Evaluating the Utilization of the Community Health Assessment:

Cabarrus County, North Carolina

Ву

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Abstract

There are 100 counties in North Carolina and 85 local health departments. As of July 2011, roughly 72 percent of North Carolina health departments were accredited. This includes Cabarrus Health Alliance, located in Kannapolis, NC. One of many measures and standards used to award accreditation by the North Carolina Division of Public Health is a completed community health assessment. Currently, there is plethora of literature about how a community assessment can be beneficial to a community, but more documentation is needed to explain how North Carolina's local health departments can use the data collected to maximize benefits to the community.

This research evaluates utilization of a community assessment, specifically among the individuals (Community Planning Council) involved in completing the assessment. The methods used for this research included data collection through an online survey to assess the level and patterns of utilization of the Cabarrus Community Needs Assessment (CNA). The online survey contained 25 questions; 16 questions were quantitative, and nine questions were qualitative.

A total of 65 prospective participants were contacted, who were members of the Community Planning Council spanning three separate assessment periods from 2004 through the presently convening 2012 Community Planning Council. Based on an emailed recruitment letter, with two follow-up requests, 38 participants responded to the survey, for a 58 percent response rate.

Results of this evaluation show that among the survey respondents 51 percent utilized the CNA to supplement a work related project and 16 percent utilized it to supplement a community project; 100 percent of respondents felt that the CNA was a valuable resource for Cabarrus County and 95 percent of respondents felt the CNA reported accurate statistics. Only 63 percent of respondents knew how to access the CNA online, which could suggest either low accessibility or respondents chose to utilize a hard copy version in lieu of being unable to access the CNA online. It also could indicate a low likelihood of future council members of using the new CNA, if the distribution and accessibility remain the same.

The three primary recommendations derived from this research center on themes of accessibility and education. The first recommendation is to improve accessibility by educating present and past council members on how to access the CNA online. The second recommendation is that Cabarrus Health Alliance increase the knowledge among stake holders in specific industries (healthcare, nonprofit and government) regarding the data included in the CNA and how it can be useful. Finally, the third recommendation is to modify and improve the distribution process of the final CNA document using specific methods recommended by survey respondents.

Recommendations originating from the answers provided by respondents will allow Cabarrus County stakeholders, including the current 2012 Planning Council and Cabarrus Health Alliance, to make adjustments and improvements to the way the Community Needs Assessment is publicized, distributed and utilized in the county resulting in a larger impact in the county. IN addition, this research and the results of this study will add to the current body of knowledge about how one local health department and the key community stake holders use a community health assessment after it is submitted to the state for accreditation.

This research provided Cabarrus County an exciting opportunity to pilot a utilization evaluation based on the unique perspectives of members of the Cabarrus County Planning Council from three separate assessment periods. Finally, the success of this study shows that evaluating the CNA through a survey of key stakeholders, the planning council, is useful, feasible and can serve as a model for other counties in North Carolina.

Keywords: community needs assessment (CNA), community health assessment, evaluation, utilization, distribution

Introduction

Twenty three years ago, the Institute of Medicine (IOM) published *The Future of Public Health*. In this publication they defined the mission and the governmental role of public health. The mission states that the role of public health is "fulfilling society's interest in assuring conditions in which people can be healthy. Its aim is to generate organized community effort to address the public interest in health by applying scientific and technical knowledge to prevent disease and promote health" (1988, p.7). The mission of public health should be addressed by multiple entities including: private organizations, individuals and public agencies. The IOM emphasizes though that "the governmental public health agency has a unique function: to see to it that vital elements are in place and that the mission is adequately addressed" (1998, p. 7). This occurs at all levels, including federal, state, county and local and that each plays a unique role in three core functions: assessment, policy development, and assurance.

This research focuses primarily on the assessment role that the local level of government plays in the overall utilization and effectiveness of the community health assessment. The IOM committee responsible for the publication of the *Future of Public Health* recommends that every public health agency "regularly and



Figure 1: States Participating in the Assessment Initiative by Funding Cycle, 1992–2012 (CDC, 2011)

systematically collect, assemble, analyze, and make available information on the health of the community" this assessment should include "statistics on health status, community health needs, and epidemiologic and other studies of health problems" (1988, p.7).

In order to implement the IOM recommendations related to assessment, the Centers for Disease Control and Prevention (CDC) initiated its first cycle of a five year cooperative agreement in 1992 referred to as the Assessment Initiative (AI). The AI partners with state health departments and since the inception of the project has partnered with 19 different states during multiple five-year funding cycles. North Carolina is one of only two states that have been funded in all three cycles for the AI. Figure 1 details the states which have participated in the AI and their corresponding funding cycles.

Background

Local governments across the United States and the world are faced with rising demands for health care, limited resources and increasing health disparities. Numerous national health agencies, including the Centers for Disease Control and Prevention (1995), the Institutes of Medicine (1988), and the Department of Health and Human Services, through their Compassion Capital Fund (2003) emphasize that community assessments have a central part to play in examining and indentifying areas of need. By completing an assessment a community enables local health departments, practitioners, managers and policy makers to identify populations in greatest need and to ensure that health care resources are used most efficiently to improve the health status of those populations. A community health assessment (CHA) is a vital health care planning tool to be used at the level of families, communities and populations (Stoto, 2009).

