secours surveyed 775 Greenville County residents. Lexington Medical and MUSC conducted their CHNA together and had 1,152 survey respondents total across Lexington and Richland County. Self-Regional Healthcare surveyed 1,610 respondents across Greenwood, McCormick, Abbeville, Laurens, Saluda, Edgefield, and Newberry County. Prisma Health gathered 7,613 surveys across seven different counties: Lexington, Richland, Sumter, Greenville, Laurens, Oconee, and Pickens. Finally, Spartanburg Regional obtained 1,659 survey responses within Spartanburg County. AnMed was the only health system that did not use surveys in its CHNA process. Four out of six health systems conducted focus groups as part of the CHNA process. This was also the only primary data source used by AnMed who conducted an unspecified number of focus groups. Prisma Health conducted 14 focus groups, while Spartanburg Regional did 10 and Lexington Medical and MUSC did one focus group. Three out of six health systems included interviews as a primary data source for the CHNA. Spartanburg Regional conducted 80 community interviews and roundtables, while Prisma Health conducted 42 interviews, and Lexington Medical and MUSC conducted 14 key informant interviews. Bon Secours was the only health system to include town hall meetings in its process and conducted three meetings.

Table 2. Primary Data Sources by Health System

AnMed Health	Bon Secours	Lexington Med/MUSC	Prisma Health	Self Regional	Spartanburg Regional
• Focus groups	• 775 survey responses • 3 town hall meetings	• 1,152 survey responses • 1 focus group • 14 key informant interviews	• 7,613 survey responses • 14 focus groups • 42 interviews	• 1,610 survey responses	• 1,695 survey responses • 10 focus groups • 80 community interviews and roundtables

Table 3 depicts the topics covered by each survey across the five health systems that used this methodology. Each system collected survey data at the individual and community levels. There were similarities in the topics surveys asked about, but there were significant differences in the types of questions that were used to address these topics. Data collected at the individual level was derived from questions about one's personal health. Demographic data was the only individual-level data metric captured by every health system. Four out of five health systems asked survey questions about health services, overall health, insurance coverage, SDOH, and health information/education. Health services include routine wellness checkups, mental health care, routine vaccinations, hypertension care, etc. At the individual level, three out of five health systems asked questions about physical activity, two out of five asked about health priorities, and one out of five asked about healthy eating.

Data collected at the community level was gathered through questions that asked survey respondents about their community and general perceptions of access and types of care/resources available as well as conditions that were the highest priority or prevalent in the community. The most common survey topic was SDOH. All health systems asked questions about SDOH that might affect the individual or their community. Additionally, the most common survey topics that centered on questions about the general community were access to health services, overall health (quality), healthy eating, community safety, and physical activity. These topics were included in four out of five health systems' surveys. The next most common topics at the community level which were surveyed by three out of five health systems were child/dependents' health and health priorities.

Table 3. Survey Question Topics by Health System

Health Priority	AnMed Health	Bon Secours	Lexington Med/MUSC	Prisma Health	Self Regional	Spartanburg Regional
Access to Healthcare		✓	✓		✓	✓
Community Education	✓					
Housing & Homelessness		✓				
SDOH	✓					
Behavioral & Mental Health	✓	✓	✓	✓	✓	✓
Clinical Preventive Services			✓			
Substance Use	✓					
Chronic Health Conditions						✓
Diabetes	✓				✓	
Heart Disease & Stroke	✓			✓		
High Blood Pressure					✓	
Lung disease						
Obesity		✓	✓	✓	✓	
Cancer					✓	
Resilient Children & Families						✓
Aging		✓				

Different qualitative data collection methods were used across the six health systems. Table 4 includes details on the types of materials used by the health system for their CHNA report. All six health systems used final reports and other secondary data sources in the CHNA development process. Other materials of primary data used in the process included the use of surveys, interviews, focus groups, and town halls or roundtable discussions.

Except for AnMed, all other health systems used survey data in its CHNA. AnMed, Lexington Medical and MUSC, Prisma Health, and Spartanburg Regional gathered qualitative data by facilitating focus groups. AnMed specified that their focus groups used a guide formatted to assess the community's general health, specific health conditions, access to health care, and quality of health care services. Similarly, the focus group guide used by Lexington Medical and MUSC during their CHNA encouraged discussions about knowledge of and access to health services in their respective communities.

Lexington Medical and MUSC, Prisma Health, and Spartanburg Regional additionally organized interviews for qualitative data collection. Spartanburg Regional conducted the largest number of interviews, followed by Prisma Health, and finally Lexington Medical and MUSC. Lexington Medical and MUSC's interview guide included a framework to discuss involvement in addressing health needs and barriers to addressing these health needs. Prisma Health sampled participants from the Midlands and Upstate for their interviews, and participants were community members, professional community partners, providers/clinicians, and hospital administrators. The interview guide for Prisma Health focused on identifying community health needs, organizations that are addressing these issues, and strengths and barriers to improving community health.

Bon Secours was the only health system to gather qualitative data through town hall meetings. During their CHNA, they organized three meetings that included community residents, faith-based representatives, and health and human service sector representatives. In these meetings, the focus groups voted to identify their community's top health priorities.

Table 4. CHNA Materials Utilized by Health System

Health Priority	AnMed Health	Bon Secours	Lexington Med/MUSC	Prisma Health	Self Regional	Spartanburg Regional
Access to Healthcare		✓	✓		✓	✓
Community Education	✓					
Housing & Homelessness		✓				
SDOH	✓					
Behavioral & Mental Health	✓	✓	✓	✓	✓	✓
Clinical Preventive Services			✓			
Substance Use	✓					
Chronic Health Conditions						✓
Diabetes	✓				✓	
Heart Disease & Stroke	✓			✓		
High Blood Pressure					✓	
Lung disease						
Obesity		✓	✓	✓	✓	
Cancer					✓	
Resilient Children & Families						✓
Aging		✓				



Table 5 includes details on the secondary resources that were used in the health systems' CHNAs. Many health systems used similar secondary data sources for their CHNA reports. These sources include the Center for Disease Control and Prevention (CDC), the Robert Wood Johnson Foundation's County Health Rankings, the South Carolina South Carolina Department of Public Health (DPH), and the U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion's Healthy People 2030. Many health systems used a robust amount of secondary data sources to help create data visualizations and graphics when presenting their CHNAs. It was important to supplement the findings of the data collected during the CHNA with contextual happenings in the local community.

