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# Community Health Decision-Making: The Power of Focus Groups in Rural Communities

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#### Abstract

This study isolates the extent of influence primary and secondary data have on determining prioritized community health needs in rural communities. Specifically, it looks at the extent of influence qualitative data have on the decision-making process. To understand the determinants of decision making, significant health needs as identified in 16 community health needs assessments, which used the same mixed methods research design, were aggregated and analyzed. Findings show that health concerns stemming from qualitative sources were more likely to be selected as a significant need, particularly from focus groups. The findings highlight the importance of focus groups as vehicles for community empowerment and engagement. Implications for healthcare research design include the need to provide more outlets for community input, especially in rural settings.

**Keywords:** Health education; Community health needs assessments; Qualitative methods; Focus groups; Community-based participatory research; Rural health

## Introduction

Hospitals, public health units, and federally qualified health centers have been regularly assessing the health of their communities for many years, sometimes working conjointly to do so. In 2010 the United States Congress passed the Affordable Care Act (ACA) which requires tax exempt 501(c)(3) hospitals to conduct a community health needs assessment (CHNA) every three years and adopt an implementation strategy [1]. American public health departments have concurrently undertaken a voluntary national accreditation process which requires them to conduct a community health assessment every five years and craft a corresponding community health improvement plan [2]. Gaining community input regarding access to and delivery of health services, identifying health concerns, and ways to address them are the objectives of conducting a CHNA.

While United States federal guidelines are clear about the consequences of not conducting a CHNA, imposing an annual \$50,000 excise tax on hospitals not in compliance, federal standards are vague about how to conduct a CHNA [3]. Apart from the mandate that assessments must be transparent, available to the community, and include individuals with public health expertise, neither the ACA nor the Public Health Accreditation Board specifies the process for conducting a CHNA [4,5].

In the absence of federal oversight, consultants and organizations have developed models for conducting CHNAs, with the National Center for Rural Health Works and Catholic Health Association being leaders in the field in the United States. Typically, there is a large reliance on quantitative data such as demographic data, community health profiles, preventative care data, children's health, and adult behavioral risk factors. Data collected objectively and remotely can be privileged over those needs that are expressed locally [6]. The tendency

to prioritize secondary data in the arena of public health is also reinforced by the United States' public health departments' reliance on mainly quantitative research as a sound basis for decision making [7] and the federal government's focus on science-based research [8]. The influence of the biomedical model, the partiality given by medical schools to clinical epidemiology, and the preference of funding agencies for quantitative descriptive surveys may explain some of the dominance given to these findings [9].

Increasingly there is a trend to include qualitative data alongside quantitative data in CHNAs [10,11]. Qualitative research emphasizes the importance of context; understanding the social context in which the data were collected is intrinsic to understanding the data [12].

Specifically, using qualitative data can integrate community members' voices, enhance the knowledge gained, and promote community engagement in the CHNA process [13]. Ultimately, once community needs are identified as a priority, the Affordable Care Act and public health accreditation guidelines stipulate that hospitals and public health units must address them, yet there is little federal guidance on how to prioritize the needs identified by the assessment, other than requiring community input [4,5]. Do the prioritized needs reflect overlapping areas of concern and therefore reflect a convergence of expressed voices? Or alternately, does one data set hold more sway in decision making? The addition of qualitative data invites a closer look at how this data set is influencing community health needs assessment outcomes.

With more public health units seeking voluntary accreditation, there is critical need to analyze the determinants of health care prioritization and decision making in order to improve community health. To better understand which data sets influence prioritized health needs, the decision-making process of numerous CHNAs that used the same mixed methods design was analyzed. This article first describes the CHNA methodology on an individual community level so that aggregate findings can be better understood. Then, it analyzes the decision-making process in the context of who has voice and agency in rural communities.

#### Community-Based Participatory Research

Inviting community input takes on a community-based participatory research approach that is defined as "a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings" [14, p. 2]. In turn, these community partnerships build lasting relationships between health care systems and community organizations and foster professional connections [15,16]. Community-partnered approaches to health research satisfy the increasing demand for research that is "community based, rather than community placed" [17, p.5].

Community based participatory research is often incorporated into a mixed methods research design because it offers the benefit of engaging community members and researchers in collecting contextrich and empirical data [18]. Yet integrating qualitative data, especially in rural areas, can be problematic. The most common qualitative data collection methods used, particularly in health care research, are interviews and focus groups [19]. Gathering meaningful data from these methods is hinged on a strong rapport between the interviewer and respondent to facilitate honest, candid responses. Speaking up against a community asset or economic generator, such as a health care facility, during a focus group can relegate community members to a position of "outsiders" [6]. Problems such as alienation and stigma can be revealed through qualitative methods, and along with the expenses associated in collecting qualitative data, may explain the preference for quantitative data over qualitative data [20].