Community assessments are important step for communities to complete, says Friedman

(2009), because the process and ultimate outcome, enables community decision makers to plan and deliver the most effective care to those in greatest need. Although community assessments do not directly impact health, they are used as a tool to identify resources and barriers to population health and they should be evaluated on "on its own terms…both on the quality of the information that it produces and on its usefulness to the larger community process" (Friedman, 2009, pg. 5). The National Association of County and City Health Officials (NACCHO), in their Accreditation Preparation and Quality Improvement program emphasizes applying the principles of equity and social justice in practice through assessing and completing health assessments.

The Assessment Initiative, a program funded through the CDC, states that a community health assessment can assist in ensuring that scarce resources are allocated where they will yield maximum health benefit and facilitate collaboration among community stakeholders in order to determine which health issues cause greatest concern which leads to innovative interventions to address those issues.

National Community Health Assessment

In 1992 the Centers for Disease Control and Prevention provided support and guidance to state health departments in assessing their progress toward goals established in the Healthy People 2000 objectives (Martin, 2009). Developing the Assessment Initiative (AI) program in 1992, the CDC "provided funds to six states to promote the development of innovative partnerships between traditional public health agencies and other public and private partnerships" (Dhara, 2002, p. 1). The AI began with eight states and a five year cooperative agreement and ran during 1992-1997. North Carolina became an active participant in the CDC AI program during the first 5-year cycle and has remained a continuous member since.

Currently, the AI program is in its fourth 5-year cycle which ends in 2011. Program emphasis for each 5-year funding cycle was tailored based on national public health needs.

With the support of the AI program, different tools and approaches have been developed with to assist state and local health departments in working with communities to assess health needs and develop plans to address them. North Carolina developed a model that is promoted through the CDC Assessment Initiative Program website, "North Carolina: Eight-Step Approach to Community Health Assessment" (CDC, 2011). This tool is in the form of a thorough Guide Book which has been regularly updated (Healthy Carolinians, 2011). This guidebook offers a national model for completing a community health assessment in eight phases.

Phase one of the guide book (Healthy Carolinians, 2011), establishes a Community Health Assessment team, referred to in Cabarrus County and this research as the Community Planning Council. The second phase is collecting community data, known as secondary data from various reliable sources (i.e. US Census, North Carolina Health Data book, American Community Survey, etc.). Phase three, is to collect primary data through a community wide survey or key informant interviews. Phase four describes how to interpret and analyze the primary and secondary data using a variety of methods, specifically citing scientific analysis. The fifth phase has the community health assessment team select community priorities. The methods for selecting these priorities include community presentations and meetings and facilitated discussion sessions. The final three phases, six, seven and eight incorporate the final indentified priorities and the collected data in order to develop a final CHA document, disseminate the document and information to the community (through county determined methods) and finally determine action plans to meet the selected priorities.

North Carolina Community Health Assessment

There are 100 counties in North Carolina and 85 local health departments. As of July 2011, 61 of those, roughly 72 percent of all health departments, were accredited. Although there are many measures and standard used to award accreditation by the North Carolina Division of Public Health one of those specific measures is a completed community health assessment.

The accreditation process, in North Carolina has been credited for promoting and expediting the sharing of best practices throughout the state (Menkens, Stone, Wood & Reed, 2009). The accreditation process began in 2002 when the North Carolina Division of Public Health and the North Carolina Association of Local Health Directors undertook an initiative to develop a mandatory, standards-based system for accrediting local public health departments throughout the state. Senate Bill 804 was signed in the fall of 2005, funding North Carolina Local Health Department Accreditation, which was established to improve the public health infrastructure by establishing an accreditation system for local health departments, as recommended by the public health task force in 2004. As stated in the North Carolina Public Health Task Force in the 2004 Report states that:

Community Health Assessment is also a critical part of the accreditation of public health agencies. Local public health agencies are mandated to conduct a collaborative, comprehensive CHA every four years that must include a review and analysis of secondary data, collection of primary data, and development of community action plans. Primary data collection is key in engaging community members in the discussion and planning for

community health improvement. (2005, p. 16).

The purpose of the North Carolina mandated community health assessment is to involve community members in examining important health issues and in selecting areas that community members identify as high priority (North Carolina State Center for Health Statistics, 2011).

In order for the 61 local health departments in the state of North Carolina to continue being accredited every four years, they will be required to regularly submit a community health assessment every four years and submit a narrative final report which includes indentified priorities for the county (or multiple county districts). According to Healthy Carolinians, during the three interim years between Community Health Assessments, the local health departments are required to do a State-of-the-County's Health (SOTCH) Report. These SOTCH reports are used to "track priority issues identified in the Community Health Assessment, identify emerging issues; and highlight new initiatives" (Healthy Carolinians, 2011).

Cabarrus County

Cabarrus County is located just north of Mecklenburg County in the south-central region of the state (Figure 2). Cabarrus County is uniquely situated in the state with both a very rural population and also an urbanized center of Figure 2 - Cabarrus County Kannapolis and Concord. The Cabarrus Health

department, leads the county's mandated public

Alliance, Cabarrus County's local health

health efforts. Cabarrus Health Alliance was organized in April of 1911 and is considered a national health pioneer as one of the first comprehensive rural – urban public health departments in the United States. In addition, it is one of only two public health authorities in the state,

created by the Cabarrus County Board of Commissioners in 1997, and is governed by a seven-member board. Healthy Cabarrus, a Certified Healthy Carolinians partnership, by the North Carolina Governor's Task Force for Healthy Carolinians, is led and facilitated by the Cabarrus Health Alliance. Among other roles, Healthy Cabarrus leads the development and completion of the community health assessment in Cabarrus County. The last Cabarrus community health assessment was completed in 2008 and the 2012 assessment process commenced in the summer of 2011.