Table 5. Secondary Data Sources by Health System

AnMed

CDC

- Behavioral Risk Factor Surveillance System (BRFSS)
- COVID Data Tracker: Integrated County View
- High School Youth Risk Behavior Survey Data (1991-2019)
- Sexually Transmitted Diseases Surveillance System Report (2019)
- National Environmental Public Health Tracking Network; Anderson County, SC and Pickens County, SC: Percentage of Residents living within ¼ mile of a park and Air Quality – Particulate Matter

Robert Wood Johnson Foundation

- County Health Rankings

DPH

- Anderson County and Pickens County Health Profiles
- Asthma in South Carolina Report (2021)
- County Cancer Profiles
- County-Level Estimates from 2017-2018 SC Adult Tobacco Survey
- COVID-19 Vaccination Dashboard
- Diabetes Impact in South Carolina (2020)
- South Carolina Community Assessment Network (SCAN) Community Profile
- South Carolina County-Level Data for COVID-19
- South Carolina Vital and Morbidity Statistics Report (2019)
- Teen Pregnancy Data Book (2009-2019)
- 2019 South Carolina Youth Tobacco Survey

U.S. Department of Health and Human, Health Resources and Services Administration (HRSA)

- HRSA Data Warehouse

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion

- Healthy People 2030

Bon Secours

Bon Secours Hospital Discharge Data

CDC

- BRFSS
- COVID Data Tracker: Integrated County View
- Diagnoses of HIV Infection in the United States and Dependent Areas 201 National Profile
- High School Youth Risk Behavior Survey Data (1991-2019)
- National Vital Statistics Report, Deaths: Leading Causes for 2019
- Sexually Transmitted Diseases Surveillance System Report (2019)
- State of South Carolina Suicide Statistics

Robert Wood Johnson Foundation

- County Health Rankings
- The State of Obesity Report 2021

DPH

- Asthma in South Carolina Report (2021)
- COVID-19 Vaccination Dashboard
- Diabetes Impact in South Carolina (2020)
- Epidemiologic Profile of HIV, Aids, and Sexually Transmitted Infections (2020)
- Heart Disease in South Carolina Report (2019)
- SCAN Community Profile
- South Carolina County Health Profile 2016-2018
- South Carolina County-Level Data for COVID-19
- South Carolina Vital and Morbidity Statistics Report (2019)
- 2019 South Carolina Youth Tobacco Survey

U.S. Census Bureau

- American Community Survey 1-year and 5-year Estimates Data Profiles (2010-2019)
- Population Estimates April 1, 2020 and July 1, 2019

U.S. Department of Health and Human, HRSA

- HRSA Data Warehouse

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion

- Healthy People 2030

Lexington Medical & MUSC

America's Health Rankings

CDC

Robert Wood Johnson Foundation

- County health rankings and roadmaps

DPH

Prisma Health

CDC
- Mental Health: Data and Publications, 2018

Kaiser Family Foundation
- Health Care Expenditures per Capita by State of Residence, 2022

Robert Wood Johnson Foundation
- County Health Rankings, 2021

DPH
- Heart Disease in South Carolina, 2021

United Health Foundation
- America's Health Rankings, 2021

U.S. Bureau of Labor Statistics
- Quartiles and Selected Deciles of Usual Weekly Earning by Educational Attainment, 2022

U.S. Census Bureau
- Population Estimates, 2022

U.S. Department of Health and Human Services, Office of Disease Prevention
- Healthy People 2030

U.S. Department of Agriculture Economic Research Service

Self Regional

CDC
- Birth data, leading causes of death, and mortality for SC

Community Commons
- Maps and Data Tool

Live Health South Carolina developed by the Alliance for a Healthier South Carolina

Robert Wood Johnson Foundation
- 2022 County Health Rankings

Sg2
- Demographics, physician demand, inpatient, and outpatient emergency room estimates for all seven counties in the Self Regional Healthcare System

South Carolina Department of Alcohol and Other Drug Abuse Services

DPH
- Community Health Profiles

South Carolina Law Enforcement Division (SLED)

The Commonwealth Fund

Spartanburg Regional

CDC
- Information on Adverse Childhood Experiences, asthma in children, infant mortality, teen pregnancy, preventing pregnancy-related deaths, nutrition and physical activity, pre-diabetes, diabetes, cancer, smoking, STDs, substance use

Children's Trust SC
- South Carolina Behavioral Risk Factor Surveillance System 2014-2015

SC Department of Education

SC Interagency Council on Homelessness

SC Office of Healthcare Workforce
- Health Professionals Data Book, 2016

DPH
- Central Cancer Registry
- Division of Surveillance and Technical Support, 2016
- Exemptions from School Vaccine Requirements

South Carolina Department of Revenue and Fiscal Affairs Hospital Utilization Query
- Inpatient Discharges, 2017
- Emergency Department 2013-2017

Sg2
- Claritas Health Insurance Estimates

Spartanburg Water
- Environmental Working Group Tap Water Database

U.S. Census Bureau
- American Community Survey 5-year Estimates

Table 6 includes details on the individuals/organizations that each health system involved to conduct their CHNA. The most common individuals/organizations involved in the CHNA were academic institutions or consultants which were involved by five out of six health systems: AnMed, Bon Secours, Lexington Medical and MUSC, Prisma Health, and Spartanburg Regional. Four out of six health systems involved internal team members, nonprofit, and public health organizations. AnMed was the only health system to involve community members in their CHNAs. Information regarding those involved in Self Regional Healthcare's CHNA was not available in the final health report.

