APPLYING RESEARCH PRINCIPLES TO THE COMMUNITY HEALTH NEEDS ASSESSMENT PROCESS

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EXECUTIVE SUMMARY

Nonprofit hospitals across the nation are required to complete a community health needs assessment (CHNA) process – a systematic process involving the community to identify, analyze and prioritize community health needs and assets. These CHNAs are becoming more sophisticated in their approach as hospitals and health systems adopt processes and engage in collaborations that can increase their impact on community health.

This guide focuses on one approach to strengthen the rigor and impact of CHNAs: applying a research lens to the process. A research lens can be implemented in two ways:

1. **Embedding research tools and principles into the CHNA process**. The CHNA process mirrors a research process; it involves analyzing and synthesizing a variety of data sources to identify the most pressing community health needs, and implementing and evaluating the impact of interventions to address those needs. By adopting patient- and community-centered research approaches, CHNA developers can implement a process that better engages the community.

2. **Applying guidance from existing evidence-based research to address priority health needs**. There is a body of research that describes which interventions are the most effective for addressing community health needs. By selecting evidence-based strategies that have proved to work for the identified need in similar environments, hospitals can ensure that they are allocating their time and resources most effectively.

This guide identifies tools and research principles to support CHNAs, describes patient- and community-centered practices to integrate into data collection during the CHNA process, and provides direction for identifying evidence-based resources to inform CHNA implementation strategies. By strategically applying research principles and results in the CHNA process, hospitals and health systems can make progress toward achieving their goal of fostering a healthier community where all individuals can reach their highest potential for health.

PROJECT OVERVIEW

This project is supported through funding by the Patient-Centered Outcomes Research Institute. PCORI is an independent, nonprofit organization authorized by the U.S. Congress in 2010 to fund comparative effectiveness research that will provide patients, their caregivers and clinicians with the evidence needed to make better-informed health and health care decisions.

The Eugene Washington PCORI Engagement Award program is intended to bring more patients, caregivers, clinicians and other health care stakeholders into the research process. The program's goal is to support projects that will build a community better able to participate in patient-centered research and comparative clinical effectiveness research, as well as serve as channels to disseminate study results.

As part of this project, a diverse range of stakeholders was recruited, including patient and family advocates, applied-communication theorists and CHNA experts from hospitals and hospital associations. In total, the Health Research & Educational Trust (HRET) conducted seven focus groups, two panel discussions and 17 interviews, comprising 65 individuals. HRET also developed two modules that were pilot-tested by representatives from nine hospitals and health systems. Participants provided HRET with robust and insightful ideas regarding community and patient engagement and how to better apply research techniques and results in the community health needs assessment process.

Additional information on how CHNA developers can engage patients, families and community members throughout the CHNA process can be found in a recent guide from HRET and the Association for Community Health Improvement, *Engaging Patients and Communities in the Community Health Needs Assessment Process*.

Background

As a result of the Affordable Care Act (ACA), every three years all nonprofit hospitals in the United States are required to complete a community health needs assessment (CHNA). A CHNA is a systematic process involving the community to identify, analyze and prioritize community health needs and assets and implement a corresponding strategy to address the prioritized needs.[1] Given their scope and scale, CHNAs are becoming a driver of community collaborations and a springboard to launch community health improvement initiatives. Recognizing the potential impact of CHNAs, hospitals and health systems are becoming more sophisticated and innovative with their approaches, with many going beyond the required elements to make it a more robust and influential force of change in community.

Now in their second cycle since the ACA requirement, CHNAs are becoming more sophisticated as developers adopt processes and establish collaborations that can increase the impact on community health. One approach is discussed in _Engaging Patients and Communities in the Community Health Needs Assessment Process_, published by the Health Research & Educational Trust and the Association for Community Health Improvement. The guide illustrates and describes the Community Health Assessment and Implementation Pathway and how to integrate patient and community engagement in each step of the pathway.