In 2005, Cabarrus Health Alliance was one of the first local health departments in North Carolina to achieve accreditation. Cabarrus Health Alliance had completed a needs assessment every four years, beginning in 1997 (Healthy Cabarrus, 2007). As noted earlier, Cabarrus County completes a "needs assessment" which differs from the tradiontional community health assessment, but is intended to serve the same purpose. Cabarrus County completes the Community Needs Assessment (CNA) which differs from the North Carolina mandated Community Health Assessment slightly, as Cabarrus County includes additional indicators such as: public transportation, behavioral health, dental, and a more in depth environmental review. They analyze all the indicators (mandated and non-required) in order to select priorities. Their final priorities often include a few health related priorities and a few priorities effecting a broader industry or issue. They complete this CNA process by facilitating a collaborative partnership between Cabarrus Health Alliance, Healthy Cabarrus, and a variety of public and private representatives in the county. The private representatives are stakeholders and leaders within the county from various industries including: healthcare, government, business, community service agencies, and the faith community. Cabarrus Health Alliance provided administrative support for

this process. The first health assessment was completed in 1997 (before being state mandated for accreditation) and has continued every four years (Healthy Cabarrus, 2007). Invited partners convened a Community Planning Council which included representatives from health and human services, the faith community, education, city and county government, foundations, businesses, and community volunteers. The Council designed and conducted a research process with a primary focus of identifying current and emerging community needs. The goals of the Community Needs Assessment (CNA) include determining if the priority needs identified in previous assessments have changed, identifying and documenting progress made since publication of the previous assessment report, identifying new and emerging needs and issues, and identifying community assets relative to the identified needs (Healthy Cabarrus, 2011).

Research Goal

Although there is plethora of literature about how a community assessment can be beneficial to a community (Dhara, 2002; Curtis, 2002; Stafford-Alewine and Land, 2002; Oswald and Collins, 2002; Spice and Snyder, 2009) more documentation is needed explaining how North Carolina's local health departments use the data collected in the health assessment. More research is also needed to assess the usefulness of the process for the people involved in completing the assessment.

The overall goal of the research presented in this paper is to add to the current body of knowledge about how one local health department and the community it represents uses the community health assessment after the report is submitted to the state; specifically this issue is addressed from the perspective of Cabarrus County's Community Planning Council. Knowledge gained will assist Cabarrus County and other local health departments in North Carolina to

improve accessibility and increase utilization of the state mandated community health assessments. This research will provide Cabarrus County an opportunity to pilot an evaluation of the utilization based on the unique perspectives of members of the Cabarrus County Planning Council from 3 separate assessment periods. Additionally, this research will present detailed steps and methods used to perform the evaluation, should other local health departments embark on evaluating their own community's utilization of the Community Health Assessment. This research will attempt to provide insight about how the Community Needs Assessment is being used by the Cabarrus County stakeholders and will offer additional suggestions how the 2012 Community Planning Council in Cabarrus County could increase the accessibility and utilization by community residents and planning council members alike.

Research Methods

In order to address the research goals described above I collected data from the members of the Cabarrus County Planning Council who served from 2004 to the present. The primary method I used for data collection was an online survey managed through the Qualtrics software and University of North Carolina (UNC) at Chapel Hill Odum Institute (Qualtrics Labs Inc., 2009). In spring 2011, prior to building the survey tool, I obtained training in survey methodology and the Qualtrics software system through the Odum Institute as a component of a graduate level public health course in program assessment. Training on the Qualtrics software system was completed during an eight hour course which included a brief overview of: survey sampling, survey computing and data analysis, questionnaire design, data collection methods, and the basics of survey building using the software. After training, I was given access to an

individual password protected account in Qualtrics. All statistics were derived using standard descriptive methods as described in Gerstman (2008) which are produced directly by the Qualtrics software system or by the Microsoft Excel software.

IRB Review

Prior to commencing data collection, the UNC-Chapel Hill Institutional Review Board reviewed the study methodology which included a review of the survey tool and a recruitment email. The Institutional Review Board (IRB) is a committee established to review and approve research involving human subjects, in order to protect the rights and welfare of the human subjects. Because this research involved surveying human subjects, i.e., the Planning Council Members, IRB approval was sought. On October 5, 2011 the initial application for IRB approval was submitted by me, as primary investigator, and on October 10, 2011 IRB approval was given. The formal IRB status was "exempt" but included mandated consent language to be part of the contact information sent to survey participants. Data collection processes began the following day, October 11, 2011.

The survey tool and IRB application were reviewed by faculty members at UNC-Chapel Hill and stakeholders at the Cabarrus Health Alliance in Kannapolis before they were submitted for approval. UNC-Chapel Hill faculty reviewed the survey tool and suggested grammatical changes which improved the readability and response rate. Cabarrus Health Alliance staff members reviewed the survey tool to assure that practical questions were being asked verifying that the results would be usable and lead to an increase in knowledge among the Cabarrus County Planning Council. Cabarrus County Planning Council members represent a variety of industries which all have a role to play in improving the health status and standard of living in

the county. Industries represented include, health care, government, education, nonprofits, transportation, the faith community and more. Gaining insight from current and past council members is the first step in improving accessibility and utilization. Council members are more likely than other community stakeholders to use the completed needs assessment because they participated in the data gathering, narration and distribution of the document. It is logical to assume that if council members are not accessing the document or utilizing the data other community stakeholders, who were not council members, are not using it either. Therefore, an important first step in evaluating the effective use of a CNA is to analyze the utilization of Council members.