Table 6. Individuals and Organizations Involved in the Health Systems' CHNAs

Health Priority	AnMed Health	Bon Secours	Lexington Med/MUSC	Prisma Health	Self Regional	Spartanburg Regional
Academic institutions	✓	✓	✓	✓		✓
Community members	✓					
Internal team members	✓	✓		✓		✓
Nonprofit organizations	✓	✓	✓			✓
Public health organizations	✓	✓	✓			✓
Used a consultant	✓	✓	✓	✓		✓

*Information not available in the final health report



Thematic Analysis of Phase II Interviews

NOTE: The qualitative findings in this section are not meant to be comprehensive but rather provide a deeper understanding of the variety of CHNA and CHIP methods, strategies for community engagement, and the barriers and facilitators of CHNA/CHIP success.

Qualitative interviews were conducted with six of the seven health systems who participated in the initial interest calls: AnMed, Bon Secours, MUSC, Prisma Health, Self-Regional, and Spartanburg Regional. Two interviews were conducted with Prisma Health as they completed a parallel CHNA process for the pediatric and adult populations. MUSC elected to complete one interview with three individuals who represented CHNA efforts across three regions across the state (Lowcountry- Berkeley, Dorchester, and Charleston counties; Catawba region; Pee Dee region). This resulted in a total of seven interviews across six health systems, each lasting approximately 60 to 90 minutes. The number of individuals participating in each interview ranged from one to three participants.

GENERAL THEMES

1. CHNA/CHIP process is a requirement for many health systems, but also provides an opportunity to gather information about community health needs and priorities

Of the six health systems that participated, four out of six were required to do a CHNA/CHIP as part of the Affordable Care Act to maintain their non-profit status. These four systems indicated that while the primary reason they complete the CHNA/CHIP is as part of this IRS requirement, they also see value in the CHNA/CHIP allowing them to better understand the health needs, priorities, and barriers for the communities they serve.

The two systems that were not required to complete a CHNA/CHIP as part of IRS requirements also indicated that better understanding their communities' health needs was the driving factor behind why they completed a voluntary CHNA/CHIP. These two systems also participated in the CHNA/CHIP as part of a broader community effort that involved other partners such as healthcare organizations (health systems and/or federally qualified health centers), community coalitions, non-profit organizations, the local health department, etc. One of these partnerships resulted in collaborating with another health system that was required to complete a CHNA/CHIP to maintain their non-profit status.

Systems required to complete CHNAs	Systems not required to complete CHNAs
"Let's look at the business aspect of it or the legality side is that it's an IRS mandate. So that's probably why it started, but it's probably not the only reason why we do it, or at least the efforts that we put into it and the way we approach it. It's really to look at or to hear the community's voice, and in order that we can have documentation of working with the community. And it's not just what we're doing to them, but it's what we're doing with them to really look at the social determinants of health."-HS #1	"None of the issues that rose to the top were a surprise, but we wanted to make sure that we were truly getting impact and involving the community in that process of informing how we go out and serve our respective communities. So, it wasn't a requirement, but we felt it was the right thing to do in terms of engaging with our respective communities."-HS #5
"Of course, we do it because it's a regulation, we have to as a nonprofit, but as the years have gone on, we do it because our opportunity to... We're trying to do a better job of having patient or community voice in all that we do, but it is definitely a targeted opportunity for that to really get information from our communities."	"As quasi-governmental system, we're not required to complete a CHNA. We do, however, like I said, participate in the CHNAs in those three counties. I would say that we do that because we are invested in and care about community health and the broader community."-HS #6

2. The role of consultants ranged significantly across health systems.

All but one health system indicated that they engaged a consultant in some capacity; however, the role of the consultants and the level of responsibility the consultant had for the CHNA/CHIP processes varied significantly across health systems. The range of roles included: compilation of secondary data indicators, collecting and analyzing both primary (quantitative and/or qualitative) and secondary data, providing some level of support for prioritization in addition to leading data collection and analysis, to finally serving as the project manager for the CHNA process including responsibility for the timeline and execution of all CHNA and CHIP processes with health system input.

Two health systems indicated time constraints and/or staff capacity as the reasons why they engaged consultants. Two consulting groups worked on two different health systems' CHNA/CHIP processes, providing services for four of the five health systems that engaged a consultant. Two health systems engaged two different consultants to work on the CHNA/CHIP, with each taking distinct roles. The one health system who did not engage a consultant mentioned cost as the reason.

Systems required to complete CHNAs	Systems not required to complete CHNAs
"Well, I think I equate a lot of our success to one of our consultants who really, not just kept things going but really stayed on top of the data. Gathering the people __ served as a coordinator as well, so even with meetings and notes and everything else that went along with. So, I give kudos to our consultant." -HS #1	"For us like I said, we do it internally, so we don't spend thousands and thousands of dollars on consultants"-HS #2 "From my understanding, it's always been internal. Now, some of the data, we may purchase a subscription for that period of time to pull in the data" -HS #2
"And based on all those discussions, the timeline that we had gotten ourselves down, the capacity of our academic partners to do that, we decided to go with an outside consulting group."- HS #3 "Yeah, the consultant group presented the priorities. I think they may have even presented maybe five of the top ones. And it was through those meetings and discussions with both our internal team and a few of our external stakeholders and academic partners that we determined here's our top three. And so, we went with them."- HS #3	"We [the consultants] have done all the secondary data polls. So going to DHEC data, census data, whatever is available. And then sometimes depending on what comes out of the focus groups and the conversations, we might go back and dig a little bit more on certain topics. And then we put that report together and then we run the community conversations and focus groups, and then we compile everything, bring that back to the planning group within AnMed and then work with them on, okay, what are those things that are going to be our priorities that come out of that?"- HS #4
"And the last couple that we have done, we enlisted ___ [academic partner] that time to complete it for us. Although coalition members were also involved in providing some specific data from the health system or from the county and involved in some of the focus groups and one-on-one interviews and getting out the surveys and that sort of thing."- HS #5 "We drafted out what we thought our goals should be under each priority area, along with strategies based on what we knew was already going on in the community. And then like __ said, with the timeline we were working with, we had to consult out some extra help. So, when we brought in a consultant, we brought in __ and told her what we were up against as far as a timeline and what we had already done, which was a lot." -HS #5	So, when we talked about doing this in the regionals or divisions, other divisions, we utilized Goodstock in those areas as well. So, the process is very similar in all divisions, if you will, in terms of what we're ultimately trying to get at, but the players are different. -HS #6