The impact of CHNAs can be elevated through increased engagement of the community. In particular, users of care are untapped resources. They are patients, family care partners who support patients, and community members in general who have relied in the past or may in the future need hospital care. Patients are those who have used health care services, and family care partners are people who provide patient care roles, including a relative or a nonrelated significant other, friend or neighbor. Patients and families are a large subset of the "community members" group; some individuals use health care services much more than others and have unique and valuable perspectives on health care and community health.

A complementary approach, and the focus of this guide, is to strengthen the CHNA process by applying a research lens. Given the scope and scale of CHNAs, increasing the focus and rigor of the CHNA process will enable CHNA developers to make a more significant, targeted impact on the health of communities. Applying research can take two forms:

1. **Embedding research tools and principles into the CHNA process**. Some required components of the CHNA process – particularly data collection and analysis and evaluation – already lend themselves easily to research. Research is defined as, "the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions."[2] Gathering qualitative and quantitative data and then analyzing and synthesizing it to develop a coherent picture of community health status is a de facto research process. Furthermore, evaluating the impact of an intervention on community health is a research process. Understanding and applying the research tools to the CHNA process may help hospitals contribute to new knowledge about the health of their community and advance the field of community health by demonstrating the impact of their implementation strategies.

2. **Applying guidance from existing evidence-based research to address priority health needs**. A plethora of research is available to support hospitals as they address identified needs. By selecting strategies that have worked in similar environments, hospitals can ensure that they are allocating their time and resources effectively.

A research approach lends itself naturally to the CHNA process, particularly to three steps: 1) collecting and analyzing data on health needs, 2) evaluating the impact of the implementation strategies and 3) planning improvement strategies. Table 1 demonstrates the research elements that are part of the CHNA process and the types of data that support those steps.

TABLE 1. RESEARCH ELEMENTS IN COMPONENTS OF THE CHNA PROCESS

CHNA Component	Research Elements
Embedding Research Tools and Principles in CHNAs	
Collecting and analyzing data on health needs	**Purpose:** Describing disease burden, identifying health disparities among subpopulations, assessing determinants of diseases, describing existing resources in the community. **Data types:** » Quantitative — epidemiological data on disease burden, electronic medical record data, communitywide surveys » Qualitative — interviews, focus groups, town hall meetings
Evaluating the impact of implementation strategies	**Purpose:** Measuring and describing changes as a result of the implementation strategies, attributing health status changes to a specific intervention, identifying areas for improvement. Adds rigor to evaluation process to identify successful strategies and areas for improvement. Contributes to the body of evidence regarding the effectiveness of an intervention. **Data types:** » Quantitative — baseline disease/condition burden, process measures (e.g., number of screenings, number of people exposed to an intervention), outcomes measures (e.g., reduced disease incidence, improved health outcomes) » Qualitative — changes in norms, perceptions or behaviors
Applying Evidence-Based Research to Address Priority Health Needs	
Planning improvement strategies	**Purpose:** Utilizing existing research findings to guide what interventions are applied to address a community health need. Selecting the intervention with the highest potential for impact. **Data types:** » Quantitative — impact of intervention on community health status, process measures to indicate progress, aggregate evidence of effectiveness in different settings. » Qualitative — helpful partners and sectors to collaborate around intervention, evidence of changed social norms, health behaviors or environments **Tools:** Survey instruments, measurement techniques and tactics based on previously validated interventions.

Source: HRET, 2016.

The recommendations in this guide are based on a series of interviews, focus groups and panel discussions on the role of research in the CHNA process. HRET conducted interviews and focus groups with 65 individuals, including CHNA developers and experts, applied-communication theorists, and advocates for patients and their families, to elicit their perspectives on the CHNA process and how to better integrate research. HRET also worked with seven hospitals and health systems to review comparative effectiveness research from the Patient-Centered Outcomes Research Institute (PCORI) and the Agency for Healthcare Research and Quality (AHRQ), to assess their applicability to needs identified in CHNAs.

This report highlights how research can be applied to increase the impact of the CHNA process and offers practical guidance about where and how research practices can be utilized.