Moreover, while the use of community-based participatory research is gaining legitimacy by academics and recognition in the United States by professionals in public health [21], nursing [22], and medicine [23], skepticism remains about its scientific rigor [17]. However, the core principles of community-based participatory action including cooperatively engaging community partners, co-learning about community gaps and assets, and empowering participants to increase control over their lives has been particularly useful in better understanding health disparities and social problems [16,24]. As Silverman [25] claims, the best research method to obtain these views and experiences is to use qualitative methods such as interviews and focus groups.

#### Community health needs assessment methodology

#### Procedure

The selected CHNA design used a community-based participatory research approach and integrated primary data obtained from conducting key informant interviews, facilitating a community focus group, and disseminating a survey. Additionally, secondary data were collected and analyzed to provide a snapshot of the area's overall health conditions and outcomes. Specific measures regarding clinical care and health behaviors were collected at the county level and compared to the state and national level. Information was collected from a variety of sources including the U.S. Census Bureau; the North Dakota Department of Health; the Robert Wood Johnson Foundation's County Health Rankings and North Dakota Health Care Review, Inc.

# Setting

Of North Dakota's 36 critical access hospitals, 16 were selected to receive assistance from the Center for Rural Health in conducting a CHNA. This sample of 16 CHNAs represents hospitals from the aging, rural populations on the eastern part of the state as well as the young and growing, but stressed and strained hospitals located in the western oil impacted area. The crossroads of rural health and the oil boom make health care in North Dakota a fascinating and timely situation to examine the decision-making process.

#### Data collection and participants

In person, one-hour long structured interviews were conducted with six to ten key informants in each community. Additionally, a twohour focus group was convened with 12-15 community members. The same set of questions were asked to both groups of respondents. A steering committee comprised of hospital leadership and a local public health unit representative invited participants for both the key informant interviews and focus groups via telephone and email. Participants were selected for their interaction with medically underserved, low income, and minority populations as well as those who could provide insights into the community's health needs. In this way, those that directly interacted with the underserved populations represented multiple voices, but there was not direct participation by marginalized community members.

Federal law mandated that a public health professional serve as a key informant [1]. The steering committee was encouraged to invite participants who represented diverse sectors in the community such as law enforcement, schools, clergy, elected officials, agricultural, economic development, non-profits, fire departments, ambulance, and other health care providers. Additionally, participants needed to represent the entire county or counties in the hospital's service area, not just the community in which the hospital was located.

Generally, community members outnumbered health care providers at the focus group at a ratio of five to one. In accordance with the institutional research review board criteria, all respondents were presented with an informed consent which explained the voluntary aspect of participation, the bounds of confidentiality, and anonymous reporting of their comments.

#### Surveys

The survey inquired about community health concerns, gaps, access to, and delivery of health services. Surveys were available at the front desks of the hospital, clinic, and public health unit. The steering committee also dropped off surveys at social services, the court house, banks, gas stations, grocery stores, libraries, post offices, and churches in towns throughout the county. Each survey contained a selfaddressed stamped envelope and was returned to the Center for Rural Health. Survey responses were entered into a password protected survey database and paper copies were filed in a locked filing cabinet. Approximately 500 surveys were disseminated at various community locations, with up to 1,500 surveys for larger communities, which represented about 25% of the population within the hospital's service area.

#### Sample size

Of the 500 print surveys disseminated, approximately 120 were returned per community, equating to a 20% response rate by community members. It is important to point out this survey was not intended to be a scientific or statistically valid sampling of the population. Rather, it was designed to be an additional tool for collecting primary data from the community at large. Adding on the key informant and focus group participants, each CHNA process reflects engagement with 150 community residents in each community. This figure multiplied 16 times gives an approximate sample size of 2,400 participants.

## Data analysis

Content analysis was employed to review the qualitative data stemming from the key informant interviews, focus group transcripts, as well as open ended survey questions to pull out themes; individual responses to the interview script served as the unit of analysis. Categories of needs emerged which were operationally defined and had a clear method of criteria [26]. For example, the category of mental health issues absorbed the need for substance abuse issues. Any mention of a need for more health care staff, providers, primary care physicians or visiting specialists was grouped into the need of health care workforce shortage. However, this workforce grouping excluded the need for mental health providers as the need for mental health providers in rural areas is significantly high and the shortage of providers needs to be documented [27]. The frequency of the category indicated the importance of the subject matter [28]. As recommended by Padgett [29], emerging categories were member checked by another researcher to ensure coding was done objectively and reliably.

