

Supporting Alignment and Accountability in Community Health Improvement:

The Development and Piloting
of a Regional Data-Sharing System

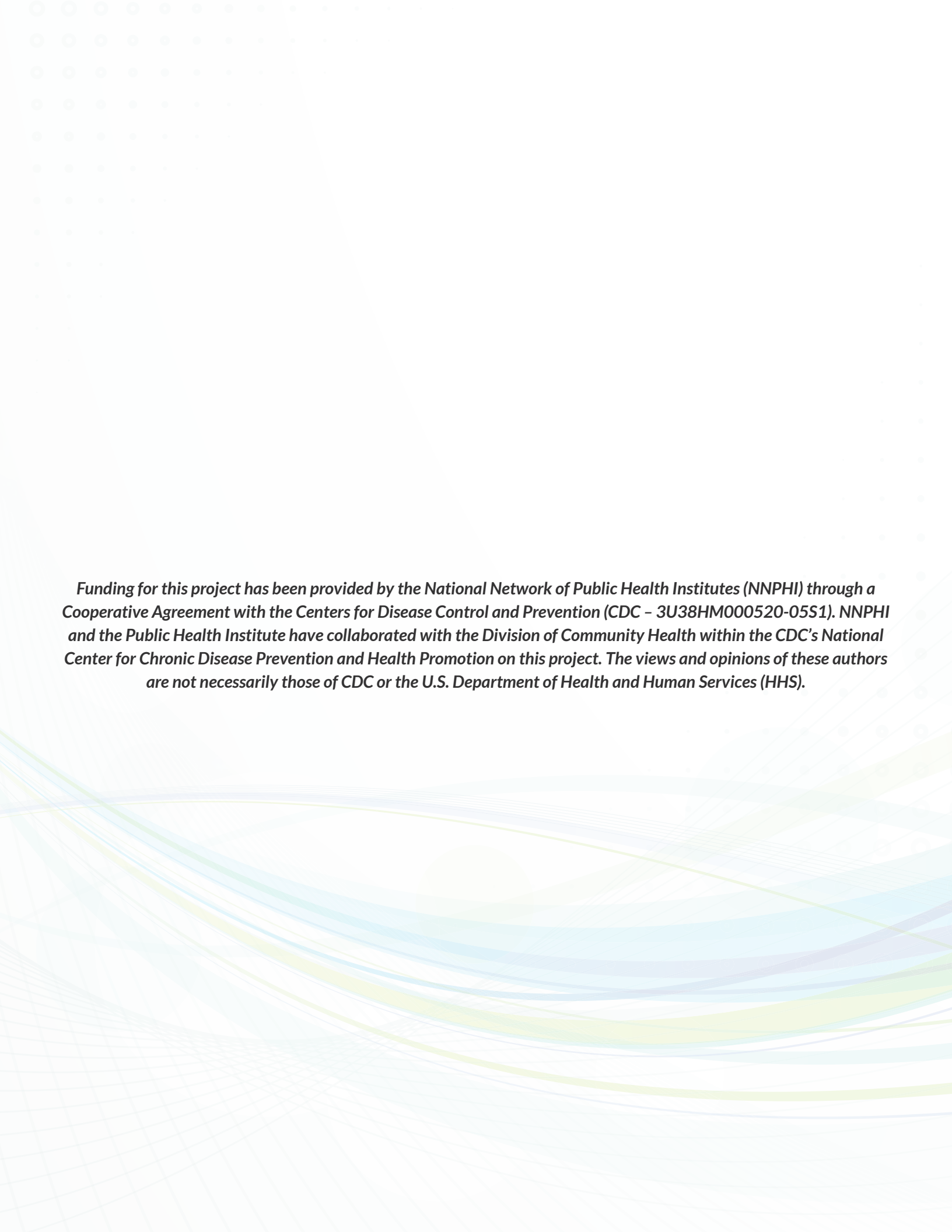
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I. Executive Summary

Project Purpose

The purpose of this project is to develop and field test a set of online tools that support the comparative review of specific elements of publicly available reports from tax exempt hospitals, local health departments, and other local community-based organizations. The online tools comprise what is referred to in this report as a **Community Health Improvement Data Sharing System (CHIDSS)**. The project builds on a three-year series of convenings and inquiry focusing on the improvement of community health improvement practices. The projects have been implemented by the Public Health Institute in collaboration with the National Network of Public Health Institutes (NNPHI) through a cooperative agreement with the Centers for Disease Control and Prevention, with focus on the improvement of community health improvement practices.

The focus of this project and the tools and templates that have been developed is on the assessment, planning, and implementation processes by hospitals, local health departments, United Way organizations, Community Action Agencies, community health centers, and a broader spectrum of stakeholders in the community health improvement process. The intent and the opportunity is to leverage the transparency provided by the new reporting mechanisms for tax-exempt hospitals, and to encourage the full spectrum of stakeholders to ask questions and provide voluntary leadership that will directly contribute to the advancement of practices.

The CHIDSS tools are intended for use by a broad spectrum of potential users, including a) organizations engaged in assessment and planning, b) community stakeholders who seek engagement in community health improvement processes, c) private sector agencies at the city, county, and state level with oversight interests, d) academic institutions and research organizations with an interest in the advancement of knowledge, and e) media organizations interested in community health improvement and the contributions of institutional stakeholders.

Impetus for the Project

The impetus for this project is the requirement for public availability of data and information on the community health assessment and planning processes of tax-exempt hospitals. The availability of public reports is made possible by new reporting requirements in the Patient Protection and Affordable Care Act (ACA) and the IRS Revised 990, Schedule H. While final regulations are pending, much of the reporting architecture has been established and provides a basis for public review of key elements of the community health improvement process.

The Public Health Accreditation Board (PHAB) launched a set of accreditation standards for local health departments in 2011, and an updated version was released in January 2014. The standards provide a formal structure to encourage assessment and planning processes. Local health departments are required to complete a community health assessment and develop a health improvement plan as a prerequisite for participation in the accreditation process. Other organizations in communities also conduct periodic assessments, including United Ways, Community Health Centers, and Community Action Agencies, to name a few examples. There are also special initiatives that may call for stakeholders to conduct assessments to establish a baseline to measure the impact of targeted interventions.

In short, there are a plethora of community health improvement assessment-related activities in local communities across the country, each with different reference points, areas of emphasis, sources of input, and varying processes. Among community stakeholders, there is often a lack of understanding about how to engage hospitals as partners. On the hospital side, there is often a lack of staffing and competencies to engage in and or sustain such partnerships. In the broader community context, there tends to be skepticism about community health assessments. This view is validated by observations that assessments are rarely followed by definitive action. There is an imperative for alignment of CHI processes and for focusing these efforts in geographic communities where health disparities are concentrated. Alignment presents the opportunity to build a critical mass of targeted activities and investments that will produce measurable and sustainable outcomes.

Project Elements / Focus of Analysis

The online tools developed in this project include the a) enhancement of an existing geographic information system (GIS) tool entitled the Vulnerable Populations Footprint (VPF) that is available at www.CHNA.org and is part of the Community Commons web-based platform, and b) development of a set of online templates and a CHIDSS User's Guide that assists in the identification and extraction of data/information from publicly available CHI assessment and planning reports. The data/information collected and the focus of analysis in the pilot study conducted in this project can be broken down into four basic categories:

- how community is defined;
- how community stakeholders are engaged in assessment, planning, and implementation;
- how priorities are set; and
- the content and geographic focus of implementation strategies.

The primary areas of focus of the pilot study were the CHNAs and Implementation Strategies of tax-exempt hospitals. The reason for the focus on tax-exempt hospitals was that the new public reporting requirements yielded the most complete information, thereby providing the basis for comparative analysis. Because there are relatively explicit reporting requirements and since many of the hospitals are relatively new to the community health assessment and planning process, the pilot study also offered the opportunity to provide early input on institutional performance. Effort was made to secure parallel local health department community health assessments and community health improvement plans in the same sites, with varying degrees of success. Only a preliminary review was conducted to identify evidence of collaboration with hospitals and potential parallels with hospital definitions of community. In most cases, assessments by other stakeholder organizations were unavailable through online sources.

It is important to note that the development and piloting of the tools and documentation of practices in this project and the intent is only partially related to compliance with federal and/or state regulations. The larger intent of this project is to support voluntary leadership and commitment to transformation among hospitals, public health agencies, and other local stakeholders, with attention to alignment of resources in communities where health disparities are concentrated. A continuum¹ that distinguishes basic compliance for tax-exempt hospitals from more transformational actions is offered as a framework to encourage the advancement of practices. See Table 1 (page 25).

¹ Adapted from Rosenbaum, S., and Byrne, M. "The Affordable Care Act's Community Health Needs Assessment Reforms: Guiding Principles for Successful Community Health Improvement, George Washington University, online resource, August 11, 2012

A series of key informant interviews and a two-day convening were carried out as a first step in the project to solicit input from leading researchers, practitioners, and public sector officials on issues and opportunities in the use of GIS mapping platforms and online tools for the advancement of CHI practices. Key informants and expert participants in the convening provided a wealth of invaluable input, which informed the consideration of metrics for inclusion in GIS platforms, elements of analysis for inclusion in a data sharing system, emerging innovations in the field, and practical considerations in the launch and maintenance of a data sharing system.

In the wake of the key informant interviews and convening, the project focused on the following tasks; a) development of a protocol and criteria for the random selection of sites for a pilot study, b) development of preliminary categories and a coding system as the focus for analysis, c) data/information collection from publicly available reports at selected sites, d) refinement of tools based upon the review of data/information available, e) identification and implementation of enhancements to the existing VPF GIS tool, f) development of a user's guide to accompany the online tools, and g) documentation of findings, recommendations, and discussion of findings in this report.

Methods

The search for reports included a search of each hospital site and respective local health departments as well as a Google search using various search terms. Most hospital CHNAs and many of their Implementation Strategies were relatively easy to access on their organizational websites, but some were more problematic. A summary of the accessibility of these reports, including a rating methodology, is included as Appendix D. Accessing local health department community health assessments and community health improvement plans was more difficult, perhaps due in part to the lack of a formal public expectation or requirement for reporting.

A random selection process was used to identify a cohort of review sites to provide a basis for the review and refinement of the online tools and templates. In the interest of representation of urban, suburban, and rural geographic regions, a starting point was the use of the three standard statistical area designations, including Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Rural Areas.

There were two **core** criteria for site selection. The first was to limit the sample to the 20 states² and/or regions that are part of the CDC's Community Transformation (CTG) Context Scan. The second criterion was the existence of a geographic sub-county area with a high concentration of residents under the Federal Poverty Level (FPL). The VPF tool provided an efficient means for the identification of potential sites and had the additional benefit of identifying overlapping geographic concentrations of high school non-completion, which provides a complementary reinforcement of the poverty rankings. The two combined indicators serve as effective proxy metrics for the identification of health disparities.

The final criterion for site selection was the relative availability of hospital CHNAs and Implementation Strategies. The VPF tool provided the means for the identification of hospitals within a region, which served as the starting point for a subsequent online search for documentation. Given the large concentration of health care providers in large metropolitan areas, geographic sub-regions were selected with smaller clusters (e.g., 5-8) of hospitals. The final sample included four sub-regions in large

² That number has since been reduced to 15 sites.

MSAs, four small MSAs, three Micropolitan Statistical Areas, and four Rural Areas, for a total of fifteen review sites.

Findings

There were a total of fifty-one hospitals located in the fifteen regions, with a high of eight hospitals in a large metropolitan site, to one hospital in a rural site. Nine (9) of the fifty-one hospitals, or 18%, were Critical Access Hospitals. Seven of the nine were in the four rural areas, and the other two were in Micropolitan areas. Among the fifty-one hospitals, we were able to obtain forty-four CHNAs from hospital websites. Twenty-seven of the forty-four hospitals from which we were able to obtain CHNAs also posted Implementation Strategies. It should be noted that eight of the nine Critical Access Hospitals had CHNAs posted, and seven of the nine had Implementation Strategies posted. There are a total of twenty-three local health departments and one Tribal Health Department represented among the fifteen sites. Five of the sites are multi-county regions, involving fourteen local health departments. In three of the counties there are no hospital facilities. Eight of the fifteen sites had at least one local health department-posted community health assessment. There are a total of ten local health departments represented in the eight sites with community health assessments.

All forty-four hospitals from which CHNAs could be acquired **defined their community** in terms of their patient service area. A total of ten of the forty-four hospitals with CHNAs (23%) identified the geographic concentrations of health disparities in their regions. A parallel review of the VPF tool and the geographic parameters of the sites highlighted ways in which some facilities may be overlooking these sub-county areas with geographic concentrations of health disparities.

Thirty-three of forty-four hospitals, or 75%, secured **input directly** from lay community members in the CHNA process. Twenty-eight (28) of the forty-four hospitals, or 64%, secured input from *representatives* of medically underserved people in the CHNA data/information collection process. Engagement of community stakeholders dropped off dramatically among hospitals in the fifteen sites in priority setting, program planning, and program implementation processes. A total of five hospitals indicated that community members were involved in priority setting processes. Among the twenty-seven hospitals for which Implementation Strategies could be obtained, only three sites indicated the intent to partner with community stakeholders in the planning and implementation of community benefit activities. In an examination of specific program activities, however, there were nineteen specific activities that indicated some level of partnering with community stakeholders on projects. In general, the findings on community engagement appear to reflect alignment with the limited IRS requirement to “take into account” input from community members *only* during the CHNA process.

Among the forty-four CHNAs reviewed, forty hospitals (91%) described criteria used to guide the **priority setting** process. Four hospitals did not. A total of sixteen hospitals out of the forty-four, or 36%, indicated that they set priorities as a group of hospitals. Of the forty hospitals that described criteria used for the priority setting process, twenty-two, or 55%, were of sufficient specificity to support a selection among alternatives; the criteria reported by eighteen hospitals, or 45%, were not. Among the forty hospitals that provided priority setting criteria, fourteen, or 35%, described only institution-related criteria. Among the forty-four hospitals that posted CHNAs, thirty-seven, or 84%, included a list of prioritized needs and a description of the process and criteria in their CHNA. Seven of the forty-four, or approximately one in six, did not.

Among the seventeen hospitals that only posted CHNAs, there were a total of eighty-eight priorities. Sixty-four or 73%, were in the *Clinical Care* category. Another seventeen or 19% were in the *Health Behaviors* category. Finally, seven priorities, or 8%, were in the *Social and Economic Factors* category and none were in the *Physical Environment* category. Among the twenty-seven hospitals that posted Implementation Strategies, there were a total of 124 priorities. Seventy-eight of those priorities, or 63%, were in the *Clinical Care* category. Another thirty-nine priorities, or 31%, were in the *Health Behaviors* category. Only five priorities, or 4%, were in the *Social and Economic Factors* category and once again, none were in the *Physical Environment* category. A total of twenty-one of the thirty-nine *Health Behavior* priorities, or 54%, could be allocated to the *Diet and Exercise* subcategory, reflecting a growing concern about the epidemic of obesity and related health problems.

Only one hospital indicated intent to focus its entire implementation strategy in geographic areas with concentrations of health disparities. Another six hospitals (24%) indicated a focus on specific populations **and** geographic areas with health disparities for selected individual programs. Ten of the remaining twenty-six hospitals (38%) indicated a focus on specific populations for selected individual programs. The remaining ten hospitals (38%) did not indicate a focus on populations **or** geographic areas with health disparities for **any** programs.

Among the twenty-seven Implementation Strategies reviewed, four hospitals, or 15%, did not provide **metrics** for any specific programs. Twenty-one (21) hospitals, or 78%, provided metrics for one or more program activities. Only one of the twenty-seven hospitals provided metrics for **all** programs in their Implementation Strategy.

Discussion

The finding that twenty-three of the forty-four hospitals (52%) did not offer a methodology with the reasoning for the selection of geographic parameters of their community is notable, particularly given the substantial attention given to the issue in IRS instructions and in Notice 2011-52 and the April 5, 2013 NPRM. This may be a function of a lack of internal expertise and knowledge of both population health and the expectations associated with community benefit. In the absence of this knowledge and understanding, the tendency among some may be simply to cite an internally derived patient service area. More attention is needed to **clarify expectations associated with community definitions** and to increase the focus of efforts in geographic sub-county areas **where health disparities are concentrated**. At the very least, this is an appropriate line of inquiry or community stakeholders in the region.

While most hospitals reviewed in this study appear to be in compliance with the IRS requirements for community input, it is less clear whether the opportunities for input were meaningful. In what ways did the input provided by community members influence the scope and/or focus of the CHNA inquiry? In what ways did it inform the review and interpretation of findings? It is likely that there were examples of each type of outcome among many of the CHNA processes that were not addressed in the posted reports. It is also likely, however, that the **opportunity for community members to provide input was limited**, and a function of fulfilling legal requirements rather than to inform the process.

Findings on hospital approaches to priority setting highlighted an array of opportunities for improvement, both in terms of the development of criteria and the larger process. The finding that forty of the forty-four hospitals identified criteria used in setting priorities indicates that there is attention to compliance, but the **lack of specificity in criteria** reported by eighteen of the forty (45%) suggests that there is a need for additional guidance. The new priority setting requirements must be viewed in the

context of the pre-existence of an array of hospital community benefit services and activities that have been in place, in some cases for many years. Otherwise objective processes may be influenced by a desire to preserve as much of the existing slate of program activities as feasible.

In the analysis of the geographic focus of hospital Implementation Strategies, it was not surprising that there was limited focus on health disparities, given somewhat confusing guidance from the IRS, a historical tendency to frame programs as “serving the community at large”, and a lack of internal population health expertise.

There is a clear need for **increased use of GIS tools** such as CHNA.org to bring more geographic targeting of programs where health disparities are concentrated. Similarly, there is a need for more deliberate work to align interventions and investments of competing hospitals and diverse community stakeholders to build the critical mass necessary to produce measurable outcomes.

The findings also indicated a clear need for assistance in the **development of metrics and monitoring strategies** for identified program activities described in the implementation strategies. In the consideration of options, it must be understood that most hospitals currently lack the internal staffing with requisite competencies to effectively evaluate many, if not most of their community benefit program activities. An important near-term strategy for hospitals is how to effectively engage external stakeholders with the expertise to provide assistance in these areas.

It is important to note that this study is not intended to provide conclusive evidence of the relative quality of hospital and/or local health department community health assessment and planning processes. Rather, the purpose is to provide a preliminary snapshot of current practices across varying types and sizes of hospitals in different kinds of geographic settings across the country, and to provide a basis for the initial development and pilot testing of the CHIDSS tools. Further refinement of the tools will be carried out during a beta implementation phase that will involve direct engagement of diverse stakeholders across the country.

There are numerous examples of exemplary practices in assessment, planning, implementation, and evaluation of community health improvement activities across the country; some are led by hospitals, others by local health departments, and still others through broadly representative groups of individuals and organizations. In some cases, these practices and the organizations involved may be advanced to the degree that the CHIDSS tools may not provide substantial opportunities for enhancement.

For the most part, however, the random sample selected for this project reflects a practical reality that there are considerable opportunities for enhancement in most communities. This applies to how individual organizations undertake community health improvement processes, but also how organizations effectively align their efforts. There is an imperative, given the persistent geographic concentration of health disparities in our communities, to better focus and align community health improvement activities in the coming years.

Recommendations

R1: Take steps to harmonize disparate, but similar community health improvement practices among community stakeholders.

Given the array of stakeholder organizations engaged in parallel and often duplicative community health improvement practices as outlined in Table 2 (pages 30-31), there is a clear imperative to better align current efforts. For both public and private sector institutions seeking to build public trust, taking definitive steps communicates a commitment to be better stewards of limited resources, and holding themselves accountable for producing measurable outcomes on the ground. We recommend two immediate actions by relevant institutions:

R1a: Encourage local health departments, Community Action Agencies, United Ways, community health centers, and other institutions to post assessment findings on their websites in a timely manner and easily accessible format.

With few exceptions, the hospitals at the review sites selected for this study demonstrated an understanding and commitment to transparency through clear posting of their CHNAs on their websites. A lack of consistency in making assessments and implementation plans publicly available by other stakeholder institutions impedes efforts to align, focus, and improve practices over time. Leadership is needed by individual organizations, related trade associations, and/or oversight agencies to make all community health improvement processes and reports available to the general public in a timely manner.

R1b: Encourage institutional stakeholders to develop proactive strategies to align schedules for assessment and planning processes

Variations in cycles and time frames for periodic community health assessments and different fiscal cycles for hospitals, local health departments, and other stakeholder institutions all conspire to complicate efforts to align processes. Many of these obstacles can be overcome in the coming years through *voluntary* adjustments by individual institutions, as well as through exceptions authorized by oversight and accreditation entities.

It is important to note that there should be **no** point in the community health improvement process when adjustments in timing, focus, content, and strategy are not possible. While collaborative community health improvement is best when diverse stakeholders are engaged at the beginning of the process, a quality improvement approach involves making ongoing adjustments that integrate emerging lessons and increase the potential for success.

R2: Increase focus of community health improvement resource allocations in communities where health disparities are concentrated.

More definitive focus of stakeholder institutional resources is needed in geographic sub-county areas where health disparities are concentrated. While local public health agencies, hospitals, and others retain the responsibility to serve broader populations, a significant proportion of

resources should be directed towards aligned actions in geographic sub-county areas where there are the greatest needs and most significant potential to produce measurable outcomes.

R3: Tax-exempt hospitals use findings/tools to implement a quality improvement approach consistent with a commitment to transformation.

There is an opportunity for hospitals to play a major role in the advancement of the community health improvement field through the implementation of the Guiding Principles for Community Health Improvement outlined in Table 1 of this report (pg. 15). This approach will help hospitals build the population health capacity needed to thrive economically as financing incentives shift from filling beds and conducting procedures to keeping people healthy and out of hospitals.

R4: Identify and support investment in organizations with the capacity to serve as conveners and facilitators of collaborative community health improvement.

Few, if any of the stakeholder institutions engaged in community health improvement processes possess the resources and breadth of expertise to serve as the convener, facilitator, manager, and monitoring entity for a collaborative community health improvement process. There is a need for direct investment in the establishment of an infrastructure to foster, establish, reinforce, and sustain an ethic of shared ownership – across stakeholders, and across sectors.

R5: Clarify the roles of diverse stakeholders in setting priorities, as well as in the planning, implementation, evaluation, and oversight of community health improvement activities.