RESEARCH TOOLS AND PRINCIPLES FOR THE CHNA PROCESS

When incorporating research components into the CHNA, hospitals should be mindful of their Institutional Review Board (IRB) rules and regulations regarding community-based research, especially if the patient population is specifically targeted. While such research would most likely be considered minimal risk, confirming with the IRB is always a good idea.

PATIENT AND COMMUNITY ENGAGEMENT IN CHNA-RELATED RESEARCH

The CHNA process is designed to engage communities, a concept that can also be applied to the research component. Patients and community members are most often engaged in the qualitative components of research – that is, taking part in interviews, focus groups and town hall meetings. These forums allow for the exchange of information and opinions that guide the prioritization process. As hospitals embark on assessments in their communities, it is important to be mindful of doing the assessment *with* the community — instead of *on* the community – to promote joint ownership of the community health assessment process and subsequent improvement work.

Patient-centered outcomes research (PCOR) and community-based participatory research (CBPR) are research approaches based in principles and techniques that can be incorporated into a CHNA process. Both approaches encourage the integration of patient, family and community voices; support the collection of more comprehensive and nuanced information about the individuals who make up the community; and provide guidance about how best to implement and evaluate interventions.

COMMUNITY-BASED PARTICIPATORY RESEARCH

CBPR is a "collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each partner brings."[3] CBPR provides a valuable model for community engagement research and is naturally aligned with the CHNA process. Table 2 shows how CBPR principles are part of a robust CHNA process.

CBPR Principles [4]	Relation to CHNA Process
Recognizes community as a unit of identity.	The unit of analysis for CHNAs is the geographic community, which is broken down into subpopulations to detect disparities in health outcomes between groups.
Facilitates collaborative partnerships in all phases of the research.	CHNA developers can foster long-term, collaborative partnerships with community members, patients and families around assessing and addressing community health needs. These partnerships can help guide the focus of the prioritized needs, strategies selected to address them, and the implementation and evaluation of the intervention.
Integrates knowledge and action for mutual benefit of all partners.	By soliciting input of individuals in the community served, the hospital gains a more nuanced perspective of community health issues. Patients and community members may benefit by having their health needs addressed in a manner that is socially and culturally appropriate. Furthermore, their involvement may lead to their taking on a role as part of the solution to the issue.
Promotes a co-learning and empowering process that attends to social inequalities.	Engaging the community throughout the CHNA process promotes a sense of joint ownership and equity between the hospital and community. Involving a wide range of community members provides diverse perspectives that illuminate potential disparities.
Involves a cyclical and iterative process.	The CHNA process is an ongoing cycle that should include periodic reflection and course correction to best meet community needs.
Addresses health from positive and ecological perspectives.	CHNA developers are encouraged to target the social determinants of health in the community in order to address the upstream factors affecting health. Many CHNAs incorporate an asset-mapping process to identify and engage individuals, organizations and resources that support community health improvement.
Disseminates findings and knowledge gained to all partners.	CHNA results are publicly available and widely distributed to participants, stakeholders and the community at large.

Source: HRET, 2016.

By applying these principles to assessment and evaluation work, CHNA developers can ensure that community members are engaged, their voices are heard and their involvement is maximized.

Patient-Centered Outcomes Research

PCOR principles are more clinically focused on the patient population, but can inform an approach for keeping in mind the needs of patients, families and community members. PCOR "considers patients' needs and preferences and focuses on outcomes most important to them. PCOR findings can help patients, families and community stakeholders make better-informed decisions about health and health care options."[5] The process of conducting PCOR can clarify outcomes that matter to patients and define steps to effectively and efficiently achieve those outcomes.[6] Table 3 shows the link between elements of the Patient-Centered Outcomes Research Institute's descriptions of PCOR and a robust CHNA process.