3. Community engagement and community voice were identified as important but also difficult to do & sustain.

All health systems noted the importance of community engagement. However, levels of community engagement varied significantly across health systems. This variability included what type of community stakeholders were involved as well as what part of the CHNA/CHIP process community partners were engaged in. Some health systems engaged partners solely as a source of primary data collection. Some included community partners in the prioritization and strategy selection process. Two health systems co-lead the entire CHNA process with community and other partners. Interestingly, this highest level of community engagement was present in the two health systems that were not required to complete a CHNA as part of their non-profit status. Only one health system noted that it was important not just to get the perceptions of the patients they currently serve but also feedback from the broader community.

In addition to varying levels of community engagement there were different perceptions of what community voice is across health systems. Most health systems conceptualized community engagement or community voice as two things 1) engaging lay people with lived experience in the data collection process, and/or 2) involving non-profit and other community partners in other aspects of the CHNA such as prioritization or implementation strategy selection. Less emphasis was placed on engaging people with lived experience, who also don't have high levels of trained community health experience, in aspects of the CHNA/CHIP process such as prioritization or strategy selection. Only two healthcare systems noted the need to do this and one of them indicated that they don't think health systems are equipped to do this well. One healthcare system noted the importance of sharing results of the CHNA/CHIP back at the neighborhood level.

Systems required to complete CHNAs	Systems not required to complete CHNAs
"It's really to look at or to hear the community's voice, and in order that we can have documentation of working with the community. And it's not just what we're doing to them, but it's what we're doing with them to really look at the social determinants of health." -HS #1	"We're trying to do a better job of having patient or community voice in all that we do, but it is definitely a targeted opportunity for that to really get information from our communities." -HS #2
"They [people with lived experience] were mostly engaged to gather information." "Yes, we had a lot of community partners helping us with our action planning, but its still a lot of people saying what we think is best for the community. And so, I think having some real discussion about how we engage community better as healthcare, despite, I think knowing that we need to engage community better, I don't think the healthcare system knows how to do that. - HS #3	"I won't say defending your 501c3 but certainly more formalizing a process to you show that you were looking at local data and listening to local voices and then incorporating that into kind of this consistent format that you were able to show on your 990 that, yes, we did a community health needs assessment and also to make that information publicly available."-HS #4
"We're data driven by what the data tells us, but we still need that lived experience that's going to speak to the deep issues that people are experiencing on a day-to-day basis. So that's another piece of how things were done in the community too…"-HS #5	"I'll also add that another side of that is that not everyone that's taken the assessment are our patients, there's a whole another segment of the community that we need to connect with that may or may not be our patients. So, when we say community needs assessment, you've got to go broad and global and not just in-house with those that we have access to."-HS #6

4. Some health systems have strong indicators of success for CHIP strategies, systems to track progress towards goals, or other processes to ensure internal or external accountability while others do not

Health systems were split on if they had solid indicators and systems in place for tracking their progress towards achieving CHIP goals and strategies. Two specifically noted that not having robust indicators and tracking systems was a barrier that they want to address in future CHNAs/CHIPs.

Two systems indicated that they have formal feedback loops to share CHIP progress with health system leadership through formal methods or regular reporting channels. Two systems reported regularly sharing data back with community partners. One was part of a community coalition based CHNA/CHIP and coalition meetings provided an opportunity to share progress and get feedback from community partners. The other health system had standing meetings with partners who had strategies that were integrated into their CHIP and used these standing meetings to share progress and discuss barriers.

Systems required to complete CHNAs

"So, we created these tracking sheets for each committee to have. And then we also have created a REDCap survey that then goes to each of the leads for that on a quarterly basis, so we're able to monitor the metrics. So not only did we have the goals, the strategies and objectives, but we had very defined metrics that we would count and measure along the way. And so, every quarter that survey is sent out to those individual work group leads with their specific metrics, so that we can easily capture them on a report and then share back to the community at large, as well as to our internal senior leadership and the board." -HS #3

"We have a spreadsheet in teams, and they ask us to keep it updated on a quarterly basis. They want to know things like, what's your goal, what's your strategy, what's your baseline? We tagged activities that we were going to do, had we met them, and then you have a space for comments." - HS #1

Yeah, we don't have an official dashboard. Each of the priorities and strategies has a tracking worksheet that we're staying on schedule and tracking progress, but nothing official yet. I know that's something that our VP, __, is working on to try to get some type of metric. -HS #3

"No. We see that as one of our challenges and one of our goals for 2024 is coming up with a shared measurement tool for those goals. We know we're going to do a needs assessment again, so we need to make sure our co-chairs, our coalition members are trained on results-based accountability."- HS #5

"What I can say is they did a really good job of explaining why we were doing the needs assessment and explaining that we were going to follow up with those members who participated in the surveys and focus groups. Because people were reaching out to me and they were like, "We want to know what the result is. What does the health improvement plan say as a result, what are we going to be focusing on? We want to hear from you."- HS #5

5. Challenges with prioritization and CHIP strategy development around complex issues like SDOH, mental health, and chronic disease

Sometimes results from surveys and qualitative data didn't always align with what health systems perceived as their internal expertise or role(s) in the community. This meant some health systems leaned towards selecting strategies that they felt like they had more direct control over in clinical settings. Almost every health system noted concerns about how to create internal support for implementation strategies, as staff responsible for CHIP strategies were not always experts in the selected priority or strategy areas or they were already at capacity. Two health systems noted that cultivating internal champions throughout the system to support CHIP strategies was important to move the work forward.