There is a need for increased transparency in determining the respective roles and contributions of different stakeholders in the community health improvement process. The imperative for more clear articulation of partner relationships and contributions is less an issue of public accountability than it is a validation of partner contributions and a statement of good stewardship – making optimal use of limited resources through the mobilization of other community resources and expertise. It also provides a practical means of disseminating innovative approaches to comprehensive community health improvement.

R6: Provide peer-led education in areas of focus for this pilot study.

There is a clear need for engagement of the broader field of hospitals and other stakeholders to advance practices in the specific areas of focus for this study. In the next phase of CHIDSS development, outreach will be conducted to engage the hospitals that were the focus of the pilot study, as well as local health departments, United Ways, Community Action Agencies, community health centers, and other key stakeholder groups. A cohort of eight-to-ten stakeholder groups will be identified from across the country to pilot the implementation of the CHIDSS tools. Selected sites will participate in educational webinars, receive assistance in the use of tools and templates, provide input on potential enhancements to the tools, and receive guidance on strategies for engagement of institutional and community stakeholders.

R7: Provide funding to state and local health departments, schools of public health, and other entities for TA to hospitals and other key stakeholders for the development of metrics and monitoring strategies.

In the years to come, there will be a need for hospitals to be fully integrated into a place-based, population health network that combines high quality clinical services with proactive primary, secondary, and tertiary prevention activities. Other stakeholder institutions must also build the understanding and capacity to strategically invest resources in a manner that is more likely to produce results. Funding to state and local health departments, regionally focused research institutions, and public health training programs in the region would help these entities play an important role in accelerating the transformation process. For local health departments in particular, it would be an important way to build their capacity to play an ongoing role as a partner with local hospitals in the monitoring and continuous quality improvement of community health improvement programs.

Moving Forward

The imperative for transformation in the health sector is well understood by key stakeholder organizations in the field. In the near term, hospital leaders are consumed with the implementation of EHRs; establishing clinical protocols to improve outcomes, reduce errors, and re-admissions; engaging in mergers and acquisitions that strengthen regional market position; and streamlining functions to increase efficiency in the face new constraints on reimbursement.

In the face of these many new challenges, it is difficult to secure the attention that is needed to build internal population health capacity. While the movement towards global budgeting is generally accepted as a necessary reality, the incremental steps in this direction such as the ACO shared savings models do not provide sufficient near-term impetus to substantially shift the focus of resource investment and staffing. In this context, we must rely on the voluntary leadership of colleagues in the hospital sector to take definitive proactive steps – in the words of hockey legend Wayne Gretzky, “to skate where the puck is going to be.” We must also rely (and encourage) leaders of other stakeholders in diverse sectors to come together with hospitals and local health departments to align their efforts, demonstrating a commitment to shared ownership for health in our communities.

The American Hospital Association (AHA) has demonstrated a commitment to leadership with the establishment of an internal Population Health Task Force. The Task Force has developed a rolling 2014-16 strategy that includes the formation of a member advisory group to provide ongoing input and guidance. Key actions include the documentation and dissemination of exemplary practices in the field and the identification of population health quality metrics for use by hospitals and health systems. In addition to the development of a web page and in-person and online educational sessions through a broad spectrum of member and partner organizations, the AHA plans to work with data at the local and national level to support development of population health strategies at the local, regional, and statewide level. Leadership by the AHA is critically important to facilitate the timely redesign of care delivery systems, the development of new financing structures, and of equal importance, the development of substantive working relationships with a broad spectrum of stakeholders with shared ownership for health of local communities.

On December 30, 2013, the Internal Revenue Service issued Notice 2014-3.³ The Notice sets an important precedent by outlining disclosure and corrective action procedures that nonprofit hospitals can take to avoid tax penalties for non-egregious or willful violations in their public reporting process. The Notice and proposed rule is aligned with a safe harbor concept that is commonly used in regulated industry laws, and the proposition is that it serves to incentivize compliance. Regulated entities, in this case tax-exempt hospitals, find it to be in their best interests to proactively review and correct errors.

The IRS has taken the right approach at this early stage of the process to focus on encouraging the advancement of practices, rather than a punitive “gotcha” approach to oversight. The notice offers the potential to move mind sets beyond simple compliance to a more salutatory focus on quality improvement.

As it relates to the “safe harbor” approach outlined in the most recent IRS notice, if the imperative is to operationalize transparency at the federal level, where do community stakeholders fit into the equation? What is the scope of issues that are valid for consideration? How does to the spectrum of issues examined in this study become an ongoing focus for quality improvement? The development and piloting of the CHIDSS tools in this study is intended to serve as a starting point for a shared approach to the review, alignment, and enhancement of community health improvement practices in the months and years to come.

³ <http://www.irs.gov/pub/irs-drop/n-14-03.pdf>

II. Introduction

A. Project Overview

The purpose of this project is to develop and field test a set of online tools that support the comparative review of specific elements of publicly available reports by tax-exempt hospitals, local health departments, and other local community-based organizations. The online tools comprise what is referred to in this report as a **Community Health Improvement Data Sharing System** (CHIDSS). Relevant reports include community health assessments, implementation strategies, and other documents with a similar purpose. The CHIDSS is intended for use by a broad spectrum of potential users, including, but not limited to the following:

- organizations engaged in assessment and planning that seek to improve and better align practices to make optimal use of limited resources and produce measurable outcomes;
- community members and stakeholder groups who seek information and meaningful engagement as shared owners of community health improvement processes;
- public and private sector agencies at the city, county, and state level with an interest in oversight and/or effective allocation of resources in the public's interest;
- academic institutions and other research organizations with an interest in the advancement of public knowledge and practices; and
- media organizations and individuals interested in community health and the contributions of institutional stakeholders.

The availability of public reports for tax-exempt hospitals is made possible by new reporting requirements in the Patient Protection and Affordable Care Act (ACA) and the IRS Revised 990, Schedule H. The new requirements call for tax-exempt hospitals to conduct a community health needs assessment (CHNA) every three years and to develop an Implementation Strategy that must be updated on an annual basis. Both the CHNA and Implementation Strategies are to be adopted by hospital governing boards in the same tax year. While final regulations are pending, much of the reporting architecture has been established and provides a basis for public review of a number of key elements of the community health improvement assessment and planning process. Hospitals are required to post their CHNAs in a highly visible manner on their web sites, but there is no centralized database for access by stakeholders.

There were a total of 5,724 hospitals in the U.S. in 2011.⁴ Of those, 2,903, or 51%, were 501c3 tax-exempt hospitals; 1,025, or 18%, were investor-owned hospitals; and 1,045 were local or state government hospitals. The remaining 751 facilities were federal government hospitals (208), non-federal psychiatric hospitals (421), and non-federal long-term care hospitals (112), and hospital units of larger institutions (10) such as prison hospitals and college infirmaries. It should also be noted that

⁴ American Hospital Association Annual Survey, 2013 by Health Forum LLC

1,332, or 46%, of the 2,903 tax-exempt facilities are Critical Access Hospitals with twenty-five beds or less.

The launch of a set of national accreditation standards in 2011⁵ by the Public Health Accreditation Board (PHAB) provides a formal structure to encourage assessment and planning processes for Tribal, State, and local health departments. The standards include a requirement for a community health assessment (CHA) and the development of a health improvement plan as a prerequisite for participation in the accreditation process. A revised set of standards released in January 2014⁶ strengthens requirements for the community health assessment and health improvement plans, provides additional guidance on measurement, and examines emerging issues such as health informatics, workforce development, and health equity.

Health departments seeking accreditation are also required to make their assessments publicly available, as outlined in Standard 1.1.3A:⁷

“Documentation could be, for example, evidence of distribution of the assessment to libraries or the publication of the community health assessment on the department’s website. Summaries of the findings could be, for example, published in newspapers, outlined in the department’s newsletter, linked to from the department’s Facebook page, or published on the department’s website.”

While there is no formally established centralized database for local health departments, the National Association of City and County Health Officials (NACCHO) has begun to informally compile reports.

As of 2005, there were a total of 2,864 local health departments in the United States, with approximately 160,000 employees.⁸ The PHAB standards and prior recommendations by the Institute of Medicine in 2003⁹ highlight the need for local health departments to expand competencies in a number of areas, including health informatics, community engagement, participatory action research, and policy development. In 2010, a total of 1,278 epidemiologists were employed at local health departments, with most concentrated in large urban agencies, and most focused on infectious diseases.¹⁰ While there has been some increase in those engaged in chronic diseases, there has been a decline in those focusing on environmental health, and little evidence of a focus on building capacity in areas such as comprehensive community health improvement.

A number of other organizations in communities conduct periodic assessments, including United Ways, community health centers,¹¹ and Community Action Agencies,¹² to name a few examples. Health Impact Assessments (HIAs) may also be conducted in communities to assess the impact of proposed

⁵ <http://www.phaboard.org/>

⁶ <http://www.phaboard.org/wp-content/uploads/SM-Version-1.5-Board-adopted-FINAL-01-24-2014.docx.pdf>

⁷ <http://www.phaboard.org/wp-content/uploads/SM-Version-1.5-Board-adopted-FINAL-01-24-2014.docx.pdf>, pg. 32

⁸ “The Local Health Department Workforce: Findings from the 2005 National Profile of Local Health Departments Study,” National Association of City and County Health Officials, January 2007.

⁹ “Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century,” Institute of Medicine, National Academy of Sciences, August 4, 2003.

¹⁰ The Epidemiology Workforce in State and Local Health Departments: United States, 2010, MMWR, Centers for Disease Control and Prevention, March 30, 2012, 61 (12): 205-208

¹¹ Assessments as part of applications to secure formal Section 330 designation to receive core funding from the federal Health Resources and Services Administration

¹² Community action agencies were established during the early days of the War on Poverty, and supported by the Administration on Children and Families.

introduction or termination of services or facilities upon the health of surrounding populations and communities. In addition to periodic assessments that are required or expected of institutions to justify or inform the allocation of resources, there are special initiatives funded by public and private sector philanthropy that may call for stakeholders to conduct assessments to establish a baseline from which to measure the impact of targeted interventions.

In short, there are a plethora of community health improvement assessment-related activities that are undertaken in local communities across the country, each with different reference points, areas of emphasis, sources of input, and varying processes. In many cases the different assessments provide unique information that is of significant value. With the entry of tax-exempt hospitals as a major stakeholder in community health assessments, however, there is considerable basis for a critical examination of ways in which the spectrum of assessments may represent a duplication of efforts. Perhaps even more importantly, a key question is the degree to which greater alignment of these efforts may present an opportunity to optimally focus resources in a manner that are more likely to produce measurable outcomes.

It is important, for example, to know which community health improvement assessments and planning processes give attention to sub-county geographic areas with high concentrations of health disparities. There has been substantial documentation of disparities in access to quality health care services and health status, as well as of disparities in social and environmental conditions that influence health status and health behaviors. While these conditions have been well documented, here is little evidence that measurable progress has been made to date. More deliberate, coordinated, and transparent action is needed at the local and regional level to achieve meaningful progress.

The online tools developed in this project include the a) enhancement of an existing geographic information system (GIS) tool entitled the Vulnerable Populations Footprint (VPF), which is available at www.CHNA.org and is part of the Community Commons web-based platform, and b) development of a set of online templates and a CHIDSS User's Guide that assists in the identification and extraction of targeted data/information from publicly available community health improvement assessment and planning reports. The data/information targeted in the reports can be broken down into four basic categories:

- how community is defined in the assessment and implementation process;
- how community stakeholders are engaged in assessment, planning, and implementation;
- how priorities are set; and
- the content and geographic focus of implementation strategies.

These categories are described in more detail in the Methods section of the report. It is important to note, however, that the development and piloting of the tools and documentation of practices in this project and the intent going forward is only partially related to compliance with federal and/or state regulations. There are substantial limits to the impact of regulations and reporting requirements at the federal and state level, in part because there is insufficient capacity and competencies to provide meaningful oversight, and in part because oversight at this level is insufficiently responsive to unique characteristics, dynamics, and interests at the local level. The larger intent of this project and the tools going forward is to support voluntary leadership and commitment to transformation among hospitals, public health agencies, and other local stakeholders, with particular attention to alignment of resources and focus in communities where health disparities are concentrated.

A focus on alignment is a strong theme in the concept of *collective impact*¹³, introduced by FSG, a nonprofit consulting firm established in 2000 as the Foundation Strategy Group. The basic model describes five conditions for the optimal alignment of stakeholder partners in an array of potential community strategies. They include a common vision or agenda, continuous communication among senior leaders, mutually reinforcing activities, a shared measurement system, and the establishment of a “backbone” entity that provides the infrastructure for ongoing support, facilitation, and monitoring of the process. For many involved in collaborative approaches to community health improvement, the conditions described in the Collective Impact model are consistent with objectives that have been pursued for many years. The FSG model has neatly packaged those objectives at a time when there is increased awareness and urgency to address concentrated health disparities in local communities, particularly among key stakeholder institutions such as hospitals, local public health agencies, and community development organizations.

B. Project Elements

This project builds on a three-year series of convenings and inquiry implemented by the Public Health Institute in collaboration with the National Network of Public Health Institutes through a cooperative agreement with the Centers for Disease Control and Prevention. The first major element was a two-and-a-half day national expert panel meeting in July 2011 that brought together leading researchers, government officials, community advocates, health care and public health practitioners to discuss the science, practice, challenges and opportunities in the community health improvement arena. A detailed report of proceedings is available online at:

<http://www.phi.org/uploads/application/files/dz9vh55o3bb2x56lcrzyel83fwfu3mvu24oqqvn5z6qaeiw2u4.pdf>. A webcast of the conference is available at: <http://www.cdc.gov/policy/opth/chna/>.

A second project was initiated in December 2011 and featured the convening of a “Design Team” of experts that focused on the development of what was referred to as a “Starter Kit” to accelerate the learning process among tax-exempt hospitals, with particular focus on the approximately 1,300 Critical Access Hospitals of twenty-five beds or less. Products of this project included the Vulnerable Population Footprint tool, the establishment of the CHNA.org site, a set of core indicators and evidence-informed interventions for consideration, and a set of guiding principles to inform CHNA and Implementation Strategy processes. A cohort of twenty-four Critical Access Hospitals was also engaged as part of this project to solicit input on their experiences to inform the development of the tools and principles.

The current project is an outgrowth of input garnered from hospitals and other stakeholders engaged in community health assessment and planning processes in the field, as well as input and technical assistance to a cohort of hospitals that participated in the piloting of the Vulnerable Population Footprint tool.

The first step in the project was a convening of approximately sixty researchers, practitioners, and government officials on May 28 and 29, 2013. Particular effort was made to secure the participation of experts in health disparities and the breadth of stakeholders involved in (or providing oversight for) community health improvement processes. A series of key informant interviews was conducted prior to the convening. A video recording of selected presentations and group discussions from the first day can be accessed at: https://app.sugarsync.com/wf/D6344583_71110957_66513

¹³ Kania, John, and Kramer, Mark, *Collective Impact*, Stanford Social Innovation Review, Winter 2011, info@ssireview.org, www.ssireview.org

and for the second day at https://app.sugarsync.com/wf/D6344583_71110957_66636_.

The key informant interviews focused on the utility of mapping tools as an ongoing resource for community health improvement processes, the identification of important features and emerging metrics, and issues in their practical application. Key informants strongly supported the use of mapping tools to provide a “big picture” perspective and understanding of the social determinants of health among users from diverse backgrounds. They also emphasized the utility of mapping tools in the identification of entry points for the mobilization of assets among a broad spectrum of community stakeholders. Informants identified an array of practical issues to be considered, including the development of specific plans for a phased-in implementation process, considering how to update data, identifying the home for the tools, and determining the resources needed to sustain an online platform. A number of informants also issued a caution to avoid slipping into potential stigmatization of communities where health disparities are concentrated, and encouraged movement from problem identification to innovative problem solving.

Key informants were also asked about the potential users of a CHIDSS, sources of data for consideration, potential challenges in the interpretation of data, and practical considerations in supporting the ongoing management and oversight of the system. They emphasized the potential value in supporting synergistic links among activities within geographic areas, as a resource for diverse organizations that may lack internal analytic capacity, and as a way to bring new stakeholders into community health improvement processes. As was the case with mapping tools, informants noted the potential for misuse and misinterpretation of data; the need for capacity to update, manage, and add data elements over time; and the need for an investment in training of potential users. Informants identified numerous practical challenges in the use of a data-sharing system, including how to balance the imperative for collaboration with long-established competitive dynamics and ensuring relevance to residents and groups at the neighborhood level.

In the two-day meeting in Atlanta, participants were provided with the summary findings from the key informant interviews and were provided a set of questions to address in small group discussions in the two areas of focus (i.e., health equity mapping tools and the development of a Community Health Improvement Data Sharing System).

For the health equity mapping tool, participants were provided with a series of three brief demonstrations of current mapping tools, including 1) www.chna.org, a full public access online GIS platform developed by the Center for Applied Research and Environmental Systems (CARES), in cooperation with Community Initiatives and Transtria, 2) UDS Mapper (www.udsmapper.org), a Health Resources and Services Administration (HRSA)-funded GIS tool that supports evaluation of the geographic reach, penetration, and growth of the Section 330-funded Health Center Program and its relationship to other federally-linked health resources, and 3) Policy Map (www.policymap.com), a GIS platform for financial institutions and other entities seeking information to support planning and decision-making. Policy Map is a project of The Reinvestment Fund, a national Community Development Financial Institution (CDFI), and provides a combination of data on real estate values, neighborhood conditions, education, and demographic data.

The three presentations were intended to provide a demonstration of the utility of GIS platforms in informing community health assessments and associated planning processes. They also provided insights into ways in which the overlapping content and different approaches may inform the further development of the Vulnerable Populations Footprint. Participants then addressed a set of questions in

small groups that focused on a) the identification of additional features to be considered for integration, b) the range of potential users, c) metrics that support intersectoral links, and d) practical considerations.

Participants suggested inclusion of community health centers, use of additional geopolitical boundaries, and more detailed representation of hospitals (e.g., bed number, Critical Access Hospitals, Academic Health Centers). They encouraged efforts to acquire GIS data on what services are being provided, as well as basic needs such as healthy food access. They also encouraged a flexible approach to mapping boundaries that allow users to define “community” in different ways. In terms of metrics, participants encouraged support of approaches that help to highlight social determinants of health-related issues such as obesity, youth behavior, and career opportunities. Particular attention was given to various forms of social capital as an important area of focus. Participants also identified a number of economic-related metrics such as housing insecurity, availability of financial institutional resources, and labor force participation. A number of other potential metrics were suggested to capture broader community conditions, health status, race/ethnicity, and education-related issues. Potential users identified by participants ranged from community residents, neighborhood associations, and advocacy groups to hospitals, community health centers, community development corporations, city councils, academic institutions, and foundations. In consideration of outreach, participants emphasized the need for technical assistance and summary guidance (including videos and webinars).

Questions for small group discussion associated with the development of the Community Health Improvement Data Sharing System focused on a) issues in determining the optimal scale/unit of analysis, b) building a common language and metrics, c) building shared ownership for health, d) considerations in determining an appropriate “home” for the tool, and e) supporting a dialogue about potential uses of the tool.

In the examination of scale, participants emphasized the need for flexibility, both to take advantage of potential synergies at the regional and/or state level, and also to allow for a “drill down” that offers the potential to focus resources and mobilize residents at the neighborhood level. As the system is further developed, some suggested creating tools that provide an easy way to look at different geographic scale.

Consistent with the imperative for relative simplicity in the development of the VPF tool, participants cautioned against moving too far into complex analytic frameworks in the development of the Community Health Improvement Data Sharing System. A number of participants emphasized a focus on core values (e.g., reducing disparities, shared ownership for health), and the identification of ways in which proposed processes (e.g., defining community, setting priorities) are aligned with those values. Participants also suggested parallel documentation of exemplary practices to provide concrete examples of approaches to the community health improvement process that reflect alignment with core values.

In the identification of an appropriate home for the Community Health Improvement Data Sharing System, participants emphasized the importance of identifying a neutral entity in the nonprofit sector that is independent of special interests. Some suggested that a foundation could serve as the home. If not, there would still need to be one or more foundations that would be invested in the implementation. In the early stages of implementation, some also suggested an analysis to determine how the newly accessible data informs action, with investment in the documentation of impacts. This would include attention to ways in which stakeholders change the way they do business, ranging from

the establishment of new internal functions and structures and the reallocation of existing resources to the development of new partnerships across sectors.

A more detailed summary of the key informant interviews is included as Appendix A. A detailed summary of proceedings from the convening is included as Appendix B.

In the wake of the meeting, project staff and leadership integrated the input from participants and began to focus on the following tasks:

- potential enhancements to the Vulnerable Population Footprint mapping tool;
- areas of focus for data collection & comparative analysis;
- develop templates, coding strategies, and primers for each area of focus;
- examine literature to document research and field work to date; and
- select a series of geographically diverse regional pilot sites.

Following the development of draft tools and the review of literature, and as part of the site selection process, project staff began to identify and secure publicly available documents from online sources. The collection, review, and analysis of data/information from these reports informed a process of refinement of the online templates and coding strategy. In the data/information collection and review process, careful attention was given to balancing technical considerations with ease of use by a broad spectrum of potential users, including non-health care or public health trained community stakeholders. At the same time, project staff worked closely with the staff of IP3 and CDC representatives to identify and secure agreement of a set of proposed enhancements to the Vulnerable Population Footprint tool. The tool, in turn, was used to illustrate and provide insights to information gleaned from publicly available reports.

C. Impetus for Project

A number of factors provided the impetus for this project. The most immediate is the public availability of data and information on the community health improvement assessment and planning processes of tax-exempt hospitals. In the near term, oversight mechanisms at the IRS may be limited to monitoring of key elements in the reporting process, such as the completion and posting of CHNAs and Implementation Strategies. The detailed information in publicly available reports has much more potential use at the local and regional level, both for the improvement of individual practices and in the interest of increased alignment (and less duplication of effort) across hospitals and other stakeholders.

There is evidence of collaboration among tax-exempt hospitals in states such as California, Texas, and Massachusetts where CHNAs are required elements of community benefit statutes. In most cases, partnerships are limited to the assessment phase of the community health improvement process. The potential for alignment of investments and interventions across institutions is impeded by competitive dynamics and a proprietary orientation that favors “branding” of strategies to distinguish institutions in the marketplace.

Among community stakeholders, there is often a lack of understanding of how to engage hospitals as partners. They are more likely to seek financial support from the hospital for existing or proposed activities of their own organization, rather than exploring options for ongoing collaboration. This tendency is driven by an assumption that hospitals have substantial discretionary resources. It is also driven by a lack of understanding by both sets of stakeholders of the positive potential for the design of

comprehensive approaches that make optimal use of available resources. In addition, on the hospital side, there is often a lack of staffing and competencies to engage in and/or sustain such partnerships.