Table 3. Linking Patient-Centered Outcomes Research with the CHNA Process

PCOR Principles[7]	Relation to CHNA Process
Assesses the benefits and harms of preventive, diagnostic, therapeutic, palliative or health delivery system interventions to inform decision making, highlighting comparisons and outcomes that matter to people.	Assesses the benefits and harms of how community health-related interventions would affect subpopulations in the community served.
Includes an individual's preferences, autonomy and needs, focusing on outcomes that people notice and care about, such as survival, function, symptoms and health-related quality of life.	Encompasses the opinions of community members, patients, families and other stakeholders, including prioritizing health needs and how to address them.
Incorporates a wide variety of settings and diversity of participants to address individual differences and barriers to implementation and dissemination.	Incorporates perspectives from a diverse range of participants across the community. This input is used throughout the CHNA process, including when determining how to address individual differences, gaps and barriers related to health-related interventions and disseminating information to the community.
Investigates optimizing outcomes while addressing burden to individuals; availability of services, technology and personnel; and other stakeholder perspectives.	Identifies available resources — both human and financial — within the hospital and the community that can be leveraged for health-related interventions that in turn collaboratively optimize outcomes for individuals.

Source: HRET, 2016.

Engaging patient, family and community stakeholders in the CHNA process can also help to identify potential research needs. For example, stakeholders may identify aspects of a health need that the hospital may not otherwise be aware of, leading to further investigation to identify interventions that could address the need.

GUIDING PRINCIPLES FOR COMMUNITY-BASED RESEARCH

Leading a thoughtful community engagement effort as part of the CHNA process is not limited to those individuals with specialized research training. Though a wealth of resources exist to support CHNA developers through a CHNA process, it may be beneficial to partner with other community organizations that can contribute research expertise. Such organizations may include public health departments, public health institutes, or local universities or schools of public health. Involving these entities not only brings rigor to the research process but also may open access to otherwise unattainable data, resulting in a partnership that can help implement strategic goals.

Guiding principles to consider when engaging community members about their community health needs include:

1. Involve community members in developing surveys or interview guides to ensure that questions are culturally appropriate and understandable. Do not use jargon, as most people outside of the health care field will not understand it.

2. When developing questions, make sure the questions accurately and directly address what is being measured.

3. Keep the wording of questions simple, with clearly defined terms. Avoid leading questions, two-part questions or questions that make assumptions about the respondent.

4. If approval from an Institutional Review Board is necessary, submit all questions used.

5. Test questions on a small sample of potential respondents so they can give feedback and identify any confusing terms or suggest modifications needed.

6. Keep surveys short to reduce the time burden on the respondent and increase the response rate. Only include relevant, necessary questions.

7. Collect responses from a large and diverse group of individuals who are representative of the community served. If there is a significant non-English speaking population, consider approaches that would allow those individuals to participate in their preferred language.

8. Do not ask very personal questions unless necessary, as doing so might alienate participants. If such questions are necessary, consider placing them toward the end of a survey or interview so trust and rapport can be developed. Avoid asking personal questions during focus groups.

9. Train individuals who will be conducting interviews and focus groups to perform this work consistently and neutrally so as not to influence responses.

10. Develop standard processes for analyzing data. This is particularly important when coding qualitative data, as it is a fairly subjective process.

Table 4 describes suggested research practices to help in collecting data and surveying, interviewing or conducting focus groups and community or town meetings.

TABLE 4: SUGGESTED PRACTICES FOR COMMUNITY-BASED CHNA RESEARCH

COMMUNITY SURVEYS

Content and format	» Assure respondents of confidentiality. » Collect race, ethnicity and language data in a culturally appropriate manner. » Ensure that survey questions are culturally appropriate and at a literacy level and language that respondents can understand. • Review the survey draft with community members to see what needs to be modified. » Provide versions of the survey in the languages spoken by community members. » Consider using or modifying a validated survey instrument or questions. » Assess regularity of health care usage as frequent users may have a unique perspective. » Allow space for qualitative answers. » Provide the option for respondents to be contacted for further involvement in the CHNA process. » Distribute the survey online, on paper, or both. Consider using both methods if there are major segments of the community's population who do not have internet access.
Participants	» Consider oversampling vulnerable populations since interventions would likely need to be focused on the needs of those groups. » Distribute the survey where people live, work, learn and play – at churches, local businesses, health fairs, etc. » Widely advertise the survey using social media, newspaper advertisements, etc. » Engage community leaders to encourage participation in the survey among their constituents. » Consider specifically surveying the patient population.