The health systems that selected strategies that were community-based identified the importance of partnering with other health care organizations (free clinics or FQHCs), non-profit organizations, government agencies (public health), etc. One health system that adopted community-based strategies mentioned that sustaining partner engagement in CHIP strategies was hard, and the CHNA/CHIP ultimately ended up feeling hospital owned even though they didn't want it to feel that way. Another health system said they were hesitant to adopt community-based strategies around things likes housing or food security because they had included community partners in their CHIP in the past and the community partner didn't follow through on implementing the strategies to which they had agreed.

Systems required to complete CHNAs	Systems not required to complete CHNAs
"Identifying champions to really lead and guide this work. I think when we do things like CHNA and then in turn we have to complete the CHIP, there has to be someone responsible for the work. And although internally we are responsible, we are not the experts in these priority areas. So I think a challenge is, the biggest challenge in my opinion, has been identifying the champion that will take this work and actually lead it for the next three years."- HS #3	"Some of these things that come out, it's like, "Okay, the hospital system can't do this, certainly not on their own. This is not their wheelhouse, but we can assist, and we can advocate and whatnot." But gosh, several years ago, several iterations ago, what came out of that is a network of nonprofits that started working together around these things that came out like transportation and housing that the hospital can't address on its own and that's really not necessarily their mission, but it is important to help."- HS #1
"Sustained community engagement is hard because the process is slow. And despite best efforts of wanting this to be a shared Community Health Improvement Plan, I think it felt less shared toward the end. And ultimately, [health system] is the one responsible for it. And I just don't know that we had the systems in place and perhaps even the strength of the relationships in place to really have it feel shared. So, it was really, really hard to keep that momentum going."- HS #3	

6. Aligning priorities and implementation strategies with other health system goals or activities was seen as beneficial.

All six health systems identified that they tried to align in some way their CHNA/CHIP with other efforts or initiatives that were happening in the health systems; however, the degree of alignment varied significantly across hospitals. All six indicated they were intentional about identifying strategies around the selected priority areas that aligned with existing health system services or programs. They noted different reasons for this including lack of funding for implementation strategies, that it maximized staff capacity, and had the potential for greater impact. One identified that they worked directly with their service lines (pediatrics, geriatrics, etc.) to identify strategies that the leadership of those service lines were supportive of, especially if it would be doing work that was new to the health system.

One health system noted they are actively working towards aligning their CHNA/CHIP directly with the health systems strategic plan, but that the planning and budgeting period does not neatly align. Another health system shared their community health goals are already in the hospital's operating plan, which was an important part of their CHIP's success. Lastly one health system noted that while it was important to try to align with the CHIP with broader system goals, they wanted to be careful that it didn't drive prioritization away from what the community was indicating was most important to them.

Systems required to complete CHNAs
"And then if it was a new thing, for example, that was community-driven or required ___ [health system] to be in the community in a different way that was being approved from the service line before we said yes." -HS #3
"I think there's a desire to have those aligned. Absolutely. I know that some of the goals that we have in there are directly aligned to what the systems doing. Is every single one aligned? Probably not. But does everything go up towards the overall goal of improving mental health, improving rates of heart disease and stroke and overweight, obesity? Yes." -HS #3
"So, the way our system does that is those goals flow down to anyone who's a manager or above has to take goals. And there are all kinds of goals in there, there are probably a hundred different annual operating plan goals. Some of them are system-wide and some of them are not. The community health ones are system-wide."-HS #5
"And so, I think that's an opportunity for us, but I think we're getting better at that. It's just they don't always align timing-wise or budget-wise. And so typically, once we complete the community health needs assessment, the budget for the health system has already been set. And so, it would always be kind of a catch-up type." -HS #4

DATA COLLECTION & METHODS CHALLENGES

The health systems interviewed noted some common themes and challenges related to survey development, data collection, and the quality of data they collected.

1. Concerns about survey fatigue was another issue noted by most health systems

Five out of six health systems mentioned survey fatigue in the community as a concern in the CHNA process. In addition to concerns that this will limit their ability to collect enough data, they also noted that they didn't not want to overburden the community with the number of surveys that were being collected for various assessments or other studies in the community. While five out of six health systems noted this as a barrier, they mention how they were addressing or overcoming this concern.

Systems required to complete CHNAs

"But we worry about the community getting fatigued with all of the systems, the people. I worry about the same people who will answer, but it's just that when all of us do it just feels like... And luckily we're kind of out of the time when we're doing other kinds of questionnaires. I think ___ county went through a time when everybody was surveying community about everything, so it feels like we're out of that zone. But that's one of the things I think that comes up sometimes."- HS #1

"We'll send it out to the practices, we'll send it out even paper surveys too. Of course, put it in with our community folks, but it's just... And then sometimes I think we have survey fatigue because even in the past year, __ is doing a survey on something and __ is doing a survey on something and I'm thinking, we got to quit doing these surveys because I want people to answer."- HS #2

"But I think that we are, people are survey fatigued and we have to be careful with that. We have to be careful that we are not surveying people too much."- HS #3

"I know we had residents that were ready to participate, but what we heard when we went back out, I know what I heard when I went back out into the community to share was that, "I'm tired of taking these surveys. You come out, you survey, survey, survey. I take this survey with you guys, you all are doing a needs assessment,"- HS #5

"Folks are not always willing to just sit there and complete that survey, and not everybody has that capability and wherewithal to do that, so they would rather do the paper copy."- HS #6

2. Representativeness of data is a major issue for many health systems

All but one health system identified challenges or concerns about the representativeness of data across demographic factors, especially among groups that were most likely to experience health disparities such people who came from low income, low education level, or predominantly minority communities. The only health system that did not mention representativeness of data as a challenge did not use surveys as one of their primary data collection methods.