In the broader community context, there tends to be skepticism about community health assessments. This view is validated by observations that periodic assessments have been conducted for many years by a broad spectrum of public and private sector organizations, but they are rarely followed by definitive action to address the needs that survey respondents and focus group participants have identified.

In the context of a new accreditation process for local health departments with the assessment as the first step, as well as parallel processes by United Ways, Community Action Agencies, and community health centers, the entry of hospitals into the community health improvement process represents an opportunity to disrupt the historical status quo. There is a clear imperative for alignment of assessments, planning processes, and investments and interventions, and to give primary focus of these efforts in geographic communities where health disparities are concentrated. Alignment presents the opportunity to build a critical mass of targeted activities and investments that will produce measurable and sustainable outcomes.

With this potential in mind, the focus of this project and the tools and templates that have been developed focus on the assessment, planning, and implementation processes, rather than simply tallying up financial contributions. The intent and the opportunity is to leverage the transparency provided by the new reporting mechanisms and to position the full spectrum of stakeholders to ask questions that will directly contribute to the advancement of practices.

III. Background

A. Tax-Exempt Hospitals, Community Benefit, and the ACA

The requirement to conduct CHNAs and develop Implementation strategies in section 9700 of ACA and reporting requirements in IRS 990 Schedule H reporting represent the most significant expansion in public oversight of the charitable practices of tax-exempt hospitals in their history. A number of states have existing requirements for CHNAs going back as far as twenty-three years in New York; twenty years in Texas; and nineteen years in California and Massachusetts¹⁴. Approximately twenty states have some form of reporting requirements for tax-exempt hospitals. Four of those states (UT, TX, PN, IL) have minimum financial thresholds as a part of their reporting framework. While there is no evidence that these thresholds have increased charitable resource allocations, access to care, or produced other measurable outcomes, there is continued interest in this approach among advocates at the local, state, and national level.

In contrast to the focus on financial reporting in other quarters, this study focuses on key elements of the assessment, planning, and implementation processes. The availability of reports by hospitals provides an opportunity to move beyond the one-dimensional financial tally to a more contextual analysis at the individual institutional level and a comparative analysis of multiple institutions at the local/regional level. As stated in the introduction of this report, the study focuses on a) how community is defined, b) how community stakeholders are engaged, c) how priorities are set, and d) the content and geographic focus of implementation strategies. The following narrative summarizes current reporting requirements and issues as they relate to each area of focus.

Defining Community

In determining the geographic parameters of a community health assessment, it is important to acknowledge that service utilization patterns, as well as concentrations of poverty, often do not fit neatly into geopolitical jurisdictional boundaries. Of equal importance, there are substantial variations in the relative proximity of tax-exempt hospitals to geographic concentrations of poverty and populations with health disparities. In many cases, proximity to these populations is an accident of history, and such hospitals often both celebrate their role as a critically important safety net institution and struggle to keep their doors open in the context of an unfavorable payer mix.

Other hospitals benefit from positive accidents of history or more recent strategic facility location decisions that place them in the midst of more economically affluent geographic areas with favorable payer mixes. Tax-exempt hospitals in these areas share the same charitable obligations as their competitors that are more proximal to low-income populations, but have very different practical realities. Hospitals in more affluent geographic regions are much less likely to have emergency departments filled with uninsured and underinsured patients with acute and preventable conditions. While they may have small pockets of lower-income populations within their geographic service area, their community benefit resource allocations are more likely to serve populations with health insurance in more economically stable communities. As such, use of a hospital's service area as the frame to establish the geographic parameters of their CHNA (and associated charitable obligations) reinforces a

¹⁴ The Office of the Attorney General in Massachusetts developed a set of "Voluntary Guidelines" for reporting in 1994, which have been generally observed by hospitals and health maintenance organizations in the state.

substantial advantage over other tax-exempt hospitals that are more proximal to communities with concentrated health disparities.

The use of a hospital's service area does offer insights into service-seeking patterns of proximal geographic populations, but does not provide the complete picture that is needed to identify concentrations of unmet health needs at the regional level. The methodology used to define service area is weighted towards insured populations (unless a hospital is managing to operate in a locality with a particularly unfavorable payer mix). Moreover, voluntary service seeking is not a particularly good mechanism to identify populations with unmet health needs. In other words, unless a particular hospital is the sole provider in a particular region, there are a variety of reasons why medically indigent populations may or may not select one or another hospital facility. Emergency room utilization by payer source, particularly if there is a focus on preventable admissions, offers more insights into where there may be concentrations of unmet health needs.

The exclusive use of hospital service area methods to set CHNA geographic parameters can potentially result in the exclusion of low-income communities, particularly in larger metropolitan areas with multiple hospitals. More commonly, it contributes to a disproportionate allocation of charitable responsibilities among hospitals. Experience in the field and research indicates that hospital facility location in many instances is more of a factor in the volume of charitable care provided than the form of ownership. Last, but not least, use of hospital service areas to define the geographic parameters of CHNAs (and subsequent charitable allocations) reinforces a proprietary approach to community benefit. The net result is missed opportunities to leverage limited resources among hospitals and other stakeholders.

Most state statutes call for hospitals to use their service area as the basis to define the geographic parameters of their assessment. Service areas are further defined at the primary and secondary level, based upon established threshold percentages of population (e.g., 50%) within designated zip codes that seek services from their hospital. The IRS also allows hospitals to use their service area as the starting framework for defining their community with language in the April 5, 2013 NPRM:

Consistent with Notice 2011-52, these proposed regulations provide a hospital facility with the flexibility to take into account all of the relevant facts and circumstances in defining ***the community it serves*** [our italics], including the geographic area served by the hospital facility, target populations served (for example, children, women, or the aged), and principal functions (for example, focus on a particular specialty area or targeted disease). (Page 29)

At the same time, the IRS notes that it may be appropriate to look outside its service area, particularly if there is an interest in collaboration with other hospitals, local health departments, and other institutions that may have different geographic parameters:

These proposed regulations also clarify that a hospital facility may define its community to include populations in addition to its patient populations ***and geographic areas outside of those in which its patient populations reside*** (our italics). For example, a hospital facility collaborating with other hospital facilities in its MSA in conducting a CHNA may define its community as the entire MSA in which all of the collaborating hospital facilities are located, even if the hospital facility itself only generally serves and draws its patients from a portion of that MSA. (Page 29)

Of equal importance, the April 5, 2013 NPRM re-states a cautionary note included in Notice 2011-52, but adds additional language about alignment with patient populations that appear to release from responsibility those hospitals that are fortunate enough to be sufficiently distant from geographic areas with concentrated health disparities:

Thus, similar to the restriction included in Notice 2011-52, these proposed regulations provide that a hospital facility may not define its community in a way that excludes medically underserved, low-income, or minority populations ***who are part of its patient populations, live in geographic areas in which its patient populations reside*** [our italics] (unless they are not part of the hospital facility's target populations or affected by its principal functions), or otherwise should be included based on the method used by the hospital facility to define its community. (Page 30)

Whether or not this language is revised in the final regulations to more appropriately articulate some level of responsibility to address geographic concentrations of disparities in a region, the tools developed in this project are intended to support relevant inquiries by local stakeholders. Such inquiries may be needed to address a lack of knowledge and/or historical insular tendencies that contribute to a view that geographic concentrations of disparities outside a hospital's immediate primary service area are not a relevant concern.

It is also important to note that rural regions and organizations that address health-related needs in those regions face an array of challenges associated with serving dispersed populations with limited resources and infrastructure. Many smaller rural counties in the Midwest and Eastern US do not have hospitals and may rely upon one or more facilities in adjacent counties to provide necessary clinical services. If there is a hospital, it is often a smaller facility that lacks the infrastructure to conduct a CHNA and engage in health planning. There are currently more than 1,300 Critical Access Hospitals with twenty-five or fewer beds in the US, and each now is required to conduct a CHNA. In these situations, it may be prudent to bring together two or more counties both to secure sufficient resources and to ensure the engagement of all appropriate facilities needed to effectively serve the populations.

Engaging Community Stakeholders

An important consideration in the community health improvement process is the degree and manner in which hospitals and other institutions engage diverse community stakeholders as partners with shared ownership for community health improvement. Given the complex nature of persistent health problems in local communities and the importance of leveraging the limited resources of hospitals and local health departments, substantive engagement is a prudent part of assessment, planning, and implementation. There are numerous examples of hospital-community stakeholder partnerships across the country documented in recent publications^{15,16} that reflect this understanding.

In many cases, however, hospitals, local health departments, and other institutions may lack the knowledge, experience, or the capacity to build substantive partnerships with diverse local stakeholders. Moreover, to the degree that proposed programs or interventions by hospitals are focused on the

¹⁵ "Partner with Nonprofit Hospitals to Maximize Community Benefit Programs' Impact on Prevention," Issue Brief, Trust for America's Health, Washington, DC, January 2013

¹⁶ "Strategic Investment in Shared Outcomes: Transformative Partnerships between Health Systems and Communities," Monograph, Health Systems Learning Group, Washington, DC, April 4, 2013

delivery of professional services, the potential contributions of community stakeholders may be limited. This more narrow interpretation of the potential contributions of tax-exempt hospitals may be reflected in the fact that the IRS has limited the prospective roles of community stakeholders to simply providing input during the assessment phase of a community health improvement process:

Specifically, these proposed regulations require a hospital facility to ***take into account*** [our italics] input from, at a minimum:

- (1) at least one state, local, tribal, or regional governmental public health department (or equivalent department or agency) with knowledge, information, or expertise relevant to the health needs of the community;
- (2) members of medically underserved, low-income, and minority populations in the community, or individuals or organizations serving or representing the interests of such populations; and
- (3) written comments received on the hospital facility's most recently conducted CHNA and most recently adopted implementation strategy. (Page 32)

Aside from a lack of attention to the benefits of ongoing engagement of diverse community stakeholders in the community health improvement process, it is unclear what is meant by the phrase "take into account." There is no indication of how an institutional response to such input should be reflected in the CHNA or IS, nor is there any encouragement to describe ways in which community stakeholders are engaged as ongoing partners. It should be noted, however, that hospitals are asked to provide information on the input, which could provide a basis for a follow-up inquiry at the local level:

Provide the names of organizations providing input and summarizes the nature and extent of the organization's input. (Page 38)

In lieu of reporting requirements, guidelines, or encouragement by the IRS, this study and the online tools provide the means for documentation of engagement of diverse stakeholders throughout the community health improvement process.

Priority Setting

Priority setting is one of the most important, yet most overlooked and generally poorly implemented steps in the community health improvement process. It is important because there is a need for stakeholders to select a subset of the larger set of identified needs, given insufficient resources to effectively address all needs in all communities (and all at the same time). As such, there is a need for a clear process that facilitates the participation of people with a broad spectrum of expertise and experience with a stake in improved community health, as well as criteria with sufficient specificity to inform a selection among alternative options.

Priority setting tends to be overlooked or poorly implemented because it frequently comes at the end of an arduous community health assessment process, and institutions may be impatient to move from assessment to planning and implementation. There may also be a lack of understanding of the importance of considering the potential contributions of other stakeholders, and how those potential contributions (and priority concerns) may inform the selection of options. Among hospitals, the predominant view may be that this is a process of determining how to spend their own resources, and

thus decisions should be limited to internal leaders. An alternative view may be that the deferral of taxes comes with an obligation to view charitable resource allocation as fulfillment of a public trust that is informed by engagement of diverse external stakeholders and that provides opportunities to select priorities that optimally leverage internal resources.

The IRS appears to recognize the importance of priority setting by outlining the following requirements in the April 5 NPRM:

These proposed regulations require the CHNA report to include a prioritized description of the significant health needs of the community identified through the CHNA, along with a ***description of the process and criteria*** [our italics] used in prioritizing these health needs. (Page 43)

It is important to note that the requirement to include the list of prioritized needs and the criteria and process for selecting them *in the CHNA* is intended in part to provide the opportunity for public input on the posted CHNA prior to subsequent finalization and posting of a hospital's Implementation Strategy.

In recognition that hospitals have to select among an array of unmet health needs that were identified in the CHNA, the IRS outlines the following requirement for documentation in Notice 2011-52:

The Implementation Strategy identifies health needs the hospital does not intend to meet and provides an explanation (Section 3.08).

Aside from the fact that priority setting is often overlooked or poorly implemented, a key challenge to be addressed, in particular by tax-exempt hospitals, is the tendency to take on too many disparate, uncoordinated, and small-scale community benefit activities. This is often the result of two shortcomings: a) an inability to say "no" to external community groups and internal clinicians who propose new activities, and b) an inability to terminate activities that have not been demonstrated to produce desired outcomes. As such, one of the more difficult steps for hospitals will be a critical review of existing activities in the context of CHNA findings and priority setting. One anticipated outcome would be some adjustments in the range and focus of existing activities. Ideally, the evolution of practices in the field would lead to a fewer number (e.g., five to eight) of larger scale, more comprehensive, and coordinated approaches to health improvement.

Content and Geographic Focus of Implementation Strategies

Data collection and analysis in this part of the study focused on documentation in three areas, including:

- the identified population and/or geographic focus of implementation strategies and/or individual programs;
- the content focus of priorities and associated programs; and
- the types of metrics identified to monitor programs.

In the documentation of these practices, it is important to recognize that CHNAs and Implementation Strategy development are new activities for many hospitals. Many, if not most hospitals lack staff members and leaders with the competencies to undertake these relatively sophisticated activities. Building internal population health capacity will be a gradual process for most. An important part of building capacity is coming to terms with the limits of a narrow focus on access to and coordination of

clinical services, and the imperative to address the social determinants of health in local communities. Many, if not most hospitals, currently engage external consultants to assist with CHNAs and the development of implementation strategies. Many also underestimate how much time, attention, and expertise is needed to manage, monitor, and periodically refine programs and activities on an ongoing basis. The IRS provides considerable flexibility to hospitals in the development of an implementation strategy, limiting the requirements to a call for clear documentation:

The requirement in section 6033(b)(15)(A) also encompasses an annual, up-to-date ***description of the actions actually taken*** [our italics] by a hospital facility during the taxable year to address the significant health needs identified through the most recently conducted CHNA (Page 59)

Similarly, hospitals are called upon to describe their approach to evaluation, including the identification of metrics to be used:

These proposed regulations also require the CHNA report to include a ***description of the potential measures*** [our italics] and resources identified through the CHNA to address the significant health needs. (Page 43)

These proposed regulations adopt some of the commenters' recommendations by requiring the implementation strategy to describe, in addition to the actions the hospital facility intends to take to address the health need, the ***anticipated impact of these actions and the plan to evaluate*** [our italics] such impact. (Page 50)

In acknowledgment that hospitals may want to collaborate with other hospitals in the development of Implementation Strategies, the IRS provided instructions that would enable reviewers to distinguish the specific contributions of each facility:

These proposed regulations state that a hospital facility may develop an implementation strategy in collaboration with other facilities and organizations. In addition, these proposed regulations provide that a hospital facility that collaborates with other facilities or organizations in developing its implementation strategy generally must ***document its implementation strategy in a separate written plan*** [our italics] that is tailored to the hospital facility and takes into account its specific programs and resources. (Page 53)

In summary, these four areas serve as the core elements of an online tool, and for tax-exempt hospitals, they represent a complementary approach, if not an alternative to a more limited focus on a tally of institutional financial contributions. In this approach, the focus is on the degree and manner in which community health assessments ***and*** implementation strategies identify and target interventions where there are geographic concentrations of health disparities, whether diverse community stakeholders are engaged in an ethic of shared ownership to leverage the limited resources of hospitals and other institutions, and whether the approaches reflect an understanding of the need for alignment across institutions to develop more comprehensive strategies that increase the potential to produce both measurable and sustainable outcomes.

Moving from Compliance to Transformation

While many hospitals are new to the community health improvement process, others have an established history of engagement with diverse community stakeholders and the design and implementation of effective programs in a variety of settings. For these hospitals, the new IRS and ACA reporting requirements may represent some additional time commitment for documentation purposes, but their experience, expertise, and institutional commitment takes them well beyond minimum compliance. The leaders of these institutions understand this and are encouraging staff to take community health improvement innovations to scale and are exploring strategies to integrate them with the delivery of clinical services.

In essence, they have moved beyond compliance and are focusing on a more fundamental transformation in the structures and functions of their organizations. Examples include, but are not limited to expanding the scope of services, leveraging their resources through the engagement of other stakeholders who are in a position to help address social and environmental obstacles to health improvement, and developing shared data information systems with other community health sector institutions that provide baseline information to monitor the impact of strategic investments and interventions.

Sara Rosenbaum and Maureen Byrnes at the George Washington University School of Public Health were commissioned by the Centers for Disease Control and Prevention to develop a set of seven guiding principles for community health improvement practice that provides important insights into the elements of the transformation that is underway among many of our hospitals and health systems. **Table 1** provides a comparative framework that contrasts examples of practices that reflect a commitment to transformation as envisioned by GWU experts with parallel practices that reflect a commitment to minimum compliance with the IRS requirements.

Table 1: Compliance and Transformation¹⁷

Actions by Tax-Exempt Hospitals in Community Health Improvement that Reflect a “Minimum Compliance” Approach Versus a “Commitment to Transformation”

<i>Minimum Compliance</i>	<i>Commitment to Transformation</i>
Shared Ownership	
Co-finance consultant to conduct CHNA Hold meetings to discuss design Return to hospital to set internal priorities	Ongoing stakeholder engagement to build common vision & shared commitments Set shared priorities & take coordinated action
Diverse Community Engagement	
Solicit input through surveys, focus groups, town halls on health care needs Meet with local or state PH officials	Engage diverse community stakeholders as ongoing partners with shared accountability ID shared priorities for community health
Broad Definition of Community	
Define community as hospital service area Identify underserved pops in service area Design programs at service area level	ID concentrations of health inequities in region that includes hospital service area Select geo focus where needs are greatest
Maximum Transparency	
Post CHNA report on hospital website Attach Implementation Strategy (IS) to Schedule H submittal or post on website	Post CHNA & IS in multiple settings ID defined roles for diverse community stakeholders in specific projects
Innovative & Evidence-Informed Investments	
Describe how hospital will address priority unmet needs	Survey practices to ID strategies with evidence of effectiveness or that offer promise Establish shared metrics to document outcomes
Incorporate Continuous Improvement	
No action required	ID and monitor indicators that validate progress towards outcomes Adjust strategies based upon emerging findings
Pooling and Sharing of Data	
No action required	Share utilization data across hospitals, local health departments, and community health centers to assess total cost of care Proactive identification and monitoring of institutional return on investment & community level social return on investment ¹⁸

¹⁷ Seven categories adapted from Rosenbaum, S., and Byrnes, M. “The Affordable Care Act’s Community Health Needs Assessment Reforms: Guiding Principles for Successful Community Health Improvement, George Washington University, online resource, August 11, 2012.

We documented a number of practices in this study that reflect a commitment to go well beyond minimum compliance, and anticipate that there are a wealth of examples in the field that merit documentation and dissemination. There is a need to communicate the broad spectrum of innovations in play across the country, both to recognize the excellent work in play and to foster replication and scaling among other institutions.

B. Local Health Departments and other Key Stakeholders

Local Health Departments

Many local health departments have extensive experience in conducting high-quality community health assessments and in engaging diverse local stakeholders. This experience and emphasis is reflected in the launch of the Assessment Protocol for Excellence in Public Health (APEX-PH) initiative in 1991, which provided a framework for an assessment of internal capacity, the identification of community health issues, and the development of action plans by local health departments. Critiques of APEX-PH cited a lack of a more comprehensive strategic planning process, as well as a limited content scope that did not take into consideration broader environmental concerns.

In response to the environmental health gap, the National Association of City and County Health Officials (NACCHO) partnered with the CDC's Center for Environmental Health to develop the Protocol for Assessing Community Excellence in Environmental Health (PACE-EH). PACE-EH was a protocol to evaluate local environmental health conditions, identify at-risk populations, and set priorities for programs and policy development.

In 2001, NACCHO and the CDC launched Mobilizing for Action through Planning and Partnerships (MAPP), which is a tool for a community-wide strategic planning process. Rather than being the center of the process, the local health department is envisioned as a partner with diverse community stakeholders in a priority setting, planning, and implementation process.

In practical terms, many local health departments lack the resources, experience, and expertise for the design and implementation of comprehensive approaches to community health improvement (e.g., linking clinical care coordination to addressing the social determinants of health). Much of local health department engagement in broader community health improvement in recent years is a function of a commitment to leverage increasingly limited public resources through grant seeking from private philanthropy. The net result is that with the exception of a small number of mainly larger urban local health departments, most local health departments lack the internal capacity to undertake and sustain comprehensive community health improvement activities. Even larger urban local health departments are limited to epidemiological staff members who focus primarily on communicable diseases. Engagement of epidemiologists who focus on broader community health improvement has not been and is not now a priority in current federal and state funding allocations.

One of the most recent developments in the advancement of local health departments was the development and launch of a set of national public health accreditation standards in September, 2011, and the release of an updated version in January 2014. The process began in 2004 with a convening by

¹⁸ SROI, or Social Return on Investment was introduced in 2000 by the Roberts Enterprise Development Fund, and integrates social and environmental impacts into the traditional economic model. For example, one might assign monetary value to increased use of a new neighborhood park and factoring in the potential increase in housing values over time and the reduction in law enforcement expenditures to due to the elimination of criminal activity.

the Robert Wood Johnson Foundation to explore the formation of an accreditation program for local and state public health departments. The Public Health Accreditation Board (PHAB) was established in 2007 as the nonprofit organization that would implement and manage a national accreditation process.

The PHAB standards are aligned with and in many cases go further than the new requirements for hospitals in conducting CHNAs and developing implementation strategies. For example, the PHAB standards require detailed documentation of partnerships/collaborative efforts including hospitals and communities, not only as part of the community assessment process (Standard 1.1¹⁹), but as part of the development of a community health improvement plan (Standard 5.2²⁰). PHAB also requires that the process of prioritization of needs be documented in the plan, as well as provide measurable objects for evaluating activities/programs.

Community Action Agencies

There are more than 1,100 Community Action Agencies across the country, representing approximately 96% of US counties. Community Action Agencies are local private and public non-profit organizations established as part of the Community Action Program, which was founded by the Economic Opportunity Act of 1964. Their primary purpose and focus is to provide support for people who live in poverty. Community Action Agencies serve more than 17 million people per year, the majority of which have incomes below 75% of Federal Poverty Level.