Recruitment of Survey Population

The first step in data collection after the research methodology was approved by the IRB, was to send a recruitment email, which can be reviewed in its entirety in Appendix A, to Cabarrus County Planning Council members from the 2004, 2008, and 2012 assessment periods. A total of 65 prospective participants were contacted. Table 1 details the distribution of prospective participants according to the respective year/s they were an active Cabarrus County

Planning Council Member. The target

population included members who served only in 2004 (N=9), and some that served in all three periods (N=5). The largest component of the targeted population were those who are

Table 1 - Population of Potential Survey Respondents

Planning Council Member served on	N = 65	% of Population
Only 2004	9	14%
2004 & 2008	4	6%
Only 2008	9	14%
2008 & 2012	15	23%
Only 2012	23	35%
2004, 2008 & 2012	5	8%

currently serving on the 2012 Planning Council (N=43).

Each potential participant was emailed a letter describing the survey, the purpose of the research which included consent language mandated by the IRB. In addition to this letter, a link to an online survey was embedded. One week following the initial recruitment email a reminder email was sent, encouraging prospective participants who had not yet completed the survey, to do so. One final reminder was sent thirteen days after the first email was sent, repeating the reminder and encouraging a response. The reminder emails were not automatically generated by the Qualtrics software. The reminder emails were instead sent to the entire list of 65 prospective participants, using the blind carbon copy (bcc) email function. This function hides recipient's emails from one another. Sending this reminder email to all prospective participants maintained confidentiality among those who had already completed the survey, those who had chosen to opt out and those who still wished to take the survey but had simply forgot between the reminder email and the original recruitment email. All communication between me and the prospective participants ceased following the closing of the survey instrument on October 28, 2011.

Survey Instrument

The online survey contained 25 questions, sixteen questions were quantitative, and nine questions were qualitative. After data collection ended, the qualitative answered were reviewed and coded into discrete categories to facilitate summarization. On average respondents reported that they took nine minutes to complete the survey.

A copy of the survey tool completed by participants can be reviewed in its entirety in Appendix B. The questions asked in the survey included questions about how often and for what purpose/s did they access the 2004 and 2008 Cabarrus County Needs Assessments. The

survey instrument also included questions pertaining to the likelihood of using the 2012 Needs Assessment and questions related to how likely they are to recommend this survey to other professionals in the county. Questions also related to the reliability and accessibility of the 2004 and 2008 Community Needs Assessment documents. As noted in Table 1, 23 Council members have never served prior to the 2012 process. Although this may affect the utilization rate of the 2004 and 2008 documents, it was expected that because the Council process began in June 2011 and the survey was disseminated in October of 2011, new council members had had the opportunity to access the 2004 and 2008 documents during those four month, so utilization rates could be measured.

Recommendations derived from the answers provided by respondents will allow Cabarrus County stakeholders, including the current 2012 Planning Council and Cabarrus Health Alliance, to make adjustments and improvements to the way the Community Needs Assessment is publicized, distributed and utilized in the county in order to make a larger impact in the county.

Cabarrus Health Alliance has facilitated the community needs assessment process in the county for over 14 years. Because of this, a comprehensive list of Community Planning Council members was easily attainable. After the comprehensive list was obtained, contact information was updated where needed and when it was possible to locate new contact information. Emails were the only contact information collected and used to contact prospective participants. If an email was not obtained, the prospective participant was removed from the population list. Sixty five prospective participants were contacted with the recruitment email and 38 responded to the survey.

Results - Survey Findings

The following section and Appendix present the distribution of survey respondents and describe how survey participants responded to the survey and an analysis of the implications that the answers potentially create. The insights chronicled here are distilled from 38 respondents who completed the survey between October 11th and October 28th, 2011. This research had a relatively good response rate of 58 percent. Tables 2 and 3 compare the distribution of the responders to the total population. These summaries indicate that the distribution of respondents is similar to the overall population, although those who served

Table 2 - Population Distribution

Planning Council Member served on	n	N	Response Rate
Only 2004	1	9	11%
2004 & 2008	2	4	50%
Only 2008	4	9	44%
2008 & 2012	10	15	67%
Only 2012	16	23	70%
2004, 2008 & 2012	5	5	100%
Total	Obtained	N	Response Rate
	38	65	58%

Table 3 - Percentage Distributions

Planning Council	% of	% of Potential	
Member served	Respondents	Respondents	
on	n=38	N=65	
Only 2004	3%	14%	
2004 & 2008	5%	6%	
Only 2008	11%	14%	
2008 & 2012	26%	23%	
Only 2012	42%	35%	
2004, 2008 & 2012	13%	8%	

"Only in 2004" are somewhat underrepresented; only 1 (11 %) of that subgroup (N=9) responded to the survey and the more recent members are overrepresented to some degree. Therefore these results may have some bias in favor of the more recent members of the Council.

The survey respondents represented a variety of industries as seen in Table 4, but primarily self indentified as being a professional in the healthcare, 26 percent and government sectors, 24 percent.

Table 4- Self Reported Industry Representation

Healthcare/ Public Health	Nonprofit	Gov't	Education/ Transit	Business	Other
10	4	9	5	3	5
26%	11%	24%	13%	8%	13%

As illustrated in Table 5, thirty seven respondents answered a question relating to their past use of the community need assessment (CNA); 51 percent had used the CNA to supplement a work related project and only 16 percent (6 people) had used the CNA to supplement a community related project unrelated to their professional position. Table 5 also illustrates the types of projects/ or assignments that respondents had used a CNA for.