One health system identified lack of input from a particular demographic group [Hispanic individuals] that was one of the patient populations they served. To address this challenge, they completed foll ow up data collection in partnership with a trusted community partner and an academic partner to better understand the health needs and challenges of the Hispanic community. Another health system indicated that their survey data was not represented of the demographics of their communities at the county level. To address this challenge, they consulted with an academic partner to use weighting techniques to get a more representative sample.

Systems required to complete CHNAs	Systems not required to complete CHNAs
"But when we looked at the breakdown of the data to see who was answering it, we left it open to try to increase the diversity of the answers or the people responding, so that we would be more representative of the community, because we found that we were not at all"- HS #3	"And we did subsequent research because we wanted more input from the Hispanic community, I think that's been a challenge. If I were in their shoes, I would be hesitant to share a lot of information when people are asking, so we have to be creative."- HS #1
"And so we were really trying to push that out broader and make sure that we were getting people of color, that we were getting men, that we were getting different economic populations. And that is tough. That is tough."- HS #5	That's why I'm excited about this next round, because again, I don't think we did a good job either of stratifying or desegregating data and looking at it closer by race, ethnicity, those type things. - HS #2
I think a part of that process in this area was ensuring that we collaborated with agencies and partners that were going to give us a wide swath of the community that we were representing. So, it was very intentional and purposeful that we worked with agencies and partners that were going to be reflective of the community as a whole. - HS #6	

OTHER BARRIERS TO SUCCESS

Health systems identified a number of other common barriers to developing their CHNA/CHIP, including time constraints, staff resources or capacity, and funding for the CHNA/CHIP process and CHIP implementation.

1. Time constraints are major barriers that also limit opportunities for partnership and alignment with broader health system priorities

All six health systems indicated that time constraints and deadlines were barriersB to completing the CHNA/CHIP. Time constraints resulted in compressed timelines that led health systems to focus on primary and secondary data collection and volume of data, particularly survey data, rather than prioritization and strategy selection process. Tight timelines also resulted in missed opportunities such as engaging community partners and voice because of the time it takes to coordinate across organizations and build trust. One health system mentioned that the timeline for health system strategic planning and CHNA is not aligned, and while they try to use information from the CHNA to inform strategic planning it doesn't always work because of timelines. For this reason, the health systems budget was already set once the CHNA was done and so they lost the opportunity to ask for specific funding to support implementation strategies.

Systems required to complete CHNAs
"and so really getting the resources approved was huge. That was a challenge. Again, only because it's just not at the front of the minds of senior leaders, but we finally got that done. But it was a challenge. And because it was a challenge, we ended up starting late. We should have started this way in advance, but we probably had about six months total." -HS #3
"Probably I'll jump in there because it's our fault scheduling, scheduling the team to get together. The hospitals are meeting rich environments, and so getting time on our calendars to get this done and is sometimes a challenge." -HS #4
"Again, it wasn't a have enough data. It was a timeline. It was the closing date is... So that we can move to the next part." -HS #2

2. Health systems indicated that they have limited staff resources and capacity to dedicate to the CHNA/CHIP process.

The lack of sufficient staff resources and staff capacity was interrelated with the time constraint barrier as many health system staff have job duties that are not primarily associated with the CHNA/CHIP. Four out of the six health systems mentioned staff capacity or resources was a barrier. One system mentioned that staff resources limited implementation strategies because they could not add staff to support them. Often these staff are pulled into the CHNA/CHIP as they are available and later in the process than optimal. This means it is difficult for them to prioritize CHNA/CHIP processes, which often results in timeline delays.

Systems required to complete CHNAs
"Because the big question that's come up I think for everybody in recent years is, if we have more people who need access to care and behavioral and mental health and all of these things, and we're not going to add staff, how do we handle that? And for us it was group education, raising awareness and working with evidence-based programs."- HS #1
"There was a lot of transition within ___, so we had a much smaller team. So that was a lot of the discussion in the beginning is, how are we going to do this? What are people's current job requirements right now? And then with the loss of multiple team players who had been involved previously, what were we going to do?"- HS #3
"Well, again, I think just being a small team and it's a big lift and it's very... I think my biggest challenge is probably because of the size of our team," -HS #2
"We did not do focus groups the last time here in _ but we did do that on the other two assessments, and I think it just came down to manpower. Roper had a lot of transition, we had a lot of transition, and United Way completely flipped and turned over. So I think it just came down to that." -HS #6

3. Lack of funding was a major barrier for CHNAs/CHIPs

Five out of six health systems identified lack of funding to support the development of the CHNA/CHIP as well as lack of funding for implementation of CHIP strategies as a major barrier. Funding also influenced which priority areas and strategies health systems pursued. Some health systems utilized internal funding strategies such as foundation support and pursued external funding mechanisms to support implementation strategies. One health system noted that leveraging funding to pay for the CHNA consulting firm resulted in them having to give up a position, because there were no funds in the health system budget to complete the CHNA/CHIP.