Secondly, survey data which reported on an alphabetized list of 20 potential community concerns such as conditions relating to schools, aging population resources, alcohol and drug use, environmental concerns, health care workforce, and poverty were analyzed. Respondents were asked to rank each concern on a scale of one to five, with one being less of a concern and five being more of a concern. Responses were averaged and those concerns with the top five highest averages were taken from each CHNA. To compare the differences in perceptions of community concerns, community members' responses were tallied separately from health care providers' responses. Finally, secondary data compiled from County Health Rankings and North Dakota Health Care Review, Inc. were reviewed from each CHNA with a particular eye on how the hospital's county fared compared to other state averages. To determine the top five most pressing health conditions, behavior and outcomes, the measures where the county was underperforming the state average by five percentage points or more were recorded.

#### Prioritization process

Once both primary and secondary data were collected and analyzed, an amalgamated list of potential community needs was presented at a second community group. Following a discussion of the findings, participants received a ballot card which listed all the potential concerns. Participants were instructed to review the list and then select the top five concerns they deemed most significant to the community. To further help with the ranking of data, the prioritization criteria recommended participants to think of the community concern in terms of its importance, impact, severity, and reach it had on the community.

After all the votes were cast, they were tallied to determine the most frequently voted for concerns. A discussion followed to ensure that the ranked needs correctly aligned with the community concerns. Often, a robust discussion ensued where community members changed their minds about certain needs and re-prioritized needs after hearing local input. In cases of a tie, some communities opted for a second vote to cull the needs. To serve as a guide for strategic planning, the results were totaled and categorized into three tiers based on the number of

votes received with Tier 1 needs reflecting the needs receiving the most votes. The identified needs satisfied the terms of the community health needs assessment as mandated by the ACA and provided hospitals with a clear list of needs to address to improve community health.

#### Results

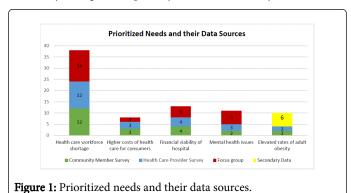
#### Aggregating data

With an eye for emerging community health care needs on a statewide level, each of the Tier 1 needs from the 16 individual CHNA reports were aggregated. The needs occurring most frequently as Tier 1 needs were: health care workforce shortage; higher costs for health care for consumers; financial viability of hospitals; mental health issues; and elevated rates of adult obesity.

While the list of Tier 1 needs has been presented to state legislators for policy change and as guidance for resource allocation, resistance to accept the credibility and generalizability of qualitative data is common in public policy [30]. The lack of credibility may be explained by policy makers' limited understanding of the qualitative data analysis and lack of understanding on how the findings of the research were obtained [31]. In response to this there is cause to explicitly identify from which data sets the needs appeared and draw a deeper understanding of the qualitative contributions.

#### Decision making process

To better understand from which data sources these needs emerged, individual reports were reviewed to determine their origin, whether it derived from primary or secondary data, qualitative or quantitative in nature. With a triangulated data set, where there are overlapping results from two or three data sets, it is important to monitor if one data source has excessive influence in the community and privileges one set of voices or type of data at the expense of others. While the power of using qualitative data is found in its rich descriptions, qualitative data can be coded and conveyed numerically for data visualization. Figure 1 shows that qualitative data outweighed quantitative data significantly, with the prioritized needs seven times more likely to originate in primary data than secondary data.



Discussion

Reviewing where these needs originated isolates the power of influence one data set has. For example, the lack of health care providers was discussed as a pressing need in 14 different community focus groups; identified as a pressing need in a survey of health care providers in 12 communities; and in a survey of community members in 12 communities, yet secondary data did not flag the ratio of primary care physicians to patients as lagging. This analysis not only shows the utility of including primary data in a CHNA process, but also shows the limits of using only secondary data.

Additionally, the qualitative data reveal concerns that are community specific. Concerns that are localized at the community level, such as "fear that hospital may close its doors" are crucial to gaining an accurate understanding of problems as well as constructing strategies to target them. Concerns expressed locally may have more stock as they prioritize residents' perceptions and subjective knowledge [32]. Using insider knowledge can help increase a community's capacity to identify problems and grant confidence to solve them [33]. Moreover, involving community voices lays the groundwork to pinpoint strategies that are culturally relevant to rural areas [34]. As Singer [35] points out community members are willing to participate in healthcare and social service decision making and given sufficient time, "can gain confidence to make decisions about complex subjects" [p. 423].

Secondary data are valuable in showing trends in clinical behavior, such as elevated rates of adult obesity, but they cannot convey personal concerns. Especially germane in rural areas, secondary data are not available for mental health providers. The criteria used to count as a qualified mental health provider are strict, and often time providers exist, but offer services on a part-time basis, commute from out of the service area, or offer services via telehealth technology. Other times, clergy offer counseling services. Yet these offerings are not captured on national data sources.