Of the 19 respondents who

had used the CNA to supplement a work related project, 89 percent had used it to supplement a grant application, 68 percent had used it to supplement an internal report and/or community meeting. Of the 16 percent (n=6) that had used a CNA to supplement a community

Table 5- Utilization and Usage of CNA

Have you used the CNA to supplement a				
	work project? n=37			
Yes	51%	16%		
No	49%	84%		
If yes, how have	you used the CNA to	supplement a		
	work project? n=19	community project? n=6		
Grant Proposal	89%	50%		
Internal Report/s	68%	17%		
Community Meeting/s	68%	67%		
External Report/s	47%	17%		
General Inquiry	47%	0%		
Other	16%	17%		

project 50 percent (n=3) used it for a grant proposal but the majority (67 percent, n=4) used it for community meetings.

Fifty percent (n=19) of respondents indicated that they have used the CNA to supplement a work related project. One hundred percent of the respondents who indicated that they have

used the CNA to supplement a work related project had used the 2008 CNA and only 55 percent

had indicated using the 2004 CNA (see

Appendix B question 4). As presented Table 6, the survey asked in respondents to recall how many times they had utilized the 2004 and 2008 CNA as part of their career, 59 percent | More than 10 times | 3%

Table 6- How Many Times was the CNA utilized?					
How many times have you utilized the (2004 and					
2008) CNA as part of your career?					
2004 2008					
	n=38	n=38			
None	59%	39%			
1-2 times	19%	5%			
3-7 times	16%	26%			
8-10 times	5%	13%			
More than 10 times	3%	16%			

(n=22) and 39 percent (n=15) respectively, answered "none" indicating that they had never once accessed the 2004 and/or 2008 CNA to supplement a funding proposal, or policy implementation project, etc. Twenty six percent (n=10) selected "3-7 times" and five percent (n=2) selected "1-2 times". This may indicate a low likelihood of future council members of using the new CNA, if

the distribution and accessibility remains the same.

When survey respondents were asked how likely they were to utilize the 2012 Community Needs Assessment as part of their career, Table 7 shows that all 38 respondents answered this question and 73

Table 7- Likelihood of Using the 2012 CNA

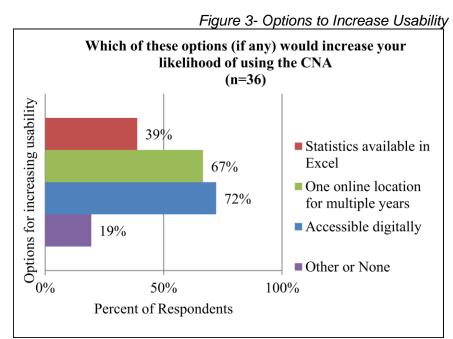
Needs Assessment to supplement a project / funding as part of (n=38)					
your career? a community project unrelated to your career?					
Very Likely	47%	8%			
Likely	26%	29%			
Undecided 8%		37%			
Unlikely 3%		21%			
Very Unlikely	16%	5%			

How likely are you to utilize the 2012 Community

percent indicated a "likely" or "very likely" response. When asked if they were "likely to utilize the 2012 Community Needs Assessment as part of a community project?" only 37 percent had a "likely" or "very likely" response.

While it is beneficial to measure the respondent's likelihood to utilize the CNA, it may be even more beneficial to Cabarrus County to identify what actions would increase the likelihood of respondents to access and use the CNA. Figure 3 illustrates the results from the question that

asked survey respondents to mark which options (of those given) they believed would increase their personal utilization of the CNA. Seventy two percent felt that having the CNA accessible in digital format (online)



would increase their likelihood of using the CNA. In addition, 67 percent of respondents would like to have one online location more multiple years of the CNA and 39 percent would like to have statistics accessible digitally. This question intended to gather information on how Council members would prefer to use the secondary data collected and whether they preferred the data to be downloadable in Excel format.

Figure 4 presents results from 37 council members who responded to both parts of a two part question (see Appendix B, question 12) on patterns of recommendation of the CNA. It compares how often respondents recommended the CNA to professionals "in their industry" vs. professionals "outside of their industry". Nineteen percent of respondents had "never" recommended the CNA to other professionals "in their industry" and 22 percent of respondents

"never" recommended the CNA to professionals "outside of their industry". Fifty four percent of respondents recommended the CNA "sometimes – i.e. a few times a year" to both professionals "in their industry" and "outside their industry". None indicated that they always recommended the CNA as a resource to others.

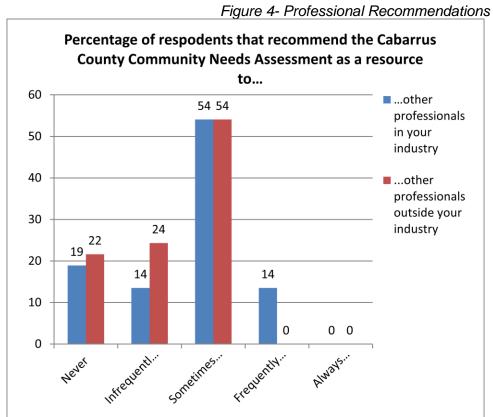


Table 8 presents the results of three questions in the survey. Thirty seven percent of respondents were not aware of how to access the CNA online. Almost all (95 percent) all respondents believed that the CNA reported accurate statistics and 100 percent of all respondents believe that the CNA is a valuable resource for Cabarrus County.