Systems required to complete CHNAs	Systems not required to complete CHNAs
"We didn't have resources budgeted, because they weren't budgeted, we found money in our budget to pay for this because we knew we can't do this. We'll have to give up a position in order to get this done. By the time we got the budget approved for the consulting firm, we were probably about six months out from the deadline." -HS #3	"Because there was no new money designated to implement this. So, we needed to be careful that we were not committing to things that there was no funding for, but also to be careful that we weren't creating goals and strategies that weren't meaningful because of that. So, we were very thoughtful in terms of what we were writing that." -HS #3
"We do because we write grants. So the expert program is a grant. The mobile health program was a grant. We put a CHW in __ and __. That was a grant, but it falls on us to do that." -HS #2	"And one of the things that we looked at was it would be great to have a__ program in our community. So the foundation was able to put together that grant application and ultimately was successful in funding an access health program in ___." -HS #4

4. Other Barriers: Other barriers that were mentioned less frequently included challenges related to getting leadership buy in or support for the CHIP/CHNA process (2), the impact of COVID-19 (3).

FACTORS HEALTH SYSTEMS IDENTIFIED AS LEADING TO SUCCESSFUL CHNAs/CHIPs

Health systems identified a number of factors that they felt led to successful CHNAs/CHIPs including having access to funding, internal and external partnerships, working with a consultant, and creating systems of tracking and accountability.

Funding	"However, for instance, affordable housing. We actually have budgeted dollars that we could meet some of those goals or we could budget it in. Like for instance, one was to build a habitat house or to support habitat."
Systems to track progress & provide accountability	"So yes, the system requires systematic progress reports. So there are time progress reports that we report on the progress at different intervals."
Community partnership & engaging community voice	"Another success I think was the community's willingness to participate. The town halls went, I mean for it to be virtual, they went well. Three town halls, 75 people, I call that a success. And then two, it was with marginalized community members, and for them to take time out of, not just their day, we had at different times of the day, but they made themselves available. And I just think it was great. It was our hope to get more voice from marginalized or even ethnic representation, and that happened. And so I think that's something that we can herald as a success. And that we completed it on time."
Role of consultants	"Well, I think I equate a lot of our success to one of our consultants who really, not just kept things going but really stayed on top of the data. Gathering the people she served as a coordinator as well, so even with meetings and notes and everything else that went along with. So I give kudos to our consultant."

Academic Partners

"I don't think we had. To be honest with you, if I recall, I don't think we had enough respondents to be able to do that. As many ways that we could disaggregate, we did. And then ultimately, we worked with Clemson to do some additional analysis, because it was so skewed. And so we had a different statistical analysis that was applied, so that we could better look at what we had represented compared to what kind of census data was, to better review those answers." -HS #3

COLLABORATIVE CHNA/CHIP

Potential barriers to participation in a CHNA/CHIP learning collaborative or statewide, collaborative CHNA/CHIP process.

Theme	# of Times Mentioned	Quote
Different Timelines	1, 2, 4, 5	"One roadblock with working with other health systems in any type of joint CHNA would be the challenge of timing, when our things are due, when their things are due. And it seems like ours was always before everybody else's."-HS #1 "We were mid kind of our CHNA implementation cycle. So it would mean that either we go a year beyond our next cycle or we would've gotten involved when we still had a year left to complete. So it was just a little bit of a timing issue.."- HS #4
Differing Agendas/Priorities	1, 3	"We have discussed this in the past, doing things in collaboration. We seem to be the ones that want to make this happen the most. People have different agendas, it's a challenge." -HS #1
Competition	1	"What would they be willing to share related to this process that's not going to have a negative impact on, trying to leave the competition component out of this, if you will." -HS #1
Challenge of statewide alignment vs. Larger health system and/or local needs	1, 3	"So we can't just align with everybody in our state, we have to align with the rest of the system. And figuring that out I think is a big challenge." -HS #1 "I think that there is a sense of ownership to the CHNA for different reasons. And so I wonder if healthcare systems are, if all of them are interested in collaborating with other systems. Because I think what might come up are ideas that counties are different and counties have different needs, and to do one big state assessment wouldn't speak to the needs of our counties." -HS #3
Staff Capacity	3, 5	"The only challenge I would see for us in particular is, we don't have dedicated staff who are focused on that kind of thing. So a little bit of bandwidth, but especially if we had lead time, I think we could make that room for several people to be part of that and really I think it would be terrific." -HS #5 "I'm sure it's just going to be time and who's going to be there representing the healthcare system." -HS #3

Summary

Overall health systems used fairly similar data collection strategies (primary and secondary strategies), but the prioritization and strategy selection process varied greatly.

The most common primary data collection strategies were surveys or qualitative methods such as interviews, focus groups, or town halls. All but one health system used a survey and all but one health system used some type of qualitative method. There was less similarity between health systems in the prioritization process. Some health systems handled prioritization internally only while some shared potential priorities with community partners for feedback but then finalized the prioritization process internally. Only one health system completed the full prioritization in partnership with community partners. This health system used a joint community ownership model of the CHNA/CHIP.

Health systems heavily focus on primary data collection, in particular survey data. Five out of six health systems used a survey to collect primary data as part of their CHNA. Many of them had concerns about their ability to collect enough data or the quality of the data they collected. This was especially true for systems that covered multiple counties across the state.

Phase III Interviews

After the completion of the qualitative interviews in Phase II, the research team then reached out to the health system to identify C-Suite executives. Phase III will include qualitative interviews with C-Suite executives from each health system using a modified interview script. After the interview portion is concluded, recordings will be transcribed, and thematic analysis will be performed using NVivo 14. The goal of Phase III will be to understand the involvement and knowledge C-Suite executives have in the health system's CHNA and CHIP.



Recommendations

Based on the findings from Phases 1 and 2, several recommendations are proposed that could strengthen and enhance healthcare systems' CHNA and CHIP processes.