Participants	» Consider whom to interview: • Interview stakeholders from a variety of sectors in the community. • Engage clinicians – including physicians, nurses, community health workers, etc. – for interviews as they likely have insights into the health needs of patients in the hospital. • Interview individuals representative of the community, including subgroups experiencing health disparities. • Supplement topic areas with sparse secondary data by interviewing community stakeholders knowledgeable in that area. » Find innovative ways to recruit for stakeholder interviews: • Ask community leaders if they know and could provide connections to potential participants with the characteristics being targeted. • Engage clinicians in hospitals or any associated medical groups and practices to identify patients for interviews. • Talk to hospitals' patient and family advisory councils (PFACs).
Location	» Make the location easily accessible; consider factors such as proximity to public transportation, time of day, availability of parking, child care, etc. » Hold the interviews in a neutral space (i.e., not the hospital). » Consider online or phone interviews to reduce barriers to participation.
Facilitator	» Ensure that the interview facilitator is culturally competent and speaks the language(s) spoken by the interviewees. » Use a facilitator who is well trained in moderating interviews, including keeping participants on topic and maintaining a neutral position.
Developing interview questions	» Develop an interview guide so the same questions are asked across all interviews. • Ask short and open-ended questions to encourage dialogue on various topics. • Review the list of questions ahead of time with community members to ensure that questions are culturally appropriate and at a level that participants would be able to understand. • Be aware that the interviewer facilitator cannot ask people to identify their health conditions. • If possible, provide the questions to attendees ahead of time.
Conducting the interviews	» Explain to participants how their input will be used. » Establish confidentiality of the participants' responses. Especially in small communities, participants may be worried about their names being attached to their comments. » Provide an estimated timeline of when final results will be shared. » Ask whether the individual would like to be involved in future stages of the CHNA and set the process for continued engagement. » Establish realistic expectations for what the hospital and partners can do to address community needs.

Participants	» Consider whom to sample: a cross-section of the whole community and/or more targeted groups? » Contemplate recruiting from existing groups (e.g., PFACs, church groups). » Find innovative ways to recruit for focus groups where people live, learn, work and play (e.g., advertisements on social media, in newspapers, on the radio, at churches, local businesses, etc.). • Engage clinicians to identify patients for focus groups. » Consider members of the community who may not be easily reached and brainstorm how they can be recruited. » Encourage attendance through reminder notices. » Limit focus groups to 10 or fewer participants to ensure that everyone's opinions can be heard.
Location	» Make the location easily accessible for community members. Consider factors such as proximity to public transportation, time of day, availability of parking, child care, etc. » Hold the focus groups in a neutral space (i.e., not the hospital). » Consider holding virtual or phone focus groups to reduce barriers to participation. » Focus groups should typically last no longer than 90 minutes.
Facilitator	» Use a facilitator who is well trained in moderating focus groups, including keeping participants on topic, maintaining a neutral position, and making sure that everyone participates and is listened to. » Ensure the facilitator is culturally competent and speaks the language(s) spoken by attendees. » Consider using a facilitator from a neutral third party, so participants feel more comfortable.

Developing focus group questions	» Develop a focus group question guide, so the same questions are asked across multiple focus groups.
	  • Ask short and open-ended questions to encourage dialogue on various topics.
	  • Review the list of questions ahead of time with community members to ensure that questions are culturally appropriate and at a level that participants would be able to understand.
	  • If possible, provide the questions to attendees ahead of time.
	  • Refrain from asking very sensitive questions that individuals would not want to share in a group.

Conducting the focus groups	» Establish confidentiality of the participants' responses. Especially in small communities, participants can be concerned about their names being attached to their comments. » Explain to participants how their input will be used. » Give participants an estimated timeline of when results will be shared. » Establish realistic expectations for what the hospitals and partners can do to address community needs. » Ask whether the individual would like to be involved in future stages of the CHNA and set the process for continued engagement.