Table 8 - Accessibility and Reliability

A. % of respondents that are aware of how to access the CNA online n=38		B. % of respondents that believe the CNA report's accurate statistics n=37		C. % of respondents that believe the CNA is a valuable resource for Cabarrus County n=38	
Yes	63%	Yes	95%	Yes	100%
No	37%	No	5%	No	0%

The final question in the survey, asked respondents to rank in order from one through eight (1 = most likely; 8 = least likely) which options they felt would increase the likelihood of Cabarrus County residents viewing the Cabarrus Community Needs Assessment? There were 23 respondents who answered this question completely, ranking all eight options. There were 14 respondents with partial completion and

were excluded from the analysis presented

in Table 9. Appendix B, question 17A includes the data from all 38 respondents (23 complete responses and 14 partial responses). Question 17B includes only the data from the complete responses (n=23). In order to analyze this question, I used the Rank function in Excel (2010), which calculates the weighted rank and the calculations are shown in Table 9 which illustrates the results using the 23

Table 9 - Options to Increase Utilization Among Cabarrus County Residents

Answer	Mean Ranking
Informational presentations at the large employers in the county	2.96
A social media site (e.g. Facebook, MySpace, etc.)	3.30
Informational presentations at back to school nights or open houses	3.74
A newspaper announcement	4.13
A public service announcement on local radio or television	4.35
Informational brochures in both Spanish and English	5.13
Low literacy informational brochures	5.78
Informational presentations at the Cabarrus County Fair	6.61

respondents who answered the question in its entirety. Table 9 is sorted in order to clearly

illustrate the order in which respondents ranked the options. Using mean ranking to sort options, the option which respondents felt would have the best chance (the one with the lowest mean score) to increase the likelihood that Cabarrus County residents would view the CNA was "informational presentations at the large employers in the county" with a mean ranking of 2.96; second with a mean ranking of 3.3 was "a social media site". The least likely option, with the highest mean ranking (6.61), was "informational presentations at the Cabarrus County Fair". In addition to ranking the options given, respondents were asked to write-in other options that they felt would increase the likelihood the residents would use the CNA. Written in responses (n=20) included: highlights on channel 22 (a local channel), continuing the civic meetings at clubs, advertisements or notices in other community brochures (churches, arts events, concerts, races), a one-page compilation in bus shelters, having business executives endorse the CNA and suggest employees read the executive summary, references to online sources and social media pages in print versions of executive summaries.

Research Limitations

The results of this research depict one county and the members directly associated with working on the completion of the assessment, the Planning Council. The response rate (58 percent) is moderately high and seems to compare well with the target population proportions relative to an important characteristic, number of years on the planning council – although the respondents exhibits some bias toward more recent years. Thus although this may be a good representation of Cabarrus County Planning Council members, especially those who served most recently, it does not necessarily imply that this is a representative sample for the state and other counties. Cabarrus County is unique in the state, as they complete a "County Needs Assessment"

compared to a "County Health Assessment". This also means that a large variety of represented industries sit on the planning council, thus the results may reflect that varied representation and may not be generalizable to other counties. Furthermore the composition of the council may affect the utilization rates. For example, the utilization in other counties might be higher, because only healthcare and public health entities would serve on the planning council and thus increase the utilization. This could not be determined in this research, but may be a question for future research which includes comparisons to other counties that don't have industry representatives on their planning council.

In addition, in order to protect the confidentiality of individuals, the data is presented in this report at the summary level, but was analyzed at both the individual and summary levels available in Qualtrics (2005). Although it would be interesting to see the difference in utilization rates among respondents by year served, e.g., only since 2008, in order to maintain anonymity this was not done. If a larger sample was used, and stratifying the results, might not risk revealing respondents, I would be able to test the hypothesis that the more recently a respondent participated in the planning council, the more likely they are to utilize the CNA.

The survey responses were primarily ordinal, quantitative and categorical variables, which limits the responses and possible analysis. If more time and resources were available to complete the evaluation, interviews may have been conducted in order to include a variety of qualitative, open ended questions. These qualitative questions might have lead to further insights and the results may have presented recommendations that were not available using solely the variables that were captured.

Discussion

The results of this research showed a 51 percent utilization rate (see Table 5 and Appendix B, question 4) among respondents that had used the CNA to supplement a work related project. Since no hypothesis was made prior to the research about what the expected utilization rate would be, it is difficult to determine if this utilization meets some minimum standard or whether it should be higher. To answer this question this utilization rate can only be compared to future research that captures utilization rates among other counties. These additional results will be useful to the 2012 Cabarrus County Planning Council. In addition there are other factors that can be assumed to be related to increasing the utilization rate that were captured in this study. Based on the analysis, I know with certainty that only 63 percent of respondents know how to access the CNA online. All of the secondary data gathered for the CNA was found through online sources. Based on the fact that 37 percent of respondents don't know how to access the CNA data, one can infer that the utilization rate (51 percent) would be higher if accessibility had been higher. In addition, 60 percent of respondents have accessed the 2008 CNA at least once in the past four years and almost 30 percent have accessed it more than eight times. This suggests that respondents may be utilizing a hard copy version in lieu of being unable to access the CNA online. It also could indicate a low likelihood of future council members of using the new CNA, if the distribution and accessibility remains status quo.

Although only 51 percent of respondents had used the CNA to supplement a work related project, 73 percent of respondents indicated a "likely" or "very likely" response when asked how likely they were "to utilize the 2012 Community Needs Assessment as part of a work related project?" This could be because 42 percent (n=16) of respondents had never served on the

planning council previous to the 2012 assessment period and the opportunity to access previous CNAs had not been presented.