GENERAL RECOMMENDATIONS

- Shift the work of the CHNA and CHIP from a standalone process that occurs every three years to a cyclical and iterative process. CHIP/CHNA responsibilities should be integrated into staff job descriptions and annual goals. Benefits of institutionalizing this work includes:
    - Improved efficiency. CHNA and CHIP processes will not be placed "on the backburner" due to lack of staffing capacity and/or resources.
    - Increased strategic impact. It provides the opportunity to integrate and/or align CHNA/CHIP processes into other healthcare system strategic planning activities.
    - Enhanced tracking of health issues. More time can be invested in tracking and monitoring complex issues identified in previous CHNA/CHIP cycles and identifying new emerging issues.
- Utilize an existing framework for CHNA/CHIP processes such as the National Association of City and County Health Officials' (NACCHO) Mobilizing for Action through Planning and Partnerships (MAPP) or American Hospital Association's (AHA) Community Health Assessment Toolkit. These guides provide model standards in conducting needs assessments.
- Identify and develop champions at multiple levels (C-suite, management, staff, etc.) within the healthcare system. Those champions can help remove barriers, build support and provide resources to support CHNA/CHIP processes and advance implementation strategies. In addition, champions within the system responsible for community-based work can demonstrate the value-add of the CHNA/CHIP process to the health system.
- Cultivate relationships with a wide variety of external partners representing diverse sectors to engage in both the CHNA and CHIP process. No individual or organization can singlehandedly address health issues; this work requires multi-sectoral collaboration to understand the key health issues and to identify the best strategies for addressing them, especially around issues related to social determinants of health. Sectors to engage include other health care partners (free clinics, FQHCs, other health systems), early childhood and education, community based organizations (e.g. transportation, housing, food security), governmental agencies (public health, mental health and substance use, work support, child protection, faith-based communities), community coalitions, business/private sector, etc. · Intentionally and authentically engage the community voice and individuals with lived experience. Include them on committees and councils and financially compensate them for their time. Provide them with additional support such as education, technical assistance, meeting debriefs so they grow in their level of understanding and comfort with the processes and partners in which they are engaging.

CHNA DATA COLLECTION

- To maximize efficiency and effectiveness in collecting data for the CHNA process, be intentional and strategic about what data to collect and how to collect it. Consider the following:
    - Review updated secondary data to assess whether or not improvement has been made around the health issues identified from the previous CHIP/CHNA process.
    - Do not collect data through primary data collection methods (i.e. surveys, town halls, interviews, focus groups) that you can obtain from secondary data sources. Meaning, do not ask questions on surveys about information you can obtain from secondary data sources. In addition to collecting data from sources such as the South Carolina Department of Public Health or the American Community Survey, leverage internal data sources such as billing and electronic health record data to obtain information such as populations served, social determinants of health, healthcare utilization, prevalent health conditions, etc.
    - When collecting data through primary data collection methods, ensure that the data you have collected reflects the demographics of the county or regional populations you serve. This is more important than the number of survey responses you gather. Review the demographic data from surveys and focus groups early and often to help brainstorm and identify targeted strategies to reach the populations that are underrepresented.

- Frequently review and cross-analyze primary and secondary data to ensure you are "painting the whole picture" and avoiding missed opportunities. For example, if the issue of substance use consistently comes up in focus groups, make sure you are collecting secondary data that includes substance use metrics.
- Only collect data that is used to inform prioritization and strategy selection.

- Collaborate with academic partners to assist in the data collection process. They can help in a variety of ways including data collection tool development, secondary and primary data collection and analysis, defining sampling goals, primary data collection, data analysis, evidence-based strategy selection, etc. This can include direct partnership with faculty and research staff on listed activities or more indirectly, such as integrating CHNA activities into creative inquiry classes or other coursework that requires a community health-based component.

PRIORITIZATION, STRATEGY SELECTION, & IMPLEMENTATION

- Think of prioritization as the bridge between data and action. Ensure the processes flow together seamlessly rather than be treated as siloed processes. Develop a feedback loop between CHNA and CHIP for final documents.
- When it's time for prioritization and strategy selection during the CHIP process, unify the findings from primary and secondary data sources and share simultaneously. For example, if mental health was a key theme identified in listening sessions and interviews, present this data with the quantitative data collected through secondary data sources. This allows decision-makers to better assess the issues (i.e., Do findings support one another or are they in tension?) and make more informed decisions.
- Consider additional information to inform prioritization and strategy selection. This could include information such as existing assets and resources within the health system and in the community, potential solutions and their level of impact (i.e., Evidence-based, number of people affected), etc.
- Establish measures of success for implementation strategies using approaches like continuous quality improvement (CQI) or Results-Based Accountability (RBA). Create systems to track metrics of success and identify communication mechanisms to report progress in achieving those metrics to both internal and external audiences. Continuous engagement of external partnership, including reporting progress and challenges, will support relationship development, build trust, and facilitate ownership and accountability of community-based strategies.
- Internally, align implementation strategies with health system goals where appropriate and, when possible, to 1) increase buy in from health system leaders and departments and 2) maximize limited resources to drive meaningful change. (Note: interview participants mentioned that while this has the ability to maximize impact, health systems must be cautious not to let health system priorities be the sole driver of prioritization and strategy selection.)

Resources

Needs Assessment and Community Engagement

- American Hospital Association's Community Health Assessment Toolkit: healthycommunities.org/resources/community-health-assessment-toolkit
- National Association of City and County Health Officials' Mobilizing for Action through Planning and Partnerships: naccho.org/programs/public-health-infrastructure/performance-improvement/community-health-assessment/mapp
- Center for Community Health Alignment's Equity through Meaningful Community Engagement: communityhealthalignment.org/about-emce/
- Connecticut Health Improvement Coalition Stakeholder Engagement Wheel: ct_sim_stakeholder_plan_04032015.pdf

Continuous Quality Improvement

- Institute for Healthcare Improvement's Model for Improvement: ihi.org/resources/how-improve-model-improvement

Results Based Accountability

- South Carolina Area Health Education Consortium (AHEC) Results Based Accountability Training: https://www.scahec.net/learn/programs/cpd/3334
- Clear Impact Results Based Accountability Training and Resources: clearimpact.com/results-based-accountability/

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