The primary source of funding for Community Action Agencies is the Community Service Block Grants (CSBG) program through the Administration for Children and Families. An important role for Community Action Agencies is supporting citizen participation and the coordination of services, information, and referrals. Programs and services include, but are not limited to, food pantries, Head Start, youth mentoring, adult education, Meals on Wheels, job training, budget counseling, housing assistance, health clinics, WIC, and prescription assistance. Community Action Agencies are also funded through a variety of discretionary grants funded through public and private sources.

Community Action Agency core funding shifted to a block grant model in 1981, and the CSBG Act requires a community needs assessment as part of the development of an action plan. The Act indicates that the assessment “may be coordinated with community needs assessments conducted for other programs.”²¹ In 1993, The Government Performance and Results Act established what is known as the Results Oriented Management and Accountability (ROMA) framework, which established a series of rigorous oversight mechanisms for Community Action Agency organizational and program management, including outcome monitoring. In 2011, the National Association for State and Community Services Programs (NASCS) published a guide to support comprehensive community needs assessments, and encourages collaboration with a broad spectrum of community stakeholders.²²

Community Health Centers

Community health centers are located in communities with high-unmet need/ medically underserved areas (MUAs). They provide comprehensive primary health care services and supportive services

¹⁹ <http://www.phaboard.org/wp-content/uploads/SM-Version-1.5-Board-adopted-FINAL-01-24-2014.docx.pdf>, pg. 18-19

²⁰ <http://www.phaboard.org/wp-content/uploads/SM-Version-1.5-Board-adopted-FINAL-01-24-2014.docx.pdf>, pg. 128-9

²¹ CSBG Act, Section 676(b)(11)

²² http://www.nascsp.org/data/files/CSBG_Resources/Train_Tech_Assistance/Needs_Assessment_FINAL_-_8.22_print_to_pdf.pdf

(education, translation, transportation etc.)²³. Grant-supported federally qualified health centers (FQHCs) are public and private health care organizations that receive funds from Health Center Program (Section 330 of the Public Health Service Act). “Look-alike” health centers are identified by HRSA as meeting the definition under the Section 330, but they do not receive Section 330 funding. They do, however, receive enhanced reimbursements for Medicaid and Medicare patients. One of the requirements of Section 330 is for health centers to conduct a community health needs assessment “when appropriate.”²⁴

Local United Ways

United Way has had a long-established history of 125 years in providing services and partnering with various organizations to aid underserved communities²⁵. United Way focuses primarily on issues of education, income, and health. They are dedicated to promoting financial stability, improving health conditions, and improving educational attainment. There are 1,800 United Ways worldwide.²⁶ All United Ways certify their compliance to standards, which include comprehensive requirements for financial reporting, governance, ethics, diversity, and operations. One of these requirements includes conducting individual self-assessments every three years.²⁷

Financial Institutions and the Community Reinvestment Act

The Community Reinvestment Act was passed in 1977 to encourage more targeted investment by financial institutions in low- and moderate-income communities. The law was passed to remedy decades of discriminatory credit practices that contributed to disinvestment patterns and concentrated poverty, particularly in communities with large racial and ethnic minority populations. Enforcement of the law is carried out by taking banking practices into consideration in the review of applications for new branches and/or for proposed mergers and acquisitions. Federal examiners conduct retrospective assessments of financial institution investment practices in low- and moderate-income communities. These assessments are called “performance contexts” and are conducted to evaluate financial institutions’ fulfillment of their public expectations associated with the Community Reinvestment Act (CRA)²⁸. They are different from the other assessments in that they are retrospective, rather than prospective, and in that they assess outputs (i.e., investments), rather than current health, social, economic, or environmental needs in specified geographic areas.

Assessments of community needs are conducted by all these organizations as part of their core functions and/or to ensure their fulfillment of legal or statutory obligations. In addition, other assessments labeled as Health Impact Assessments may be ordered by government agencies to determine the potential impact of the introduction, continuation, or termination of organizations, functions, services, or production processes.

²³ Retrieved from: <http://bphc.hrsa.gov/about/>

²⁴ Retrieved from: <http://bphc.hrsa.gov/about/requirements/index.html>

²⁵ Retrieved from: <http://www.unitedway.org/pages/accountability>

²⁶ Retrieved from: <http://www.unitedway.org/>

²⁷ *ibid.*

²⁸ The Community Reinvestment Act (CRA) was passed in 1977 with an intent to gradually reverse a decades-long pattern of disinvestment by financial institutions in low- and moderate-income communities where racial and ethnic minorities were forced to live due to “redlining” practices that prohibited mortgage loans in communities where Caucasian populations were concentrated. The performance context provided the central means by which federal examiners could assess the relative commitment of financial institutions to reverse these practices. Federal approval of financial institution mergers and acquisitions is to be based in part upon these assessments.

Finally, municipalities also develop what are referred to as General Plans or Comprehensive Plans that include status assessments of existing infrastructure as a baseline for planned investments. While most cities do not have explicit responsibilities for health care and/or public health services, there is increasing attention to the explicit integration of the social determinants of health. The American Planning Association recently conducted a multiphase case study assessing the integration of health issues into comprehensive plans.²⁹ The multiphase study included a national web-based survey targeting local planning staff and local governments. Thirty-one percent (31%) of the respondents (845) reported that that their jurisdiction did adopt a comprehensive plan that explicitly includes public health goals and policies.

The most cited health-related topics that were identified in comprehensive plans include recreation, public safety, clean water, transportation, clean air, emergency preparedness, active living, physical activity, recreation, environmental health, food access, and public safety.³⁰ The plans included language that suggested connections between planning/built environments and their impacts on public health. The most common category cited in plans was active living (i.e. active transport, recreation, and injury)³¹. Most plans, however, did not include metrics/ evaluation benchmarks and timelines. One notable plan from Niagara County, New York included health as a topic in a survey to assess community needs. Questions included the identification of implementation mechanisms, including primary actions, potential collaborative efforts, and funding opportunities.

While the schedule and timing of all these assessments and planning processes often vary, the substantial overlap in their focus and purpose represents a substantial duplication of effort and missed opportunity to align resources and strategies. **Table 2** provides an overview of elements where there is overlap and opportunities for alignment of community health improvement practices.

²⁹ Ricklin, Anna, Kushenr Nick. Healthy Plan Making. Integrating Health into the Comprehensive Planning Process: an analysis of seven case studies and recommendations for change. American Planning Association. February 2014.

³⁰ Ibid.

³¹ Retrieved from: <http://www.planning.org/research/publichealth/pdf/evaluationreport.pdf>

Table 2: Opportunities for Alignment of Community Health Improvement Processes

	Issue-Specific Assessments (Health Impact Assessment)	Local Health Departments (CHAs/CHIPs)	Tax-exempt Hospitals (CHNAs/Implementation Strategies)	Community Health Centers (Section 330 Application)	United Ways (Community Health Assessments)	Community Action Agencies (Community Services Block Grant Application)	Financial Institutions (CRA Performance Context Review)
How Community is Defined	Generally varies, one element of an HIA includes <i>Scoping</i> , which establishes the population affected by the proposed policy, plan, or program. ⁱⁱ	Jurisdictions that determine the service populations of local health departments vary, including: county, districts, city, and combined city-county areas. ⁱⁱⁱ	Regulations provide for flexible framing with attention to geographic service area, and consideration of principal functions and target populations. Hospitals cannot, however, define their community in a way that excludes medically underserved, low income, minority groups, and groups with chronic disease needs. ^{iv}	Located in or serve a high need community such as MUAs (designated Medically Underserved Area or Population). ^v	UW jurisdictions typically include county/ and multi county/ regional areas. ^{vi}	Established in 1964 as part of the War on Poverty, the 1100 Community Action Agencies define their communities as broad geographic areas, ranging from multi-county regions and MSAs to more targeted municipalities or inner city areas. The central focus in low-income communities. ^{vii}	CRA “assessment areas” include one or more MSAs or one or more contiguous political subdivision, such as counties, cities or towns. Attention is given to the location of main offices, branches, ATMs, and loan origin geo locations. ^{viii} Areas may not arbitrarily exclude low- or moderate-income geographies.
Core Expectations	HIAs use data, research and stakeholder input to determine a policy or project’s impact on the health of a population. HIAs also provide recommendations to address these impacts. ^{ix}	Local health departments connect people with personal health services, including preventive and health promotion services. They also advocate for programs and services, and monitor the quality and accessibility of public health services. ^x	Relieve government burden by serving poor populations and communities. The economic value of tax exemption is a common metric. The historical focus of contributions has been the provision of free and discounted medical services. There is increasing focus on more proactive services and activities that reduce the need for medical care. ^{xi}	Community health centers provide comprehensive primary health care and support services (education, translation and transportation, etc.) for populations with limited access to health care. ^{xii}	As a coalition of charitable organizations working with partners to address issues surrounding income (i.e. financial stability), health and education ^{xiii}	Services include community coordination, emergency services, education, food and nutrition, child and family development, training/employment, budget counseling, transportation, housing, economic development, health care. ^{xiv}	CRS is intended to encourage depository institutions to help meet the credit needs of the communities in which they operate, including low- and moderate-income neighborhoods, consistent with safe and sound operations ^{xv} .
Selection of Priorities	NA	Expected to document “process to set community health priorities”. ^{xvi}	Required to provide prioritized list of health needs, and describe the process and criteria used. ^{xvii}	No formal guidance for priority setting.	General focus on income, education and health. ^{xviii}	No formal guidance for priority setting.	NA

Table 2, cont'd: Opportunities for Alignment of Community Health Improvement Processes

	Issue-Specific Assessments (Health-Impact Assessment)	Local Health Departments (CHAs/CHIPs)	Tax-Exempt Hospitals (CHNAs/Implementation Strategies)	Community Health Centers (Section 330)	United Ways (Community Assessments)	Community Action Agencies (Community Services Block Grant)	Financial Institutions (CRA Performance Context Review)
Community Stakeholder Engagement	The desired outcome is to engage community members in understand the impacts of existing or proposed actions on health and how to advocate in order to improve conditions. ^{xix}	Expected to engage and mobilize diverse community stakeholders “in a strategic way” to identify and solve health problems in the jurisdiction. ^{xx, xxi}	Required to “take into account input from persons who represent the broad interests of the community” and input from local or state HD during CHNA. The CHNA (incl. priority-setting process) must be made widely available to the public. ^{xxii}	Emphasis on collaboration w/ other safety net providers and requirement for 51% consumer membership on board of directors. ^{xxiii,xxiv}	Emphasis on community mobilization & collaboration with other organizations in guidance from UW USA. ^{xxv}	Call for gathering information from CBOs, faith- based organizations, and private sector, public sector, and education institutions. ^{xxvi}	Banks expected to “proactively assess community needs,” and “consult with community stakeholders” to develop financing options for affordable housing and economic development. ^{xxvii}
Accountability Mechanisms	No laws explicitly require HIAs as an approach or method in regulatory analysis. ^{xxviii} Once ordered, there may be a court order or other publicly authorized process that requires action in response to findings.	Accountability mechanisms are most often tied to categorical funding. Some states require local health departments to conduct CHAs and develop CHIPs. PHAB standards require both a CHA/CHIP for local health departments seeking PHAB accreditation.	Hospitals assessed a fine of \$50,000 and potential loss of tax exemption for failure to submit a CHNA. ^{xxix} Penalties for failure to comply with some reporting requirements (e.g., adoption of IS in same year as CHNA, exclusion of low-income community, lack of priority-setting criteria) unclear to date. Notice 2014-2 provides a “safe harbor” for hospitals to correct errors without penalty. ^{xxx}	Community health centers are required to conduct periodic assessments. Also required to document needs of target populations to inform & improve its delivery of appropriate services. ^{xxxi}	Annual certification of adherence to standards that include financial reporting, governance, ethics, diversity operations, as well as self-assessments. ^{xxxii}	Site visits at each CSBG-eligible entity once during three-year period. Required to “determine whether meet performance goals, administrative standards, financial and management requirements. Terminate or reduce support if deficiencies not corrected.” ^{xxxiii}	A bank’s CRA performance record is taken into account in considering an institution’s applications for deposit facilities, mergers, and acquisitions. ^{xxxiv}
Opportunities for Alignment	When available, HIAs provide an additional layer of information, most often relating to broader environmental impacts, in the design of strategies to improve health.	PHAB standards include measures and guidance for <i>ongoing</i> collaboration with diverse stakeholders to leverage expertise and secure political support for policies that reinforce and sustain improvements in health status and quality of life.	Treasury/IRS allows hospitals to develop Implementation Strategies in collaboration with other hospitals and State and local agencies, such as public health departments. ^{xxxv} Given expanded enrollment and movement towards global budgeting, hospitals will benefit from work with other stakeholders to help address the determinants of health and reduce health disparities.	CHCS are encouraged to link with other providers such as local health departments and hospitals to provide better-coordinated, higher quality, and more cost-effective services. ^{xxxvi}	United Ways have an established history of collaborating with other stakeholders in conducting assessments and addressing unmet health needs. ^{xxxvii}	Standard 2.1 emphasizes partnerships across the community, and CAAs can “serve as a backbone organization of community efforts to address poverty and community revitalization: leveraging funds, convening key partners...” ^{xxxviii}	Targeted CRA investments in housing, retail, education, and job creation in low- income census tracts that are aligned with parallel interventions and investments of health care and public health stakeholders provide an opportunity to address social determinants of health and help reduce health care costs.

C. Geographic Information Systems and the Advancement of Community Health Improvement Practices

Community health improvement practices are being profoundly influenced by advancements in the sophistication and spread in the use of geographic information systems (GIS) and growing knowledge of the role of determinants of health as drivers of health outcomes. GIS tools are used increasingly by tax-exempt hospitals across the country as part of their CHNAs and by local health departments, the former to meet new federal reporting requirements, the latter in striving to secure new accreditation standards. In both cases, use of GIS tools provides a reference point for the alignment of resources in the development of implementation strategies and health improvement plans.

Increased knowledge of the determinants of health contributes to a broader consideration of social and environmental factors that influence health behaviors and health status at the individual and community level. Attention to these factors will be increasingly important to hospitals and other providers as insurance coverage expands to populations in low-income communities with poor quality housing, high crime rates, a lack of access to healthy food, limited employment opportunities, and limited public transportation. Residents in these communities experience chronic stress associated with daily challenges and crises, and the resulting allostatic³² (stress) load carried by their bodily systems contributes to the emergence and exacerbation of multiple chronic diseases. As payment structures move towards global budgeting, the economic viability of hospitals and other providers will be determined by their ability to leverage their resources and engage diverse stakeholders as ongoing partners with shared ownership for health in the community context.

GIS tools help to quickly identify where health inequities cluster in “hot spots,” most typically in communities where there are concentrations of socioeconomic and environmental challenges, and offer the opportunity to increase impact by focusing efforts in these areas. There is a need to focus on alignment of investments and interventions to build the critical mass needed to produce measureable improvements in health status and economic vitality. GIS enable stakeholders to quickly identify geographic areas of the community where health, social, and economic inequities are concentrated, and offer the opportunity for effective targeting of high-intensity, coordinated interventions and services. Timely sharing of data among stakeholders to support collaboration in planning, implementing, and assessing the impact of CHI activities provides the basis for ongoing monitoring of progress and the implementation of periodic quality improvement adjustments.

This project focuses on the enhancement and/or development of two sets of tools to support more strategic allocations of CHI resources where health inequities are concentrated, and alignment and shared ownership for CHI at the regional level. Those tools include:

- 1) **Health Equity Mapping:** The project focuses on the enhancement of an existing GIS tool (at www.CHNA.org) to assist in the establishment of geographic parameters that include sub-areas with concentrations of health disparities. A tool called the Vulnerable Populations Footprint (VPF) uses a combination of two metrics (percentage of the population under the federal poverty level, and high school non-completion rate) that serve as proxies for poor health. Those metrics are supplemented with an overlay of hospitals, community health clinics, and a selection of jurisdictional boundaries. The tool helps to quickly identify geographic areas where health

³² McEwen, BS; Stellar, E (1993 Sep 27). "[Stress and the individual. Mechanisms leading to disease.](#)". *Archives of internal medicine* **153** (18): 2093–101.

inequities are concentrated both as a first step and as the default context in defining communities for a CHNA.

Of equal importance, it is intended to encourage consideration of ways in which hospitals, local health departments, and other stakeholders may share responsibility for focusing where health inequities are geographically concentrated. In some cases, particularly in rural areas, jurisdictional boundaries may be appropriately crossed in order to address concentrations of unmet needs and/or take advantage of economies of scale and available assets.

- 2) **CHI Data Sharing System:** The development of a CHI Data Sharing System (CHIDSS) to support the advancement of practices and broader surveillance functions, with particular focus on comparative analysis at the local and regional level.

The CHIDSS involves the development of a data template and users' guide to upload data and information from a variety of sources at the local/regional level, including but not limited to hospital CHNAs; Implementation Strategies; local health departments; community health assessments, and community health improvement plans; and assessments and strategies of other local entities such as United Ways, community health centers, and Community Action Agencies. By capturing key elements from the narrative information from these reports and plans, the intent is to support targeted quality improvement from within collaborative frameworks and/or from external community stakeholders.

The existing literature indicates that there is value in the use of GIS mapping in health planning activities. Mapping has been used to identify health inequities and hospital service utilization across various spatial scales of analysis. There have also been discussions in regard to the challenges with practitioners' current understanding and application of mapping tools. The literature also indicates that challenges and limitations exist with the future uses of GIS as they relate to residential mobility, changing neighborhoods, and protecting confidentiality. Lastly, emerging uses of GIS in service planning and community health improvement across institutions and jurisdictions have also been examined in field.

In summary, there is robust evidence for the value of using GIS as an important new tool in health planning. GIS has been extensively used to map community need, access to health services, other health resources, health services catchment areas, and jurisdictional boundaries. Increasingly, GIS has been used to drill down to smaller scale to identify neighborhoods and areas grappling with health disparities – health “hot spots” – thereby guiding more targeted interventions.

The selection of indicators can be extremely useful, though care must be taken to recognize that some indicators might not capture or fully account for disparities. Indeed, careful use of GIS can reveal gaps in initial research hypotheses and can help point to areas for further study. Finally, introducing the use of qualitative data in combination with quantitative data offers the possibility to better grasp and reflect some of the on-the-ground issues that stand in the way of health for communities burdened with the greatest health inequities.

It should be noted that some LHDs and selected hospitals and health systems have developed highly sophisticated GIS platforms that are being used to identify many of these issues. In most cases, however, use of this invaluable data and information to drive and inform comprehensive community-wide interventions has been limited to date. Moreover, little systematic research has been done on

efforts to share community health assessments with the goal of coordinated, collaborative action to achieve collective impact. With the advent of health reform, new requirements for hospitals, new expectations of LHDs, and other stakeholders coming to the table, an opportunity exists to make data sharing and collaboration the norm rather than the exception.

A detailed literature review on the evolution of GIS tools, their application in the population health arena, and emerging uses in the field is included in this report as **Appendix E**.

IV. Methods

A. Data/Information Sources

Data and information for this study was acquired through direct access to publicly available documents. For hospitals, the starting point was the Community Health Needs Assessment (CHNA) report that is required by IRS regulation (April 5, 2013 NPRM) to be posted on their institutional web site. Section 501(r)(3)(B)(ii) provides that a CHNA must be made widely available to the public. Treasury and the IRS indicate that a CHNA will be considered widely available to the public by reason of posting on a web site only if the web site through which the written report is available *clearly* informs readers that the document is available and provides instructions for downloading (April 5, 2013 NPRM). As part of our project, we assessed the relative accessibility of CHNAs on tax-exempt hospital web sites. A summary of the analytic method, scaling strategy, and findings are included as Appendix C.

The ease of accessibility for local health department community health assessments and community health improvement plans (or equivalent reports) was assessed and documented in the selected sites. The search for the reports included an extensive search in each of the respective local health departments and state health department web sites, as well as a Google search using various search terms. Because there are varying regulations/statutes governing these processes, locating these reports proved to be challenging. One of the challenges in locating these reports includes the varying timelines/cycles in which these reports are conducted and subsequently posted. Many of the local health departments conduct community health assessments or similar processes every three to five years, and therefore it is difficult to gauge when these reports will be publicly available, if at all (i.e. if public reporting is not required).

Another challenge in searching for these reports includes navigating the respective local health department web sites. Many of the local health departments in the rural/micro sites do not have web sites and information on these entities is commonly found on the state web site. It is also important to note that local health departments in these areas may not have the capacity to produce these assessments and these processes are often left to the state (i.e. reports such as state health improvement plans).

B. Focus of Analysis

It should be noted that hospital CHNAs and Implementation Strategies were the primary focus of analysis for this study, given the new federal requirements for public reporting and the unprecedented availability of information on tax-exempt hospital approaches to the community health improvement process. Securing parallel reports from other sources in the sites selected for analysis was difficult at best and suggests that attention is needed to support a more universal approach to transparency in this important area of work.

Defining Community

Hospital CHNAs and local health department community health assessments were reviewed to identify language in the definition (required by the IRS) or in any other parts of the report that addressed the following:

- geographic parameters of the community identified as the focus of the CHNA/CHA;

- for hospitals, if their service area was identified as the frame for the community definition, whether a specific methodology was provided;
- whether health disparities were identified in broad, non-geographic terms; and
- whether geographic concentrations of health disparities or associated proxy metrics (e.g., poverty) were identified.

The Vulnerable Populations Footprint (VPF) tool was then used to validate data/information provided in the hospital CHNA or local health department CHA.

Engaging Community Stakeholders

Hospital CHNAs and Implementation Strategies and local health department community health assessments and community health improvement plans were reviewed to identify any reference to the solicitation of input and/or other forms of engagement of any external community stakeholders in the following processes:

- surveys, focus groups, town hall meetings, and key informant interviews;
- input on written CHNA;
- participation in priority-setting processes;
- participation in program planning and design;
- participation in program implementation; and
- participation in program and/or general oversight.

Particular attention was given to special groups identified in the IRS guidelines, including people experiencing health disparities, racial minorities, and medically underserved people. As noted previously, IRS guidance to hospitals only requires that they “consider input” from community stakeholders in the CHNA process.

Priority Setting and Implementation

Hospital CHNAs and Implementation Strategies and local health department community health assessments and community health improvement plans were reviewed to identify any language associated with the setting of priorities, with attention to the following:

- description of the priority-setting process;
- description of the participants in the process; and
- identification and description of the criteria used in the process.