There was a high response rate among Council members who served during 2008 and 2012 (67 percent), only 2012 (70 percent) and a 100 percent response rate among Council members who've served during three assessment periods (2004, 2008 and 2012). In comparison, the response rate among Council members who only served on the 2004 was very low (11 percent). This response rate may infer a potential response bias. It is possible that this response bias is positive as current members may be more engaged. But, because results were analyzed at the summary level, there is a possibility that current members indicated a low utilization. Given more time and with a larger population this could be explored further.

The respondents also indicated some very positive experiences including the responses detailed in Appendix B questions 14 and 15. One hundred percent of respondents indicated that they felt the CNA was a resource for Cabarrus County and 95 percent of respondents felt that the CNA reported accurate statistics. I feel this validates, for both the state of North Carolina and Cabarrus Health Alliance, that the resources being obligated for this activity are being viewed as a positive and time worthy experience for the people involved in the process.

Finally, the success of this study shows that evaluating the key stakeholders, the planning council, is useful, feasible and can serve as a model for other counties in North Carolina.

Recommendations and Conclusions

To obtain the maximum benefit from the CNA, including increasing its utilization, there are three main recommendations that can be distilled from this research. The first recommendation is to improve accessibility by educating present and past council members on

how to access the CNA online. In order to do this, Cabarrus Health Alliance may consider including multiple years of the CNA in one location online place and have the statistics downloadable in Excel format. The Health Alliance may also wish to include a web link to the Healthy Carolinians website, where Planning Council members and county residents can access and view the health assessments of every county in North Carolina which complete a health assessment.

The second recommendation would be to increase the knowledge of healthcare, nonprofit and government representatives about how the data included in the CNA and can be useful to them. This recommendation stems from the fact 61 percent of respondents self reported being in those industries, so concentrated efforts towards those industries may result in higher utilization rates. This education or change in knowledge may be done by utilizing public service announcements and press releases as well as internal memos.

Finally, the third recommendation would be to modify and improve the distribution process. When distribution and publication begins, I recommend that Cabarrus Health Alliance and the 2012 Planning Council, continue outreach as in the past, at community clubs and churches, but consider creating a social media site (Facebook), look at the largest employers in the area and complete presentations at staff meetings or get CEO to endorse and recommend the documents, and finally publicize the CNA by presenting in fall at the local school's back to school night.

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Appendix A

Recruitment Email Utilization of the Cabarrus County Needs Assessment

Subject Line: Research Study for the Cabarrus County Planning Council
Dear:
You have been identified as a potential participant in a research study that is being conducted ir partial fulfillment of requirements for graduation from the Gillings School of Global Public Health; Masters in Public Health Degree program at the University of North Carolina (UNC) at Chapel Hill. The goal of this research is to assist Cabarrus County and Cabarrus Health Alliance to better understand the utilization of the Community Needs Assessment conducted every four years.
Taking part in this research is completely voluntary. If you volunteer to be in this study, you may withdraw at anytime. You do not have to answer any questions you do not want to answer The research will be conducted through an online survey that will take approximately 15 minutes to complete.
Please follow this link to the survey (insert link here).
If you have any questions or concerns about this research project, please feel free to contact me any time at (831) 917-0915, or by email at meghanl@email.unc.edu. You may also feel free to contact the Faculty Advisor for this project, Dr. William Sollecito, by email at bill_sollecito@unc.edu.
Sincerely,
Meghan Lewis, Principal Investigator Public Health Leadership Gillings School of Global Public Health University of North Carolina at Chapel Hill

(831) 917-0915

meghanl@email.unc.edu

Appendix B

Aggregated Results Utilization of the Cabarrus County Needs Assessment

- **1.** Have you served on any of the Cabarrus County Planning Council, during the development of the Community Needs Assessment?
 - 38 -Yes
 - **0** No
- **2.** Which Planning Council/s have you served on for Cabarrus County? (select all that apply)
 - 8 2004 Community Needs Assessment
 - 21 2008 Community Needs Assessment
 - 31 2012 Community Needs Assessment
 - $\mathbf{0}$ Do not wish to respond
- **3.** What industry were you employed in while serving on the Planning Council?

Healthcare/ Public Health	Nonprofit	Government	Education/ Transit	Business	Other
10	4	9	5	3	5

- **4.** Have you used a Community Needs Assessment to supplement a **work related** project / funding application / policy adoption / etc?
 - 19 -Yes
 - 18 No
 - 1 No Response

If **yes**, which Community Needs Assessment did you use as part of your work related project?

(Check all that apply)

- <u>3</u> 2000
- <u>11</u> 2004
- **20** 2008

v - Ouici	0	_	Other
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Note: The one respondent who had "no response" on the first portion of this question was automatically directed (using the skip pattern embedded in the online survey tool) to answer the second portion, thus a response of 20 instead of 19 on the "2008" response.