#### Weight of Focus Groups

Of importance is the weight focus groups have in contributing to prioritized needs. The concerns of financial viability and mental health issues predominantly emerged in focus group discussions as illustrated in Figure 1. The focus on group interactions enables the researcher to analyze not only what was said, but how it was said in the context of a group exchange, including nonverbal behavior and the tone of exchanges. As Wilkinson [36] informs, sarcastic remarks or long silences following a comment can speak louder than words and illustrate the co-construction of meaning. At one focus group, the researcher noted rolling of the eyes by some health care provider participants when others talked about a lack of confidentiality among hospital staff which was perceived to cause some community members to travel to another hospital to receive care. While this concern was noted, the nonverbal feedback underlined the barrier and helped the researcher to access elements not captured in other methods [37].

Primary data like focus groups are examples of what James Carey classifies as ritual communication, where a message is not sent and received, but created mutually by participants and fosters a sense of community [38]. This model of communication is well-suited to the dynamics of rural communities where, whether at the gas station or the local café, communication is a central daily ritual that helps to form and sustain communities. Moreover, focus groups depict the collaborative effort and social contribution to decision making and acknowledge the communion, participation, and fellowship inherent in the communication process. Knowledge that is socially constructed with others has the tendency to gain more traction and buy in from community members [39].

In focus groups, interaction is concentrated among participants, rather than between a researcher and participant as in a key informant interview; this peer-to-peer communication fosters discussion on divergent issues and the reasons why it might be [37]. For example, one community survey ranked "Attracting and retaining young families" as a top community concern. When this topic emerged in the focus group, respondents provided multiple ways of how this problem manifested in the community and pinpointed numerous causes, explaining that there was a housing shortage and no available lots to buy in town. The focus group revealed a perception that there was a disconnect in development and demographics, meaning that banks were not willing to take risks and offer loans for new construction. This rich and detailed information not only deepened understanding of how the problem impacted the community, but laid groundwork for who needs to be consulted when making plans to address it. These reasons shed light on why focus groups hold the most influence and provide a foundation for a systematic, transparent and justified decision-making process. Visibility is especially important for 'soft' decision problems that often occur in medicine and health care [40]. As focus groups gain traction by health educators and feminist researchers as a means to work with vulnerable individuals and empower them to change their worlds, they need to be recognized for their contribution in the decision-making process [41,42].

The widespread use of focus groups in the health area, along with the need for policy makers to perceive and understand the perspectives of community members, may help increase the acceptance of qualitative methods by policy makers [43]. Within the framework of applied policy research, qualitative data is gaining recognition for its contributions in offering insights and explanations of social behavior [31]. When numerical data is strengthened with text, overall understanding is based on more diverse viewpoints, thereby making it easier to make successful and unanimous decisions [44]. With many health care reforms calling for increased public involvement in decision making, the influence of focus groups can help grant acceptance to qualitative data by offering legislators theories of social action grounded on the experiences and perspectives of those likely to be affected by a policy decision [45].

#### Limitations

Given the emphasis on the use of focus groups it is important to look at who was in attendance. An obvious weakness in terms of data validity is the potential bias created by hospital leadership in selecting CHNA participants who may present socially desirable and favorable community impressions [46]. Often, the participants were longtime residents who had unique perspectives from their various leadership roles. Abelson [47] warns that choosing an appropriate combination of public, elected officials, experts, and stakeholders to participate in the assessment process can be complicated. The views and voices of those who are invited will have power and privilege in the decision-making process despite facilitation attempts to monitor against one or two speakers dominating the conversation or pushing for consensus. Although the data triangulated from multiple data sources helps to combat this bias, the self-selection bias is worth noting.

# Conclusion

Since CHNA research designs vary it is important to understand which data sources hold the most sway in rural communities. One strategy to make CHNAs more community responsive is to incorporate qualitative methods so hospitals and public health

organizations can receive concerns stemming directly from community members' voices. This is especially paramount for conducting CHNAs in rural communities where opportunities to speak candidly about hospital services are limited due to lack of anonymity [48]. The inclusion of qualitative data, specifically focus groups, helps to identify trends that are not detected in fixed data sources and augment understanding of important aspects of environmental, social, and organizational contexts [49]. Given the amount of health care facilities conducting CHNAs, it is an exciting time to review how qualitative data influences the prioritization process. Understanding the importance of focus groups in the decision-making process has explicit implications in research design and highlights the ritualistic nature of communication preferences in rural communities and the need for more opportunities for community participation and feedback.

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