Participants	» Advertise the meetings where people live, work, learn and play using social media, newspapers, radio, announcements and flyers, local organizations, support groups, PFACs, etc. » If possible, offer child care for participants. » Explain why the CHNA is relevant for the whole community.
Location	» Make the location easily accessible for community members. Consider factors such as proximity to public transportation, time of day, availability of parking, child care, etc. » Hold the meetings in a neutral space (i.e., not the hospital). » Consider coordinating the meeting with existing community or town meetings.
Finding a facilitator	» Ensure that the facilitator is culturally competent, speaks the languages spoken by community members and is sensitive to attendees' needs. » The facilitator should be well trained in moderating community meetings, including keeping participants on topic, ensuring that louder voices do not drown out others, and maintaining a neutral position.
Developing an agenda and questions	» Develop a draft agenda and questions and, if possible, distribute them to attendees ahead of time. » Ask participants open-ended questions to encourage dialogue about various topics. » Review the list of questions ahead of time with community members to ensure that questions are culturally appropriate and at a level that participants would be able to understand.
Meeting logistics	» Explain to participants how their input will be used. » Consider using voting devices (clickers, cell phones apps, etc.) to gain input from more community members, especially those who may not feel comfortable speaking up in a public setting. » Tell all participants how their feedback will be used and when results will be shared. » Establish realistic expectations for what the hospitals and its partners can do to address community needs. » Provide the option for participants to be contacted for further involvement in the CHNA process; this is an easy way to identify individuals who desire increased engagement.

Source: HRET, 2016.

SHARING KNOWLEDGE THROUGH THE CHNA PROCESS

Engaging patients, families and communities in the CHNA process can also support hospitals and health systems in better understanding how to share with their communities the results of existing and ongoing research and evidence-based interventions. Through their interactions with community stakeholders during the CHNA process, CHNA developers can inquire about which formats and languages would make research findings accessible to community members. Potential dissemination strategies could include websites; online videos and podcasts; social media; brochures; newsletters and e-newsletters; radio programs;

and via speakers at local events (e.g., farmers markets and health fairs), organizations (e.g., churches, schools) and other groups (e.g., patient and family advisory councils, social committees). Additionally, if patients, families and community members gain awareness and knowledge of research related to their community's needs, it may encourage them to become more involved in future CHNAs or research initiatives.

APPLYING RESEARCH RESULTS TO INFORM IMPROVEMENT STRATEGIES

Applying the results of evidence-based research – both quantitative and qualitative – from other sources is a key part of the CHNA process, particularly when developing and implementing implementation strategies. Selecting the appropriate interventions can be informed by looking at strategies that have been successfully employed and evaluated by other health care organizations. The Patient-Centered Outcomes Research Institute and the Agency for Healthcare Research and Quality have produced the results of comparative effectiveness research on topics related to commonly identified CHNA needs such as obesity and behavioral health. Those resources can be found online:

- » AHRQ Health Care Innovations Exchange — https://innovations.ahrq.gov/
- » PCORI — http://www.pcori.org/research-results/pcori-literature
- » PCORnet — http://www.pcornet.org/

Though CHNA developers can look to academic literature for effective interventions related to community health needs, many research studies lack information on the process or tools needed to implement the intervention. There are a variety of online resources that distill the key elements of interventions to guide CHNA developers toward what is most effective for improving health. These resources include:

- » CDC Guide to Community Preventive Services — http://www.thecommunityguide.org/
- » CDC Community Health Improvement Navigator — http://www.cdc.gov/chinav/
- » County Health Rankings and Roadmaps — http://www.countyhealthrankings.org/

CONCLUSION

Community health needs assessments continue to be developed into sophisticated vehicles to drive community health improvement initiatives across the United States. By incorporating community-based research and patient-centered research principles into the CHNA process, hospitals and health systems can develop an approach that promotes sustainable community engagement and information exchange. Furthermore, knowing how existing research findings can be applied to address identified health needs in the community has the potential to increase the impact and efficacy of interventions. Strategically applying research principles and results to the CHNA process can help hospitals and health systems achieve their goal of fostering a healthier community where all individuals can reach their highest potential for health.

ENDNOTES

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