5. What was the purpose of using the Community Needs Assessment for a **work related project**?

(Check all that apply)

- 17 Grant Proposal
- 13 Internal Reports
- 9 External Reports
- 13 Community Meetings
- 9 General Inquiry
- 3 Other
- 18 Never Used the Community Needs Assessment for a work related project
- **6.** Have you used a Community Needs Assessment to supplement a project / funding application / policy adoption / etc as part of a **community project outside of work**?
 - <u>6</u> Yes
 - <u>32</u> No

If **yes**, which Community Needs Assessment did you use as part of a community project unrelated to your career? (Check all that apply)

- **0** 2000
- 1 2004
- <u>6</u> 2008
- **0** Other _____
- **7.** What was the purpose of using the Community Needs Assessment for a **community project outside of work**? (Check all that apply)
 - 3 Grant Proposal
 - 1 Internal Reports
 - 1 External Reports
 - **4** Community Meetings
 - **0** General Inquiry
 - **1** Other
 - 32 Never Used the Community Needs Assessment for a work related project

- **8.** How many times have you utilized the **2004 Community Needs Assessment** as part of your career?
 - **22** None
 - <u>7</u> 1-2 times
 - **<u>6</u>** 3-7 times
 - **2** 7-10 times
 - **1** More than 10 times
- **9.** How many times have you utilized the **2008 Community Needs Assessment** as part of your career?
 - <u>15</u> None
 - **2** 1-2 times
 - **10** 3-7 times
 - <u>5</u> 7-10 times
 - **<u>6</u>** More than 10 times
- **10.** How likely are you to utilize the **2012 Community Needs Assessment** to supplement a project / funding application / policy adoption / etc...?

	Very Unlikely	Unlikely	Unsure	Likely	Very Likely
as part of your career	<u>6</u>	<u>1</u>	<u>3</u>	<u>10</u>	<u>18</u>
as part of a community project unrelated to your career	<u>2</u>	<u>8</u>	<u>14</u>	<u>11</u>	<u>3</u>

- **11.** Which of these options (if any) would increase your likelihood of using the Cabarrus County Community Needs Assessment? (Check all that apply)
 - 26 Accessible digitally (online)
 - 14 Statistics available in Excel
 - 24 One online location for multiple years of the Community Needs Assessment
 - 7 Other

12. How often do you recommend the Cabarrus County Community Needs Assessment as a resource to...?

	Never	Infrequently (yearly)	Sometimes (a few times a year)	Frequently (a few times a month)	Always (weekly)
other professionals in your industry	<u>7</u>	<u>5</u>	<u>20</u>	<u>5</u>	<u>0</u>
other professionals outside your industry	<u>8</u>	9	<u>20</u>	<u>0</u>	<u>0</u>

13. Are you aware of how to access the Community Needs Assessment Online? (As presented in Table 8)

24 - Yes

14 - No

14. Do you believe the Community Needs Assessment report's accurate statistics? (As presented in Table 8)

<u>35</u> - Yes

2 - No

15. Do you believe the Community Needs Assessment is a valuable resource for Cabarrus County?

(As presented in Table 8)

<u>38</u> - Yes

 $\underline{\mathbf{0}}$ – No

16. What other industries or organizations (if any) should be represented on the Community Planning Council?

Comments included: Community Residents, Law Enforcement, Food Services, Private Business, Economic Development, Political Leaders, Wellness and Health Promotion, Mental Health, and Manufacturing.

17. In order from 1 - 8, please rank which options would increase the likelihood of Cabarrus County residents viewing the Cabarrus Community Needs Assessment? (1 = most likely through 8 = least likely)Each option below gets only one ranking. For example: if you believe that "a newspaper announcement" would be the "most likely" option in increasing the likelihood that a Cabarrus County resident would view the CNA, you would put a mark in the 1 column in that row.

A. All responses (including partial responses)

									Response
									S
Answer	1	2	3	4	5	6	7	8	n
A social media site (e.g. Facebook,	12	3	7	4	3	2	2	2	
MySpace, etc.)	12	3	,	7	3	2	2	2	35
A public service announcement on local	3	4	8	3	3	3	5	1	
radio or television	3	4	8	3	3	3		1	30
A newspaper announcement	3	4	4	5	4	3	3	3	29
Informational presentations at the	0	2	0	1	4	3	6	13	
Cabarrus County Fair		2	0	1	+	3		13	29
Informational presentations at back to	3	6	4	7	2	5	2	0	
school nights or open houses	3	0	4	/)		U	29
Informational presentations at the large	8	9	5	6	5	1	1	1	
employers in the county	8	9)	U)	1	1	1	36
Low literacy informational brochures	2	1	3	3	4	8	6	7	34
Informational brochures in both Spanish	2	5	3	5	7	6	5	4	
and English)	3)	'	U)	'1	37
Total	33	34	34	34	32	31	30	31	259

B. Complete responses (excluding partial responses)

									Responses
Answer	1	2	3	4	5	6	7	8	n
A social media site (e.g. Facebook,									
MySpace, etc.)	8	2	4	2	3	1	1	2	23
A public service announcement on local									
radio or television	3	2	6	1	2	3	5	1	23
A newspaper announcement	2	4	4	4	3	2	2	2	23
Informational presentations at the									
Cabarrus County Fair	0	2	0	1	2	2	6	10	23
Informational presentations at back to									
school nights or open houses	3	4	3	6	2	3	2	0	23
Informational presentations at the large									
employers in the county	5	6	3	4	4	1	0	0	23
Low literacy informational brochures	1	1	1	2	3	6	4	5	23
Informational brochures in both Spanish									
and English	1	2	2	3	4	5	3	3	23
Total	23	23	23	23	23	23	23	23	184

18. What other options in addition to those listed above would increase the likelihood of community residents viewing the Cabarrus County Needs assessment?

n=20 Comments Included: Highlights on Channel 22 (a local channel), continuing the civic meetings at clubs, advertisements or notices in other community brochures (churches, arts events, concerts, races), a one-page compilation in bus shelters, have business executives endorse the CNA and suggest employees read the executive summary, references to online sources and social media pages in print versions of executive summaries.

19. If you have any other comments or suggestions about how to make most efficient use of the Cabarrus County Needs Assessment please write them here?

N	one
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