Attention was given to the types of criteria used in setting priorities. Two types of criteria were identified: population/community health criteria (e.g., size and severity of the problem) and institution-relevant criteria (e.g., aligned with institutional expertise and strategy). In addition, criteria that lacked the level of specificity needed to select among alternatives were also identified. For example, if a hospital indicated that their selection was guided by a commitment to their charitable mission, it would be categorized as lacking the necessary specificity.

The documents were also reviewed to determine the following:

- content focus of the identified priorities;
- population and/or geographic focus of the implementation strategy and/or programs; and
- types of metrics used to evaluate the impact of investments and interventions.

The content focus of identified priorities was reviewed in part to identify potential synergies across institutions or entry points for community stakeholders who seek to engage those institutions. In addition, the review across regions provides insights into potential patterns of interest/focus in different kinds of geographic settings. Last, but not least, documentation of the content focus of priorities provides some insights into the degree to which there is consistency between identified priority needs and the focus of the implementation strategies.

The population and/or geographic focus of the implementation strategy in general and programs in particular were reviewed to determine the relative consistency with the identification of these specific populations and/or geographic areas as a focus in the CHNAs/community health assessments. Documents were also reviewed to identify metrics documented for the evaluation of community health investments and interventions. The review of metrics reported by these institutions provides insights into the scope and relative rigor of identified programs and monitoring strategies, as well as opportunities for alignment with other current or planned activities in local communities.

C. Site Selection

A random selection process was used to identify a cohort of review sites to provide a basis for the review and refinement of the online tools and templates. In the interest of representation of urban, suburban, and rural geographic regions, a starting point was the use of the three standard statistical area designations, including Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Rural Areas. (<http://www.census.gov/population/metro/>).

There were two **core** criteria for site selection. The first was to limit the sample to the twenty states³³ and/or regions that are part of the CDC's Community Transformation (CTG) Context Scan. The Context Scan is a data/information collection process that includes both targeted surveys and a review of public documents, with a focus on characteristics and/or institutional and public policies that would facilitate and/or impede efforts to reduce obesity or smoking. The projected purpose of alignment with the Context Scan was the potential to identify areas for alignment with the assessments and implementation strategies of institutional stakeholders.

The second criterion was the existence of a geographic sub-county area with a high concentration of residents under the Federal Poverty Level (FPL). For urban Metropolitan Statistical Areas, the threshold was 40% of residents under the FPL for a sub-county region; for Micropolitan Statistical Areas, the threshold was 35%, and for Rural Areas, the threshold was 30%. The downward adjustment in the thresholds was intended to accommodate the reduced density of populations at the sub-county level.

The VPF tool provided an efficient means for the identification of potential sites and had the additional benefit of identifying overlapping geographic concentrations of high school non-completion, which provides a complementary reinforcement of the poverty rankings. The two combined indicators serve as effective proxy metrics for the identification of health disparities.

A total of 381 US Metropolitan Statistical Areas were reviewed with the application of the CTG Context Scan and VPF 40% FPL threshold screens, yielding a preliminary sample of fifteen large (metropolitan areas with populations of 250,000 or more) and sixty-five small sites for potential selection. A total of

³³ That number has since been reduced to 15 sites.

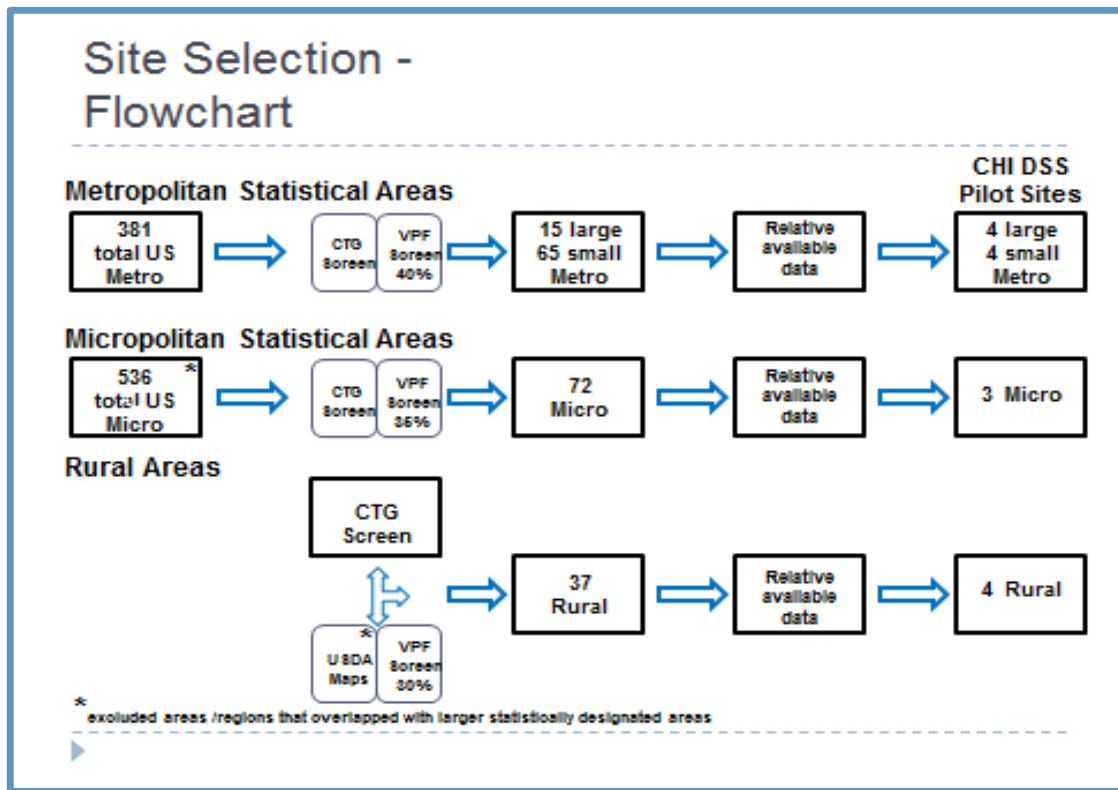
536 Micropolitan Statistical Areas were reviewed with the application of the CTG Context Scan and VPF 35% FPL threshold screens, and seventy-two sites were identified for potential selection. Rural areas in the twenty CTG Context Scan sites were reviewed with a focus on those that met VPF 30% FPL thresholds, yielding a preliminary sample of thirty-seven potential sites.

The final criterion used in the selection of sites for participation in the pilot review was the relative availability of hospital and local health department CHNAs, CHAs, Implementation Strategies, and health improvement plans. The VPF tool provided the means for the identification of both hospitals within a region, which served as the starting point for a subsequent online search for documentation.

Given the large concentration of health care providers in large metropolitan areas, geographic sub-regions were selected with smaller clusters (e.g., 5 to 8) of hospitals. Other factors considered in the interest of broad representation included a Rural Area with an Indian Reservation, Rural or Micropolitan Areas with counties that have no health care provider, multiple proximal counties with Critical Access Hospitals, and secondary geographic concentrations of poverty and high school non-completion.

The final sample included four sub-regions in large Metropolitan Statistical Areas, four small Metropolitan Statistical Areas, three Micropolitan Statistical Areas, and four Rural Areas, for a total of fifteen review sites. A flow chart outlining the selection process is included as **Figure 1** below.

Figure 1



There were a total of fifteen review sites selected, with the following distribution:

- **Four Large Metropolitan Sites**
- **Four Small Metropolitan Sites**
- **Three Micropolitan Sites**
- **Four Rural Sites**

The fifteen Community Health Improvement Data Sharing System sites represent ten states. The geographic distribution of the sites include representation of two states in the Pacific/Northwest, two Southwestern states, four Midwestern states, and two South Atlantic states.

D. Tool Development/Refinement

A preliminary set of templates was developed to align with the areas of focus for analysis described above. The templates were revised periodically based upon the form, specificity, and relative availability of data/information as projected in public reports. A key consideration in the development of the templates was/is the relative clarity and simplicity of data/information, how it is interpreted, and how it informs dialogue among institutions and diverse community stakeholders.

Three templates have been developed and have been converted into online reporting tools, along with a user's guide that provides a brief overview of each area of focus for analysis, instructions and guidance for the identification of content in reports, and sample responses in each category. The Community Definition Template (CDT) is provided as **Table 3**, followed by the Community Engagement Template (CET) as **Table 4**, and the Priority-Setting and Implementation Template as **Table 5**.

The templates can be accessed with the links provided below. You can click on the links below or copy and paste the link onto an Internet browser. Each link will allow you to download each of the templates directly.

Community Definition Template:

<https://www.itonido.com/url00zt3w>

Community Engagement Template:

<https://www.itonido.com/urlabc3bi>

Priority-Setting Template:

<https://www.itonido.com/urlmipl4i>

Table 3: Community Definition Template

Community Definition			
MSA/County/Region:	Entity 1:	Entity 2:	Entity 3:
<i>Y if Yes, N if No</i>			
Hospital or other institutional service Area			
Specific method to calculate service area			
County			
Region (e.g., multiple counties)			
Municipal/City			
Zip Code(s)			
State			
ID health disparities in community definition			
In other section of assesment			
ID geo concentration(s) of health disparities at sub-county level			
ID geo concentration of health disparities outside defined community			

Table 4: Community Engagement Template

Community Engagement										
Categories of Input/Engagement	Entity:									
	Input in Assessment					Priority Setting		Implementation / Oversight		
<i>Insert Y if yes, N if no</i>	Survey	Focus Groups	Public Forum	Key Informant Interviews	CHNA Advisory Committee	Priorities set for hospital only	Priorities set for group of hospitals, PH, etc.	Involved in Project Planning	Partner on Individual Project(s) Enter A if project advisor, F if receiving funding, I if providing in-kind support	Members of CB Function Oversight Body
Identified in CHNA										
Source of Input:										
No specification										
Community-Based Organizations										
Govt Public Health Local										
Govt PH State										
Other Public Sector officials										
Lay community members										
People experiencing disparities										
Medically underserved people										
Racial/ethnic minorities										

Table 5: Priority Setting and Implementation Template

Priority Setting and Implementation Strategy						
MSA/County/Region	Entity 1		Entity 2		Entity 3	
<i>Y if Yes, N if No</i>						
Priority Setting Process and Criteria						
Process described						
Specific methodology (ranking, weighting)						
Criteria Described						
Provided Specific Criteria						
Institution-relevant criteria						
Community-population health criteria						
Content Focus of Priorities/Core Topic						
<i>Content focus options are based on county health rankings model including: Health Behaviors, Clinical Care, Social and Economic Factors, and physical environment.</i>						
Number of Priorities						
	Content Focus	Core Topic	Content Focus	Core Topic	Content Focus	Core Topic
Priority #1						
Priority #2						
Priority #3						
Priority #4						
Priority #5						
Priority #6						
Pop/Geo Focus for Implementation Strategy						
<i>N if No, SP if for specific program(s), A for All</i>						
ID focus on populations						
Under/uninsured pops						
Medicare pops						
Medicaid pops						
Age groups, gender						
Pops with disparities						
ID focus in geo areas						
HPSAs and/or MUAs						
Disparities						
Metrics for Implementation Strategy						
<i>N if no, A if for all, SP if for specific programs, or C if identified a related category, but not specific metrics (e.g., reduce preventable ED use)</i>						
Process metrics						
Service utilization metrics (Individual/cohort)						
Community/social metrics (SROI)						
Population health metrics						

V. Findings

There were fifteen regions in ten states that served as review sites for data collection and analysis in the areas of focus outlined in the methods section. There were a total of fifty-one hospitals located in the fifteen regions, with a high of eight hospitals in a large metropolitan site to one hospital in a rural site. Nine of the fifty-one hospitals, or 18%, were Critical Access Hospitals (CAHs). Seven of the nine were in the four rural areas, and the other two were in Micropolitan Areas. This is a smaller representative sample than the 46% representation of Critical Access Hospitals among tax-exempt hospitals, reflecting an emphasis in this study on the selection of sites with geographic concentrations of poverty at the sub-county level. Among the fifty-one hospitals, we were able to obtain forty-four CHNAs from hospital web sites. Twenty-seven of the forty-four hospitals from which we were able to obtain CHNAs also posted Implementation Strategies. It should be noted that eight of the nine Critical Access Hospitals had CHNAs posted, and seven of the nine had Implementation Strategies posted.

There were a total of twenty-three local health departments and one tribal health department represented among the fifteen sites. Five of the sites were multi-county regions, involving fourteen local health departments. In three of the counties there are no hospital facilities. Eight of the fifteen sites had at least one local health department-posted community health assessment. There were a total of ten local health departments represented in the eight sites with community health assessments (including one tri-county collaborative assessment by three local health departments). Two other local health departments posted a “health status report” and a reference data summary of their community health assessment. Twelve of the twenty-three local health departments and the one tribal health department did not post community health assessments. A total of ten of the local health departments posted community health improvement plans, including eight of the ten local health departments with community health assessments. Five of the fifteen sites had community health assessments and community health improvement plans available.

There were a total of twenty-three hospitals in the four **large MSAs**. We were able to obtain eighteen CHNAs and twelve Implementation Strategies from the large MSA sites. There are four local health departments in the large MSAs, from which we were able to obtain two community health assessments.

There were a total of eleven hospitals in the four **small MSAs** in the sample. We were able to obtain ten CHNAs from the four small MSAs. There are six counties and local health departments in the small MSAs, from which we were able to obtain one community health assessment and three community health improvement plans.

There were a total of seven hospitals in the three **Micropolitan** sites. We were able to obtain CHNAs from all seven hospitals and Implementation Strategies from six of the seven. There were four local health departments in the Micropolitan sites, from which we were able to obtain two community health assessments and two community health improvement plans, both from the same two local health departments.

There were a total of ten hospitals in the four **rural** sites. We were able to obtain nine CHNAs from the ten hospitals. We were able to obtain six Implementation Strategies. There are nine local health departments in the four rural sites, from which we were able to obtain four community health assessments and four community health improvement plans, three of which were a joint community

health assessment/community health improvement plan from three rural local health departments done in partnership with local hospitals.

Among the ten states in the study sample, four had state community benefit statutes in place prior to the passage of the ACA. Eight of the fifteen sites selected are located in those states, including four sites in one state and two in another. The statutes in two of the states have been in place for more than a decade. Two others were passed within the last decade, and one within the last five years. One of the states also has a minimum financial threshold for hospital charity care reporting. Two other states require hospitals to report annually on their charity care totals, but do not require CHNAs, Implementation Strategies, or other community benefit reporting. Finally, three of the ten states have no community benefit-related reporting at the state level.

A. Defining Community

As stated previously, an important first step in the review of data and information for each of the fifteen regions was the use of the VPF tool to provide a visual frame of a) the geographic concentration of residents under the FPL and high school non-completion rates at the census tract level, b) the geographic distribution of hospitals and community health centers, and c) jurisdictional overlays at the municipal and county level. Census tracts that meet the 40% FPL threshold in the large and small MSAs, 35% in the Micropolitan Areas, and 30% in the Rural Areas are shaded in light tan; 30% high school non-completion is shaded in purple; and combined threshold levels are shaded in brick red. The small boxes with the letter “H” represent hospitals; red denotes private sector; and blue represents public sector. The smaller green circles with crosses in the middle represent community health centers. The red lines represent county jurisdictional boundaries.

Figure 2 is a VPF map from Philadelphia, PA, as a sample of a large MSA site; **Figure 3** is a VPF map from Columbia, SC, as a sample of a small MSA region; **Figure 4** is a VPF map from Lumberton, NC, as a sample of a Micropolitan Statistical Area; and **Figure 5** is a sample VPF map from Sanders and Lake Counties in Montana, as a sample of the type of rural regions assessed in the study.

Figure 2: Philadelphia, PA (Large MSA)

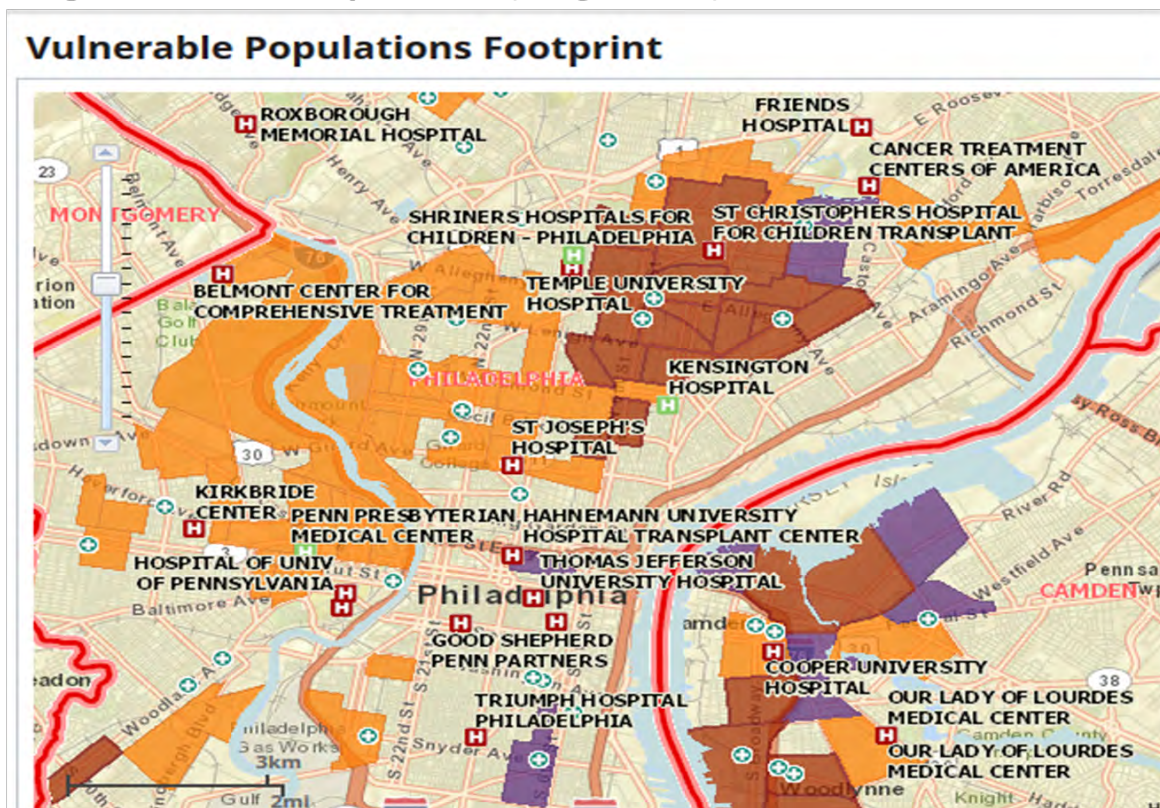


Figure 3: Columbia, SC (Small MSA)

Vulnerable Populations Footprint

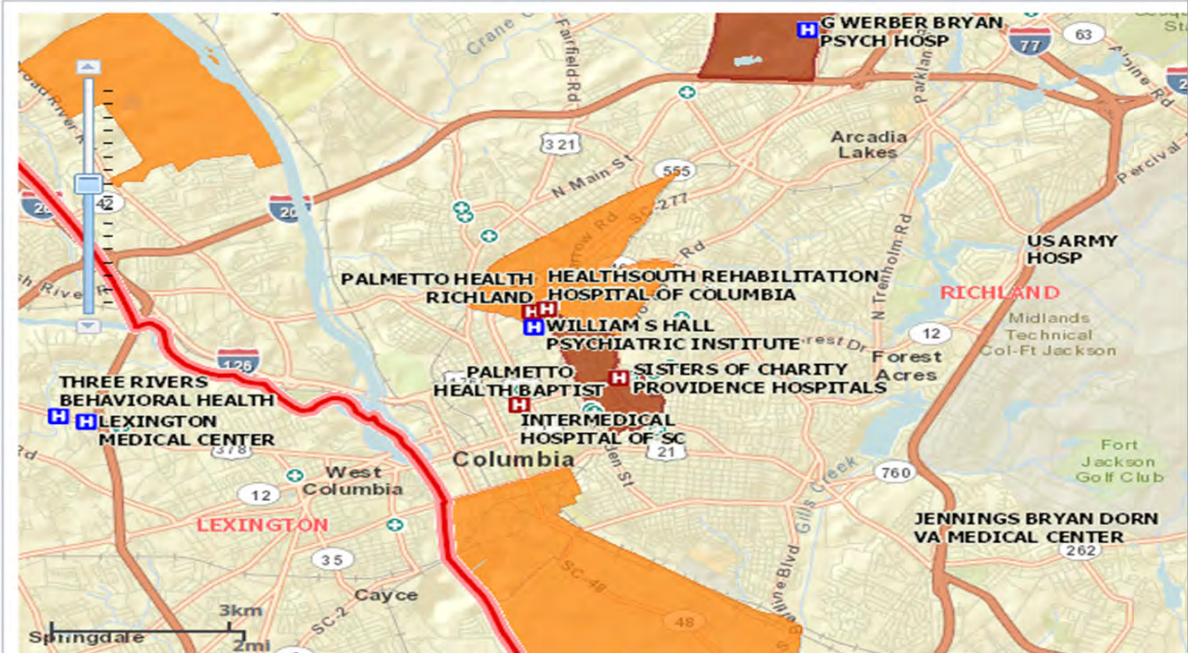


Figure 4: Lumberton, NC (Micropolitan Area)

Vulnerable Populations Footprint

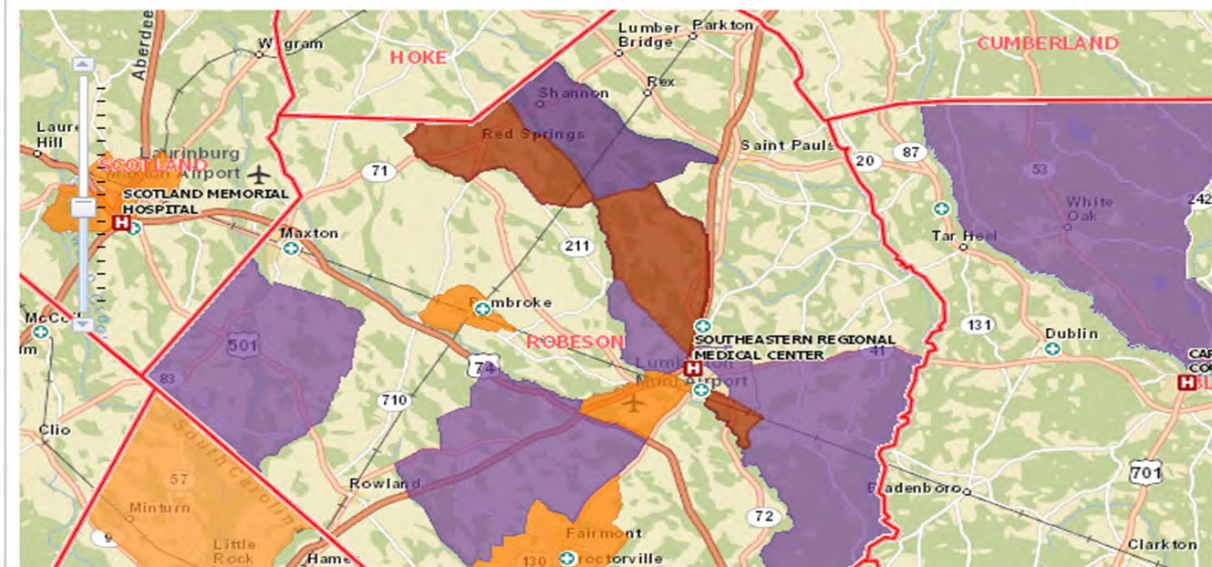
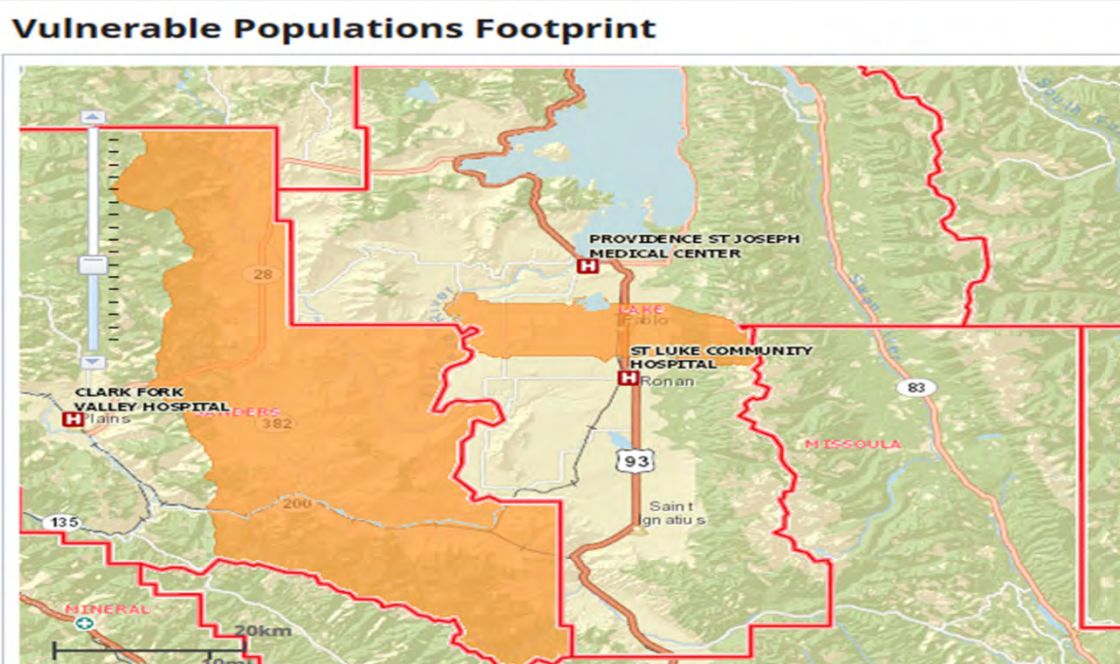


Figure 5: Sanders and Lake Counties (Rural Area)



All forty-four hospitals from which CHNAs could be acquired defined their community in terms of their patient service area. Sixteen of the forty-four hospitals (36%) used zip codes to draw the geographic parameters of their community. Thirteen of the forty-four hospitals (30%) defined their communities as multi-county regional service areas. One of the hospitals defined its service area as the entire state. Twenty-three of the forty-four hospitals (52%) did not provide information on the methodology used to define their service area.

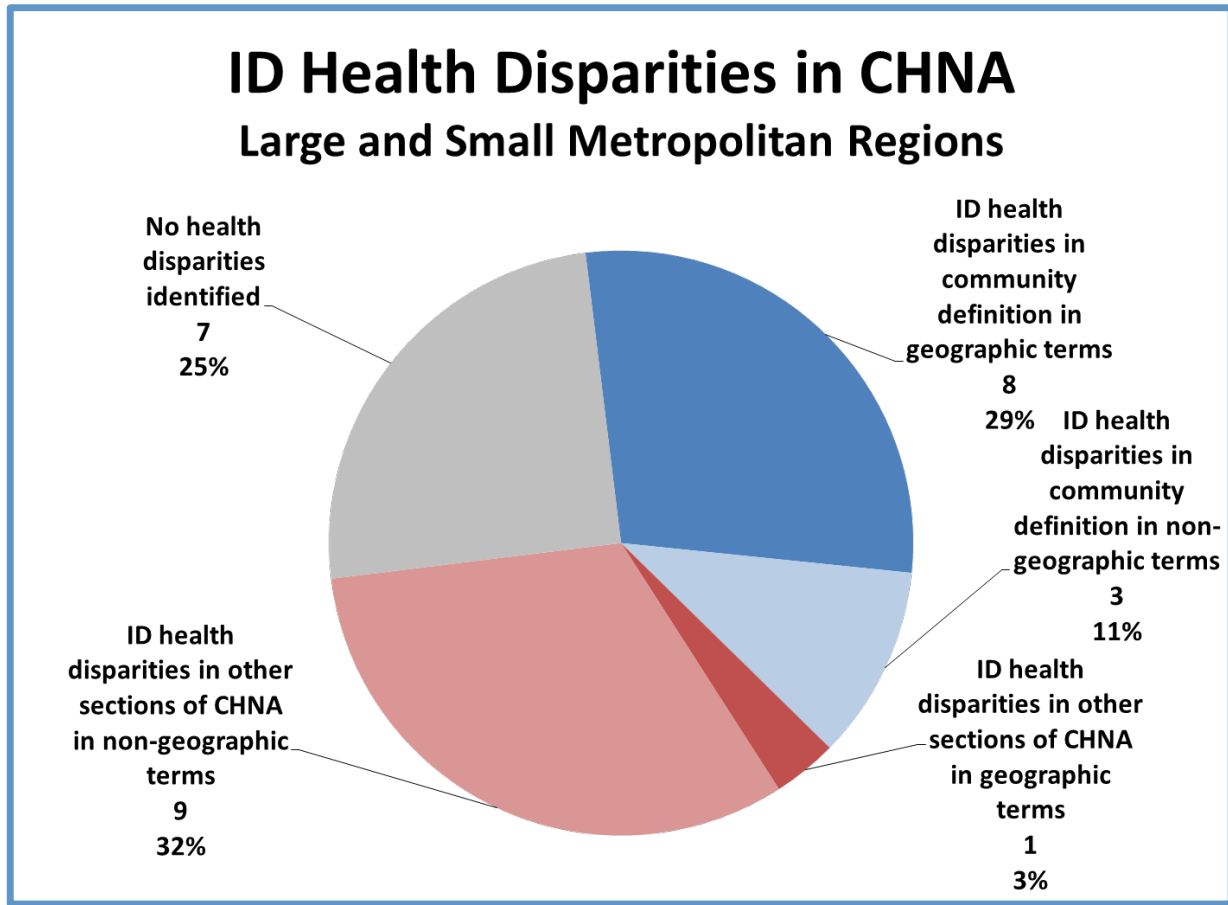
A total of ten of the forty-four hospitals with CHNAs (23%) identified the geographic concentrations of health disparities in their regions. Eight of those were in two of the four large MSA sites. Only one small MSA hospital and one rural hospital identified health disparities in geographic terms. A small MSA hospital used geocoding of Medicaid emergency room visits at the zip code level as a proxy metric for health disparities:

“The highest proportion of Medicaid and self-pay is in the immediate vicinity of the hospital and the ... area. This would also identify those in most need of assistance from community benefit programs in the ... area. The highest Medicaid emergency room visits reside in the zip codes of Access to care will be a priority focus for this identified area of need,”

Among the twenty-eight hospitals in large and small MSAs with CHNAs, eight (29%) identified geographic concentrations of health disparities in their community definition, and one identified them in other sections of their CHNA. Three other hospitals identified health disparities in generalized,

population terms³⁴ in their community definition, and nine did so in other sections of the CHNA. Seven hospitals (25%) did not identify health disparities anywhere in their CHNA. The distribution is graphically represented in **Figure 6**.

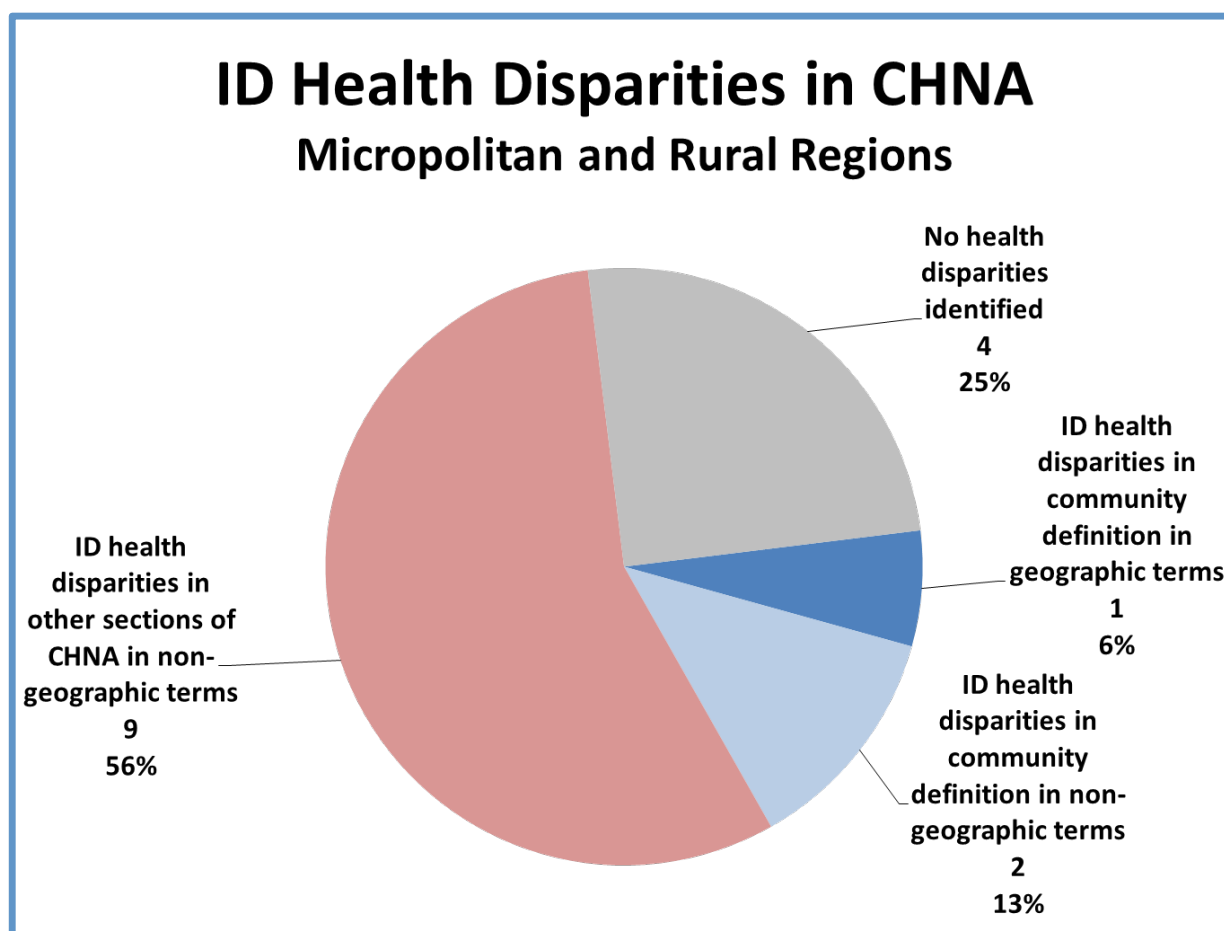
Figure 6: Identification of Health Disparities in Large/Small MSAs



Among the sixteen Micropolitan and Rural hospitals from which we could secure CHNAs, only one identified geographic concentrations of health disparities in their community definition. Two others identified health disparities in the community definition in general terms. Nine others identified health disparities in general terms in other sections of their CHNA. Four hospitals did not identify health disparities anywhere in their CHNA. This distribution is represented in **Figure 7** below.

³⁴ Identification of health disparities by racial or ethnic group (e.g., diabetes prevalence is x% higher among African American populations in xx county) without reference to specific sub-county areas.

Figure 7: Identification of Health Disparities in Micropolitan and Rural Areas



The one rural hospital that identified the geographic concentrations of health disparities in their region used a broad framing based upon transportation corridors and proximity of service facilities:

“Even though there is this area of higher population, the entire county is considered rural and is determined to be an “underserved” area for health care. The needs in the county vary greatly in the southern end from the northern end. Because the largest concentration of the population is in the north, that is where the majority of the services are located and public transportation throughout the county is less than adequate.”

Site-Specific Findings for Community Definition

In the review of how hospitals and local health departments defined their communities, the template addresses what geographic boundaries are used (e.g., city, county, zip codes), what methodology was used, whether health disparities were identified and whether in general or geographically defined terms. In the examination of specific regions, consideration was given to the relative proximity of hospital facilities to the geographic concentrations of poverty/high school non-completion, as well as geopolitical boundaries such as cities and counties. Some hospitals used zip codes to define their

service areas, while others used county boundaries (particularly those who collaborated with local health departments in their CHNA).

In a number of cases, a parallel review of the VPF tool and the geographic parameters of the community outlined in hospital CHNAs highlights ways in which some facilities may be overlooking sub-county areas with geographic concentrations of health disparities. In **Figure 8**, for example, there is an outline of two defined service areas as reported by two sets of hospitals. The service area presented with lavender shading is for three facilities within the same health system and shows inclusion of the area shaded in tan, where 40% or more of the population is under the FPL. In contrast, the service area with the black outline is for two others on the east side of the MSA and excludes the area of concentrated poverty.

Figure 8: Service Area that Excludes Proximal Area of Concentrated Poverty

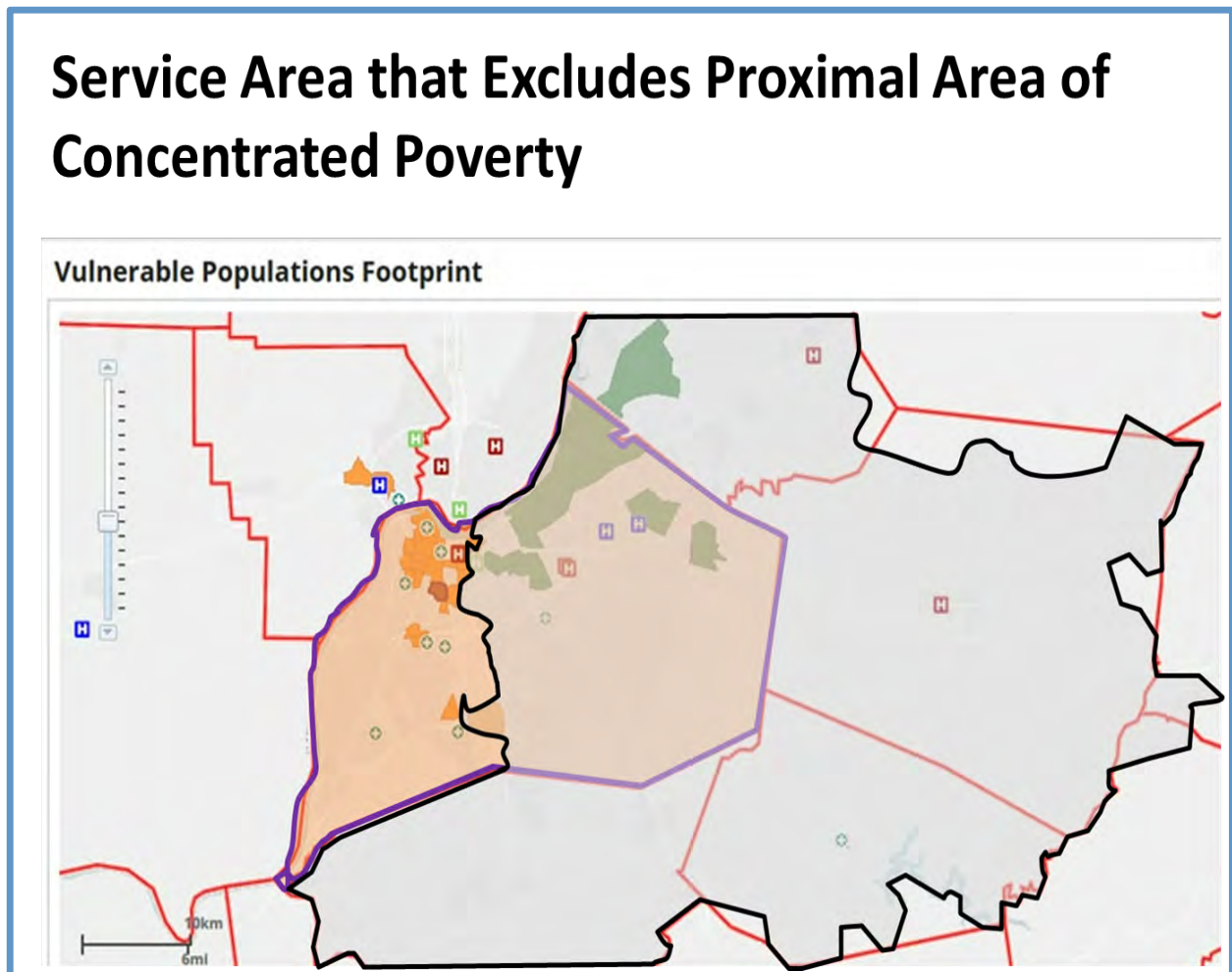


Figure 9 provides an example where three hospital facilities used counties as geographic boundaries in defining their communities. The county on the left with the orange border is the defined service area for one hospital. The county in the upper center and bordered in blue is the defined community for a second hospital located in the center of the small MSA. There are three counties outlined in green, which are the defined communities of a third hospital also located in the downtown area of the small MSA. Curiously, the third hospital's definition excludes one county that is between two others. This is

of concern, in part, because there are no identified hospital facilities in that county, and while there are no geographic concentrations of poverty, the high school non-completion rate in Western census tracts is more than 35%.

Figure 9: Orphan County Excluded from Community Definition

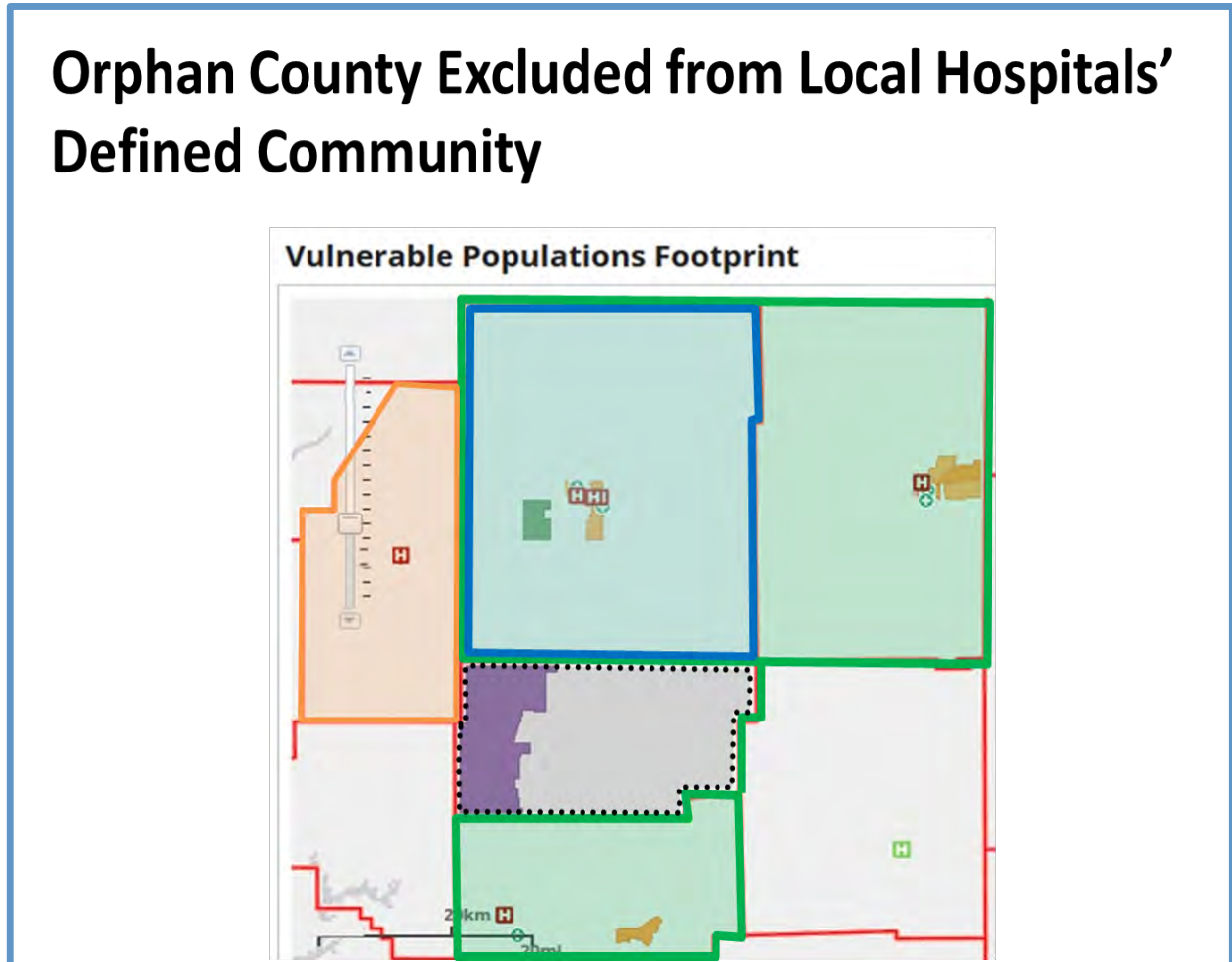
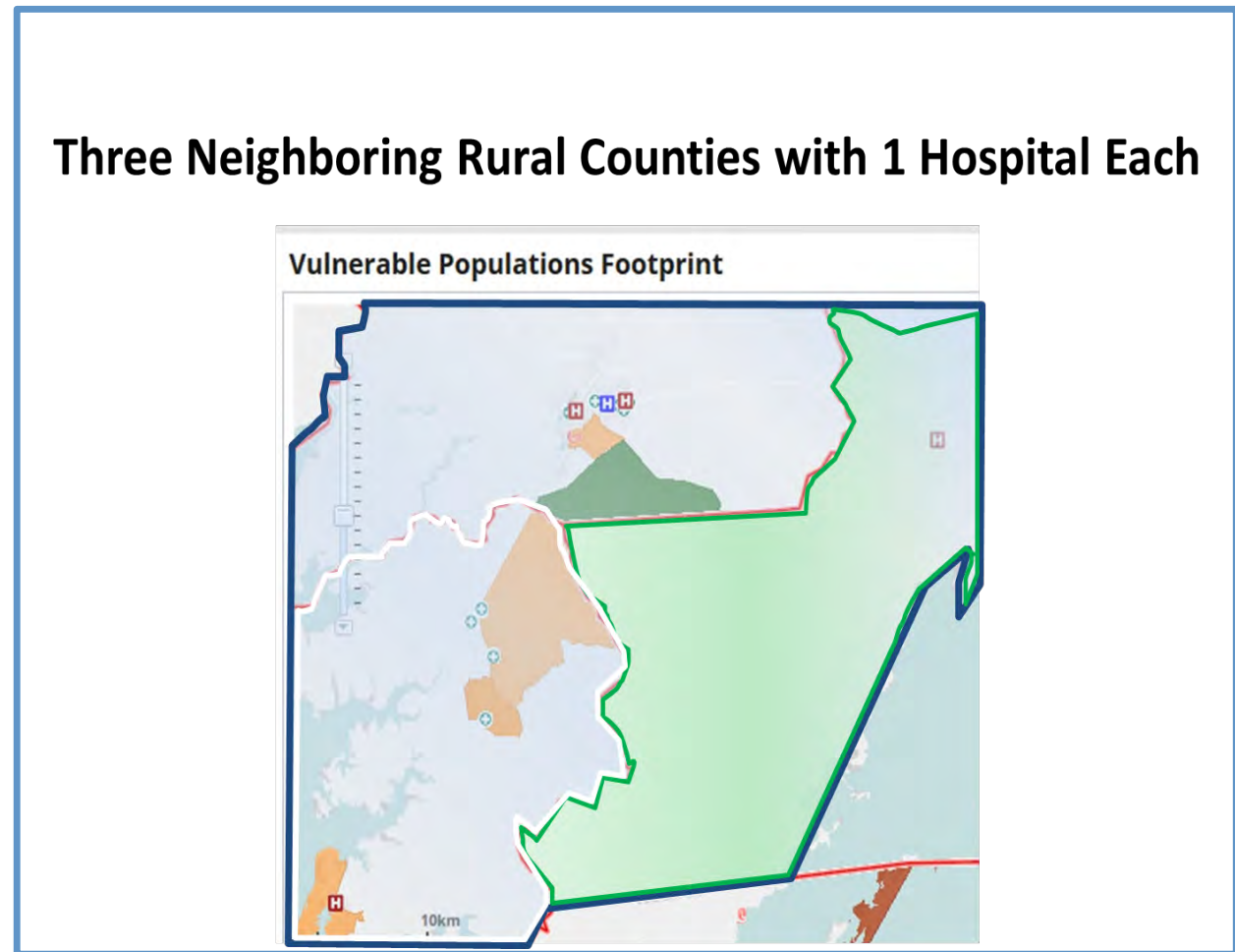


Figure 10 provides a sample of a three-county rural region, each county with one hospital. The three hospitals conducted a joint assessment in 2009, in collaboration with the three local health departments, and a new assessment was scheduled for completion at the end of 2013. There are three geographic concentrations of poverty (one census tract with more than 75% of the population under the FPL): one in the county in the northwest, and two in the county in the southwest, where a small Critical Access Hospital is located. One of the two larger hospitals defined its community as the northeast, and the other defined its community as all three counties (including Wicomico County, where it is located).

Figure 10: Three Neighboring Rural Counties



Neither of the two highest geographic concentrations of poverty in this region was identified in the three-county assessment conducted in collaboration with the three LHDs in 2009. Both of the larger hospitals indicate that there are health disparities in the region, but they defined them in general population terms:

“African Americans and those living at or near the poverty level were two to four times more likely than residents overall to indicate they have had trouble getting dental care in the past two years. One-third of individuals living in the lowest income levels and one-fifth of African-Americans are without health insurance coverage, both segments being higher than the community overall.”

The hospital located in the county without concentrations of poverty present at the threshold examined noted that services tend to be concentrated in the northern end of its county where there is the greatest concentration of seniors and tourists:

“The largest concentration of the population is in the northern part of the county where the resort area is located along with the [X] area. This is a mecca for retirees...The population of the resort of [X] City increases by about 200,000 during the tourist season. Even though there is this area of higher population the entire county is considered rural and is determined to an “underserved” area for health care. The needs in the county vary greatly in the southern end from the northern end. Because the largest concentration of the population is in the north that is where the majority of the services are located and public transportation throughout the county is less than adequate...Again the majority of the population in the CBSA is white but the needs tend to be in the black and Latino populations.”

Collaboration on CHNAs/CHAs

A number of the hospitals and/or local health departments indicated that they collaborated with others in conducting their assessments. It was often difficult, however, to determine the specific nature of the partnership or contribution of identified partners. For example, in one of the large metropolitan sites, a group of hospitals indicated conducting a collaborative (2012) CHNA along with other local hospitals and local health departments. One of the hospitals identified as a partner in the larger collaborative assessment submitted a separate CHNA in 2013 that did not mention their engagement in a collaborative assessment.

In some cases, it appeared that local health departments provided leadership in the collection of primary data (e.g., surveys, focus groups, public forums). For example, three hospitals belonging to the same hospital system in a large MSA site indicated in the executive summaries of separate CHNAs for each of its three facilities that each hospital:

“... identified community health needs by undergoing an assessment process in collaboration with the [local health department], [local] Hospital Association, and other... area health systems.”

Some reports also indicated that they engaged the local LHD in the prioritization process. For example, one of the hospitals from the example listed prior stated:

“Hospital leadership entered into a dialogue with other key community partners, including representatives of [local health department] to discuss the results of the evaluation and select health priorities. Participants were given the opportunity to revise rankings and debate issues until a consensus was reached on a composite ranking of health issues.”

In contrast, one hospital from the same large MSA site also identified local health departments in their CHNA, but it was difficult to determine the health department specific roles:

“...contacts were made with the Health Departments responsible for the counties in the service area”, including the [local metro LHD], who brought all the hospitals, hospital systems, and the [local] Hospital Association together for joint meetings to assist them in the CHNA process.”

No further descriptions of these meetings or their outcomes were provided. All four hospitals (three from a larger health system) in the large MSA site (1) cited the same primary data from a survey and

public forums conducted by the local LHD. At the same time, both entities identified different priority health needs.

In another example, a hospital in a small urban MSA indicated close collaboration with a local health department in their MAPP process:

“[X] Medical Center was a participant in the 2011 Community Health Plan. The [local health department] chose to utilize the Mobilizing for Action through Planning and Partnerships (MAPP) model to help acquire input from community partners, planners, elected officials, and the residents of the community. This MAPP process helped to assess the current health status of the community, identify the needs, and create a comprehensive plan to make the community healthier.”

The hospital also indicated that the selection of their priorities and development of their Implementation Strategy was informed by the findings of the county community health assessment, but the specific linkages are unclear.

Six hospitals from a large metropolitan site are part of a larger health care partnership and conducted a collaborative needs assessment along with the state and twelve local health departments in the area. Four of the hospitals posted their own individual assessments/ implementation strategies and cited the collaborative assessment. The two remaining hospitals provided links to the larger collaborative assessment but did not post their implementation strategy. It should be noted, however, that the CHNA posted used secondary data from the respective local health department’s community health assessments to identify and prioritize health needs. There is no indication that any primary data was collected in the assessment process.

B. Engagement of Community Stakeholders

As described in the methods section, the assessment of community engagement in this study extended beyond the solicitation of input for the hospital CHNA into a) participation in priority setting, as well as in the b) planning, implementation, and/or oversight of community health improvement activities. While the IRS and ACA requirements for hospitals are limited to the CHNA, our inquiry and the development of the tools are intended to both capture and encourage efforts by hospitals to build shared ownership among the full spectrum of diverse stakeholders for improving health in local communities.

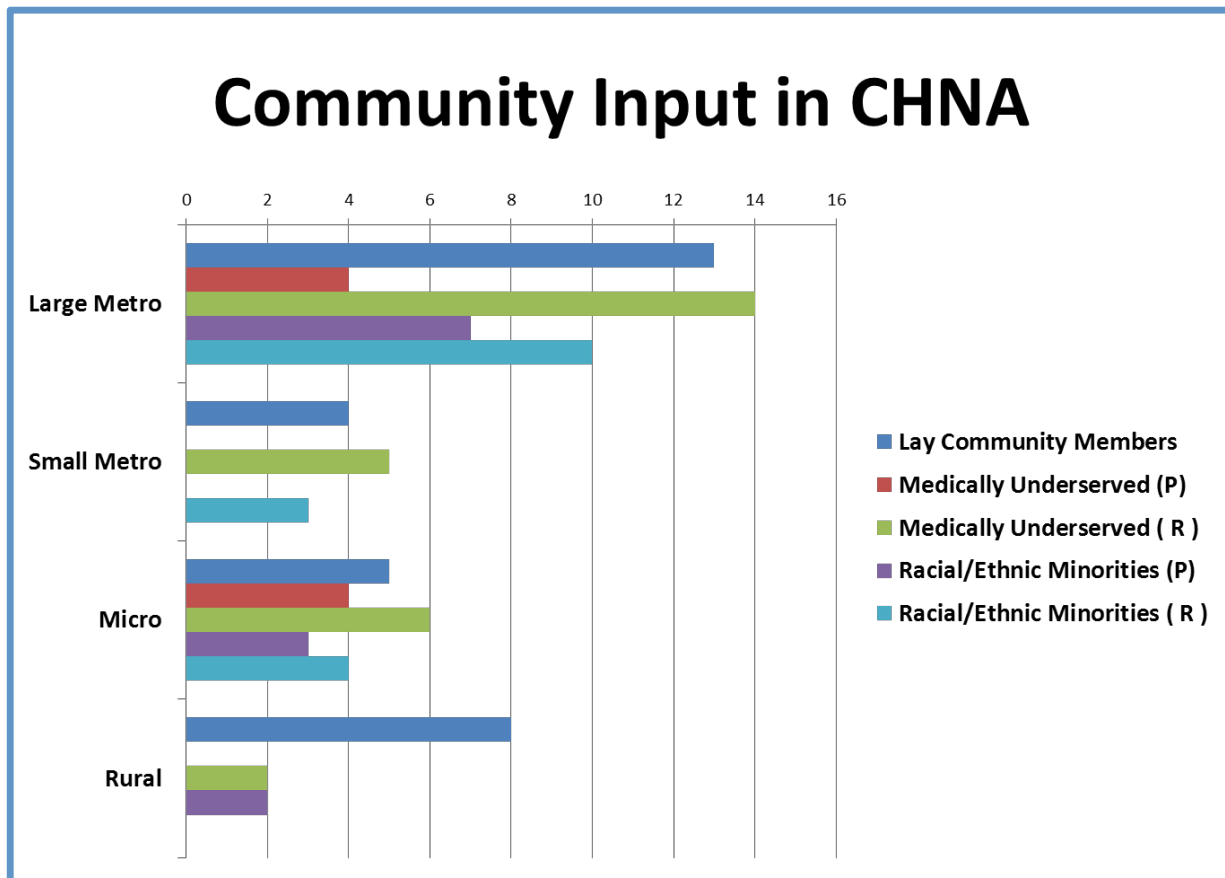
Findings from the assessment of community engagement across sites indicate that there is a moderate level of engagement with local stakeholders for the CHNA process. Thirty-three of forty-four hospitals, or 75%, secured input *directly* from lay community members in the CHNA process (sixteen of the twenty-three hospitals in large MSAs, four of the eleven hospitals in small MSAs, five of the seven hospitals in Micropolitan Areas, and eight of the ten Rural Area hospitals).

Twenty-six of the forty-four hospitals, or 59%, secured input from *representatives* of people with health disparities in the CHNA data/information collection process. Eleven of the forty-four hospitals, or 25%, indicated that they secured input *directly* from people with health disparities in the CHNA data/information collection process.

Twenty-eight of the forty-four hospitals, or 64%, secured input from *representatives* of medically underserved people in the CHNA data/information collection process. Eight of the forty-four hospitals, or 18%, secured input *directly* from medically underserved people in the CHNA data/information collection process; four of the eighteen hospitals in the large MSA sites for which CHNAs were available; none of the eleven hospitals with CHNAs in the small MSAs; four of the seven hospitals in Micropolitan Areas; and none of the ten Rural Area hospitals.

Eighteen of the forty-four hospitals, or 41%, secured input from *representatives* of people from racial/ethnic minority groups in the CHNA data/information collection process. Twelve of the forty-four hospitals, or 27%, secured input *directly* from people from racial/ethnic minority groups in the CHNA data/information collection process, including seven of the eighteen hospitals with CHNAs from large MSAs; none from the small MSAs; three of the seven hospitals from Micropolitan Areas; and two of the ten hospitals in Rural Area regions. **Figure 11** provides a summary of efforts to secure input from community stakeholders in the CHNA data/information collection process.

Figure 11: Community Input in CHNA Data/Information Collection



The CHNA process described in a hospital system in a Micropolitan site indicated a strong and long-term commitment to broad engagement among hospitals, local health departments, and diverse stakeholders:

“The community needs assessment process in [X] County is a multi-stakeholder, multi-sectorial process that has been in effect for nearly thirty years. The maturity of the process is evidenced in the extent to which the local health system, public agencies, and CBO’s are coordinated in aligning their resources to support data collection and community engagement of various segments of the county including minorities, the elderly, and other populations in the county that experience disparities. The CHNA is adopted by all of the agencies involved and priority setting done by committee with the hospitals’ programs planned to target those specific needs. “

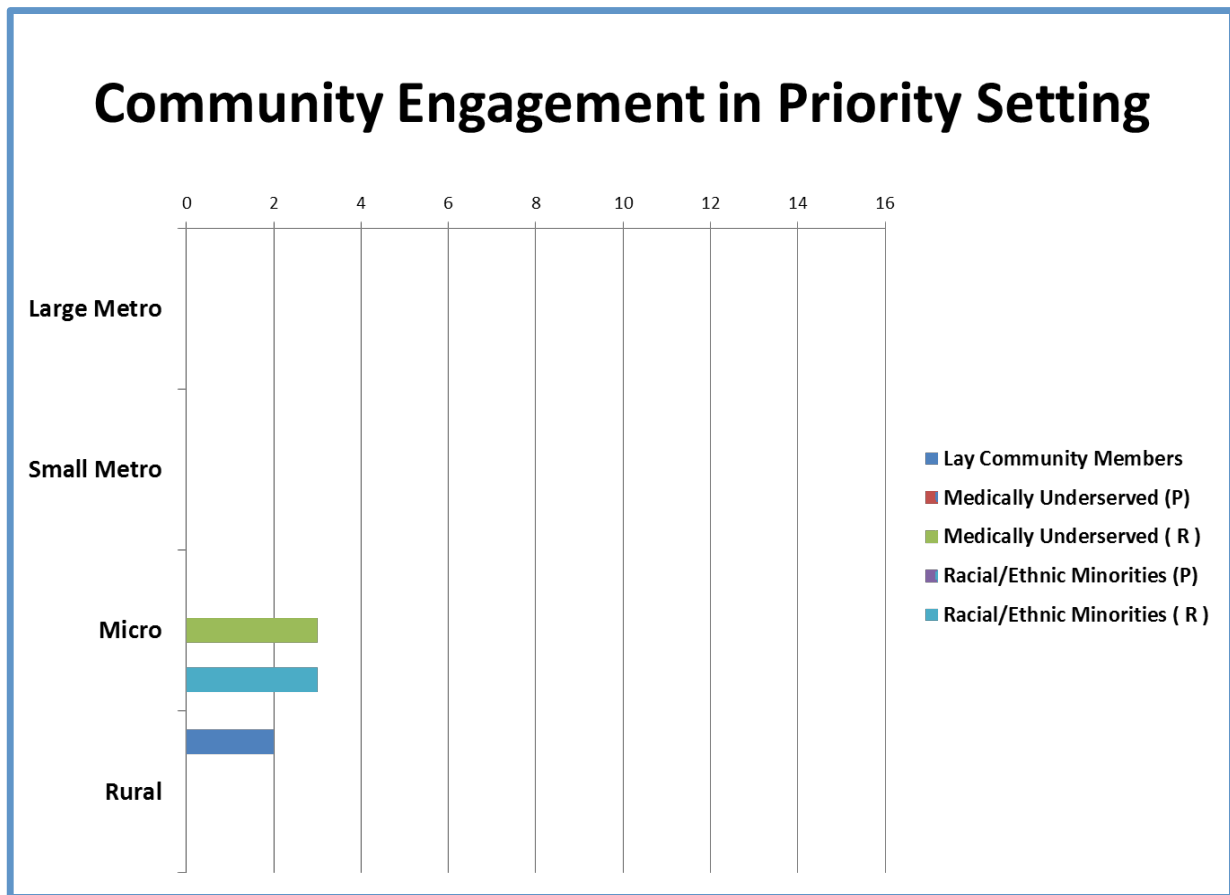
The CHNA process described by one hospital in a rural site reflected an approach to engagement of local stakeholders not seen in any other sites. In apparent acknowledgment of the difficulty in accessing useful quantitative data in a geographically dispersed rural population, as well as the limited resources of a Critical Access Hospital, the hospital established a comprehensive committee of local representatives from county, health, public health, and social service settings to identify and rank the most pressing needs of their county based on their daily experience. These experts were asked to review secondary health data for their region and asked to discuss how well it reflected or did not reflect their county’s local circumstances. This group was then asked to rank what they saw as the most pressing needs of the county based on their informed insights. While hospital leadership was left to select from the finalized list, the needs that informed the list were felt to be a more accurate depiction of what issues the County faced.

In contrast, priority setting as described for a hospital in a Micropolitan site was viewed as an exclusively internal decision-making process:

“The implementation planning process began with the Chief Executive officer. The Chief Executive officer first reviewed identified issues and opportunities discovered in the CHSD report. The CEO then determined which issues or opportunities could be addressed considering [X] hospital’s parameters of resources and limitations...The administrator declared four issues or opportunities could be addressed through the implementation planning process considering said parameters. Then, the hospital’s leadership team worked together to prioritize these four issues and opportunities using the additional parameters of: organizational vision, mission, values, relevant mandates, and community partners.”

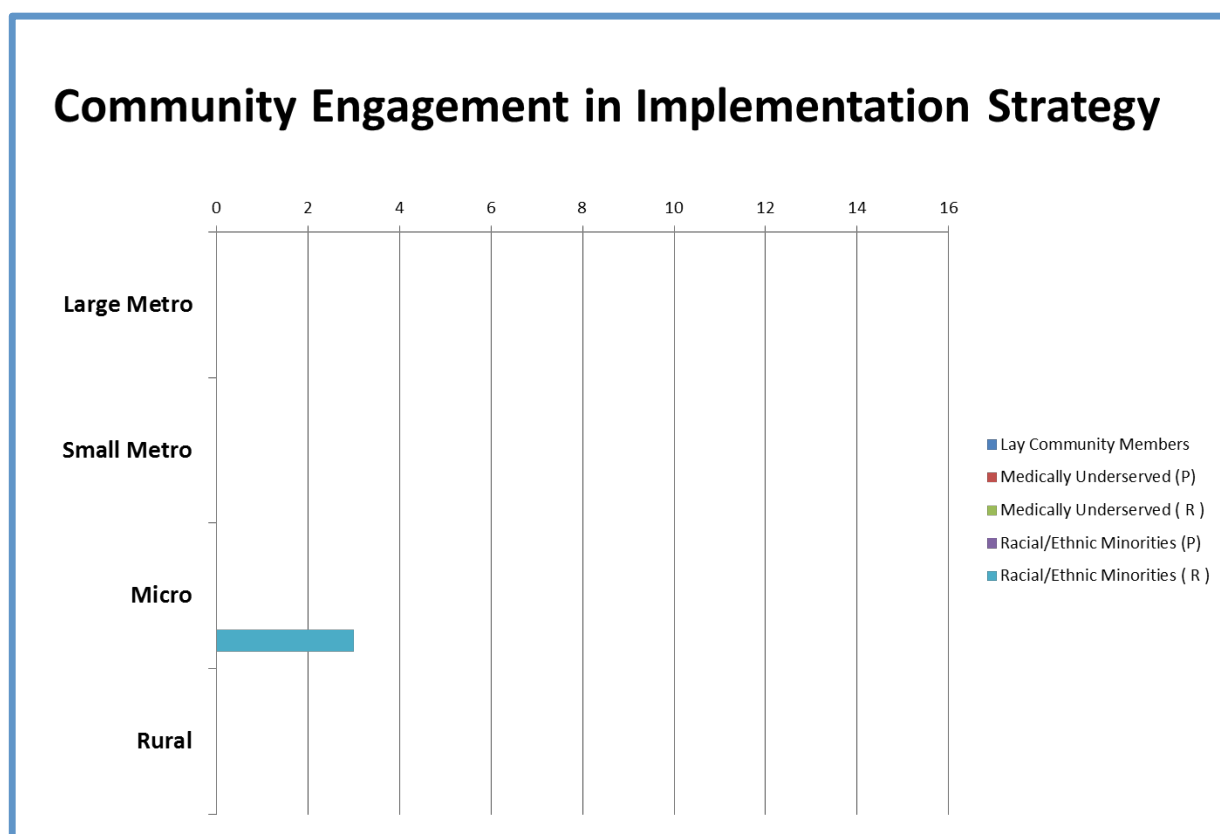
In general, engagement of community stakeholders dropped off dramatically among hospitals in the fifteen sites in the subsequent priority-setting processes, program planning, and program implementation processes. A total of five hospitals indicated that community members were involved in priority-setting processes: three of the seven hospitals in Micropolitan sites, and two of the ten hospitals in rural sites. None of the eighteen hospitals with CHNAs in the large MSA, or the ten hospitals with CHNAs in the small MSAs, indicated that community members were involved in priority-setting processes. Totals are reflected in **Figure 12**.

Figure 12: Community Engagement in Priority Setting



Similar results were observed in the review of hospital CHNAs and Implementation Strategies in regards to engagement of community stakeholders in the planning, implementation, and oversight of community benefit program activities. Among the twenty-seven hospitals for which Implementation Strategies could be obtained, only three, all from Micropolitan sites, indicated the intent to partner with community stakeholders in the planning and implementation of community benefit activities. These results are captured in **Figure 13** below.

Figure 13: Community Engagement in Implementation Strategy



In an examination of specific program activities identified in the twenty-seven Implementation Strategies, however, there were nineteen specific activities that indicated some level of partnering with community stakeholders on projects. Seven of those were among hospitals in large MSAs, two were in hospitals in small MSAs, four in Micropolitan Areas, and six in Rural regions.

C. Priority Setting

As indicated in the methods section, the review of priority-setting processes focused on the description of the processes and criteria used to guide the decision-making process, as required for reporting by Treasury and the IRS. In the examination of the processes, attention was given to specific methods of group decision-making used (e.g., ranking), and whether priorities were set individually by hospitals, or among a group of stakeholders.

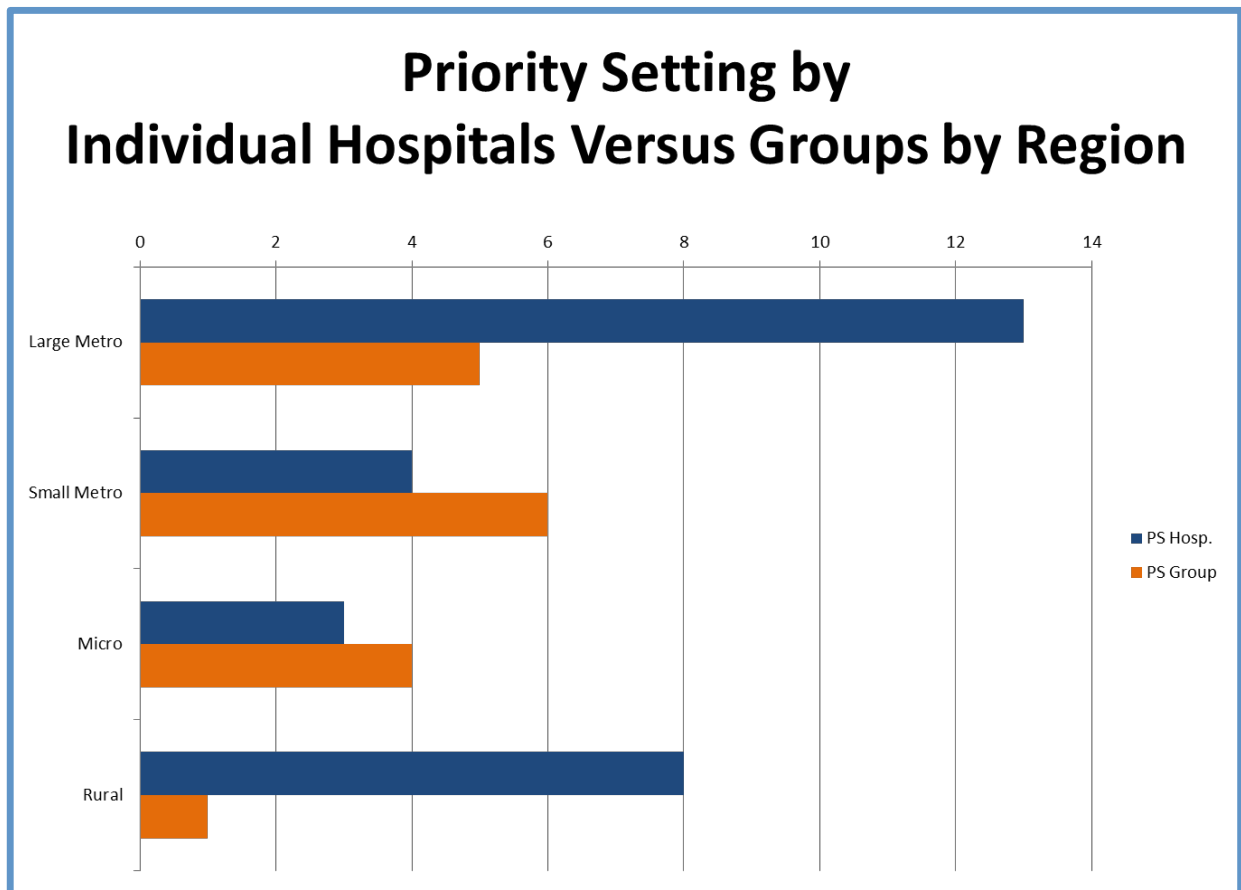
In the examination of criteria, attention was given to whether the criteria were of sufficient specificity to assist in the selection among alternatives, and whether the criteria were institution-relevant and/or broader population/community health related. Examples of criteria with insufficient specificity to select among alternatives include “alignment with the charitable mission of our hospital,” or whether content options (to be distinguished from specific interventions and the specific roles/contributions of the hospital) were “within the budget of the hospital.” Examples of criteria that are institution-relevant

include “aligned with the strategic direction of the hospital,” or “aligned with core competencies of the hospital.” Examples of population/community health criteria include, but are not limited to, the size of the problem (i.e., incidence or prevalence), the severity/cost of the problem to the community, or importance of the problem to the community.

Among the forty-four CHNAs reviewed, forty hospitals (91%) described criteria used to guide the priority-setting process; four hospitals, all from large MSAs, did not.

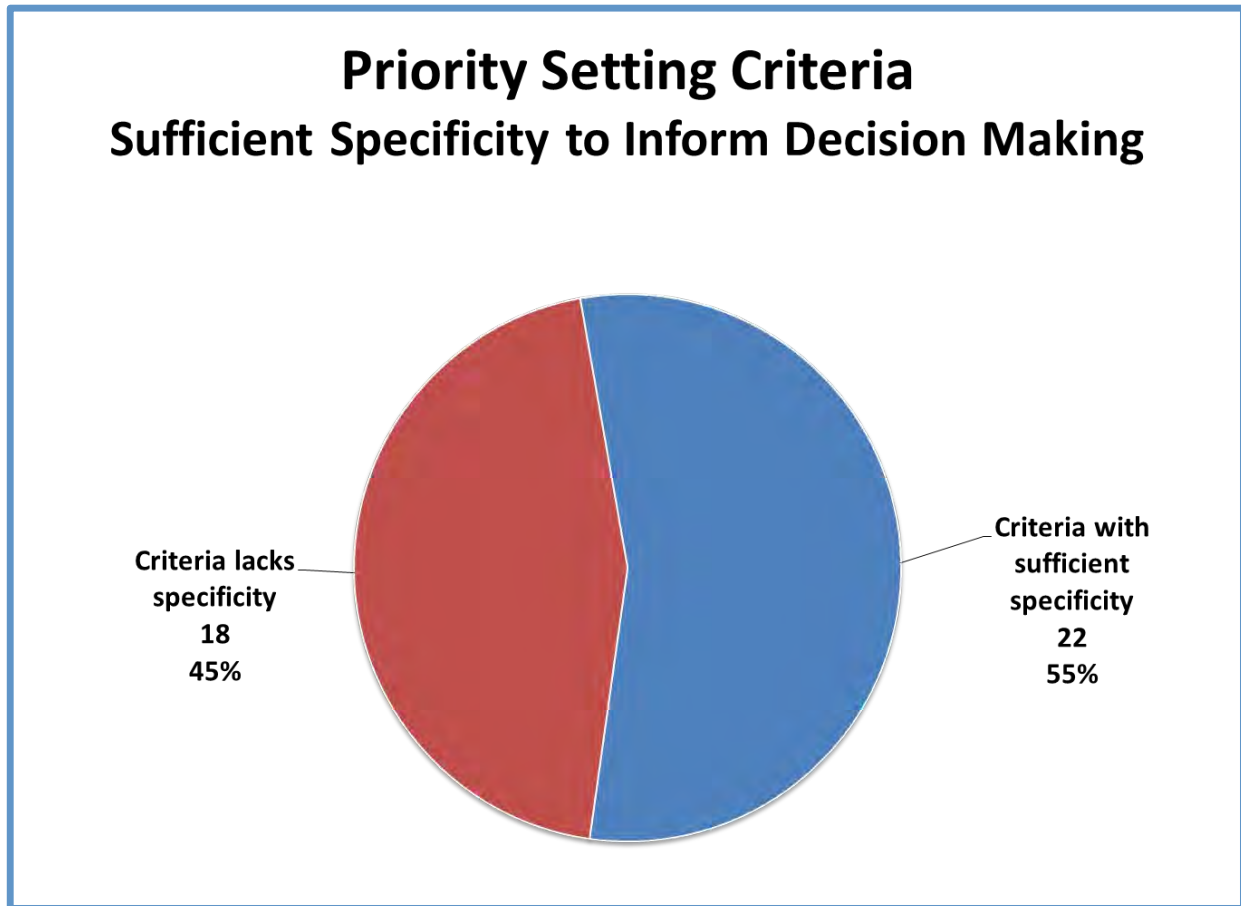
A total of sixteen hospitals out of the forty-four for which CHNAs were available, or 36%, indicated that they set priorities as a group of hospitals. These included five of the eighteen hospitals from large MSAs, six of the ten from small MSAs, four of the seven from Micropolitan areas, and one of the nine from rural regions. The results indicate a potential tendency towards individual priority setting in large MSA and Rural regions, and towards group decision-making in small MSA and Micropolitan Areas. The totals for individual versus group priority-setting processes by region are provided as **Figure 14**.

Figure 14: Group Versus Individual Institutional Priority Setting



Of the forty hospitals that described criteria used for the priority-setting process, twenty-two, or 55%, were of sufficient specificity to support a selection among alternatives; the criteria reported by sixteen hospitals, or 45%, were not. The results are presented as **Figure 15**.

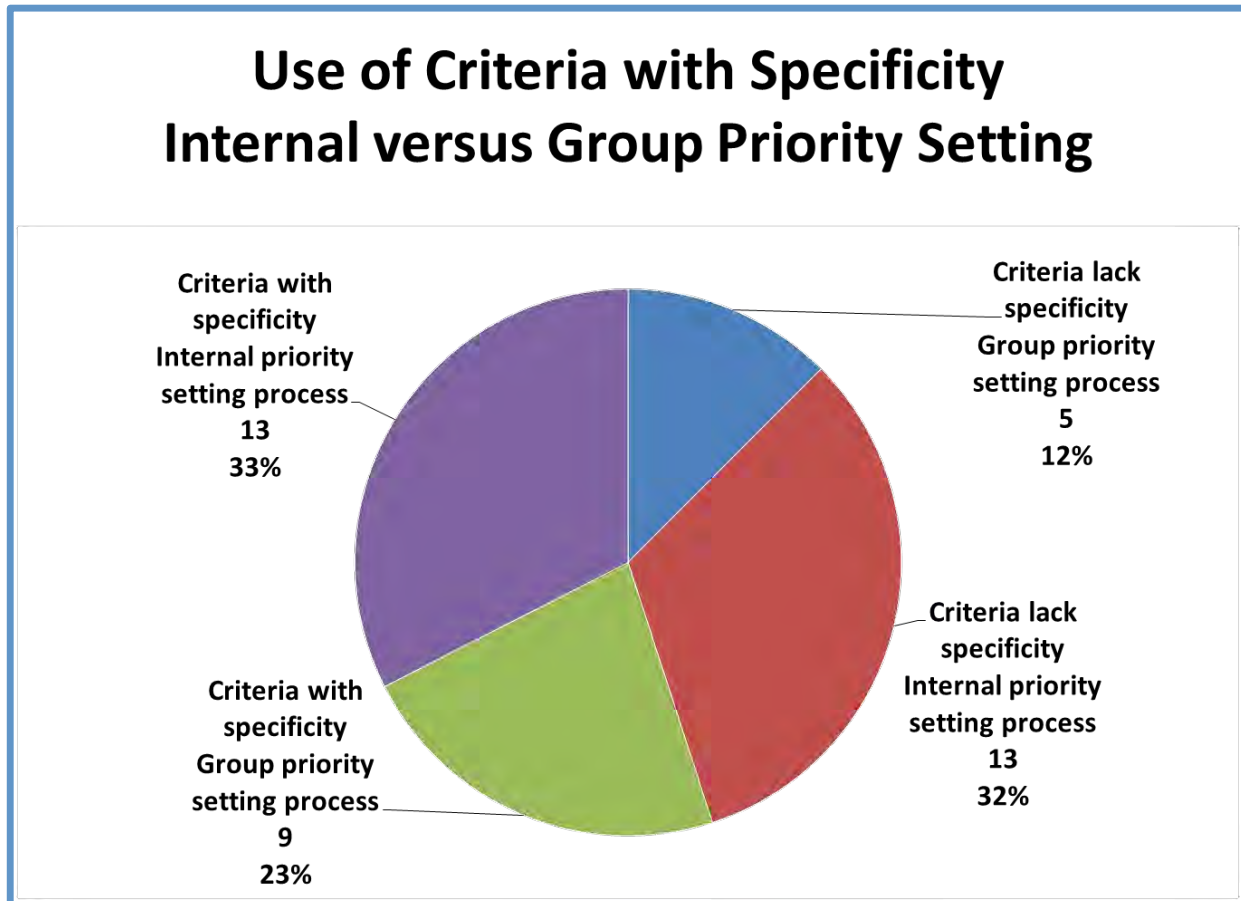
Figure 15: Specificity of Priority-Setting Criteria



Thirteen of the eighteen hospitals whose priority-setting criteria *lacked specificity* carried out internal priority-setting processes. These represent 32%, or approximately one-third of the forty hospitals that reported criteria, and 72% of those whose criteria lack specificity. The other five hospitals whose priority-setting criteria *lacked specificity* participated in group processes. These represent 12% of the forty hospitals that reported criteria, and 28% of those whose criteria lack specificity.

Nine of the twenty-two hospitals whose priority-setting criteria were of *sufficient specificity* to support a selection among alternatives participated in group processes. These represent 23% of the forty hospitals that reported criteria, and 41% of those with sufficient specificity. Thirteen of the twenty-two hospitals whose criteria were of *sufficient specificity* carried out internal priority-setting processes. These represent 33% of those hospitals that reported criteria and 59% of hospitals with criteria of sufficient specificity. These results are represented in **Figure 16**.

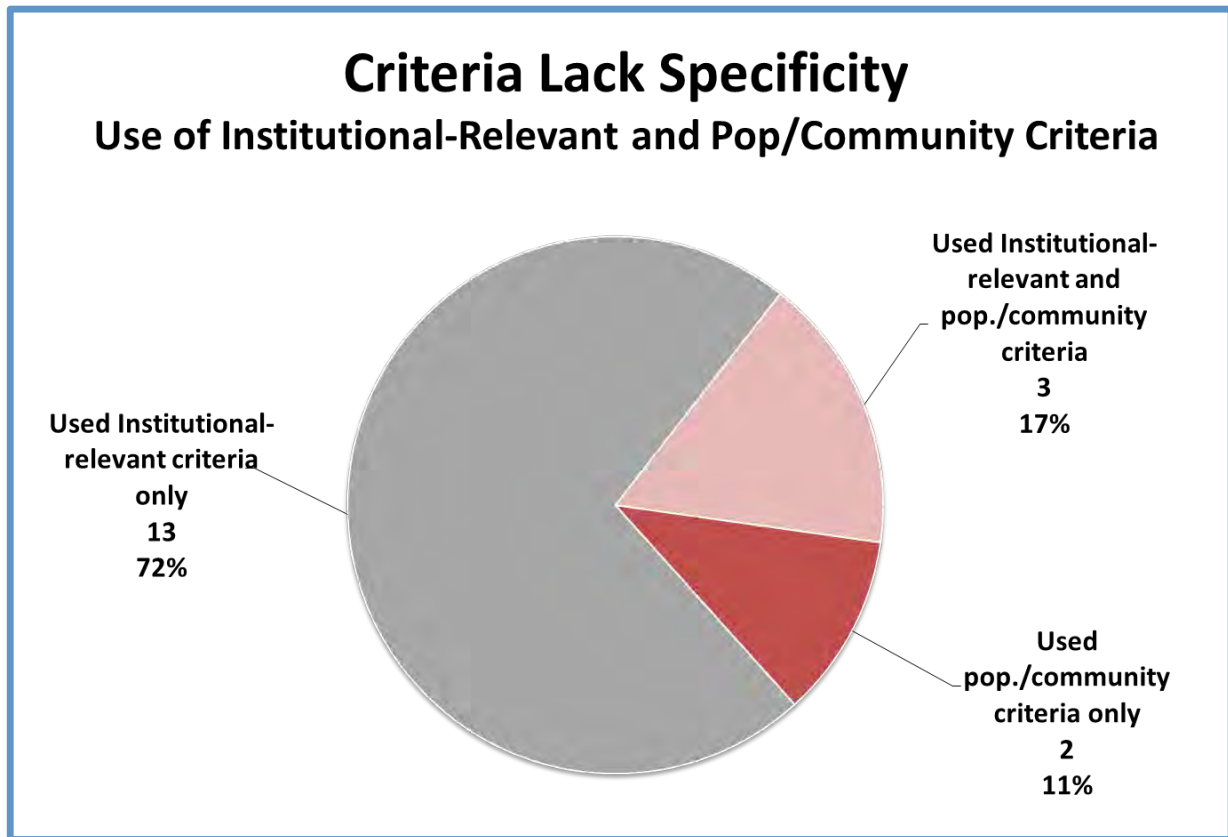
Figure 16: Criteria Specificity and Internal Versus Group Priority Setting



Among the forty hospitals that provided priority-setting criteria, fourteen hospitals, or 35%, described only institution-related criteria. Another ten hospitals, or 25%, described only population/community health-related criteria. Sixteen hospitals, or 40%, described both institution and population/community health-related criteria.

Of the eighteen hospitals that *lacked specificity* in describing criteria for priority setting, thirteen, or 72%, described only institution-related criteria. They also represent 93% of the fourteen hospitals that described only institution-related criteria. Two of the eighteen hospitals whose criteria *lacked specificity*, or 11%, described only population/community-related criteria. The remaining three hospitals (17%) described both population/community-related criteria and institution-relevant criteria. These results are represented in **Figure 17**.

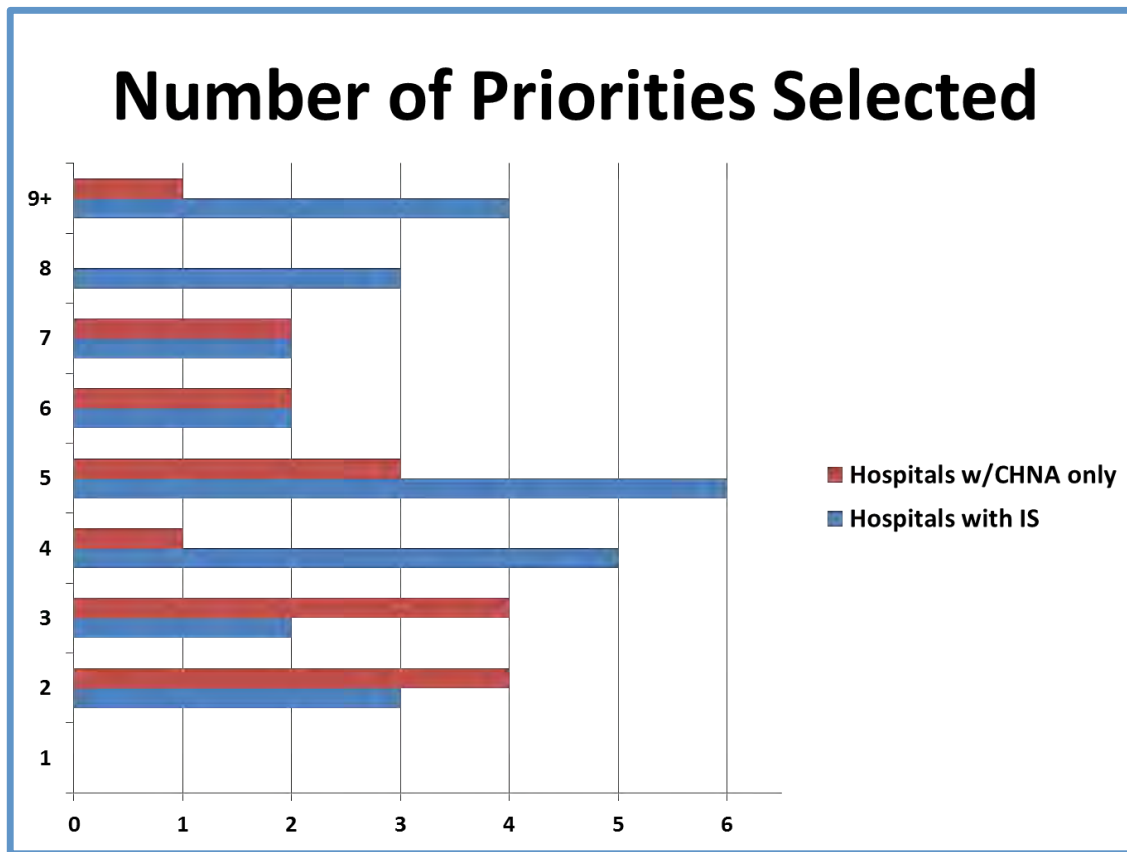
Figure 17: Priority-Setting Criteria Specificity and Type



Another area of focus in the examination of the priority-setting process was the number of priorities selected as a focus for Implementation Strategies. This is an issue of concern because IRS and the Treasury require hospitals to provide an explanation for any priority unmet health needs that are not addressed in the implementation strategy, and also because there are practical considerations in determining how many priority concerns can be effectively addressed at one time by a hospital.

Among the forty-four hospitals from whom CHNAs were available, thirteen, or 30%, selected two to three priorities. Another fifteen hospitals (34%) selected four to five priorities. Eight other hospitals (18%) selected six to seven priorities, and another eight hospitals selected eight or more priorities. In some cases, it appears that those hospitals with posted Implementation Strategies may select a larger number of priorities. Results are represented in **Figure 18**.

Figure 18: Number of Priorities Selected By Hospitals



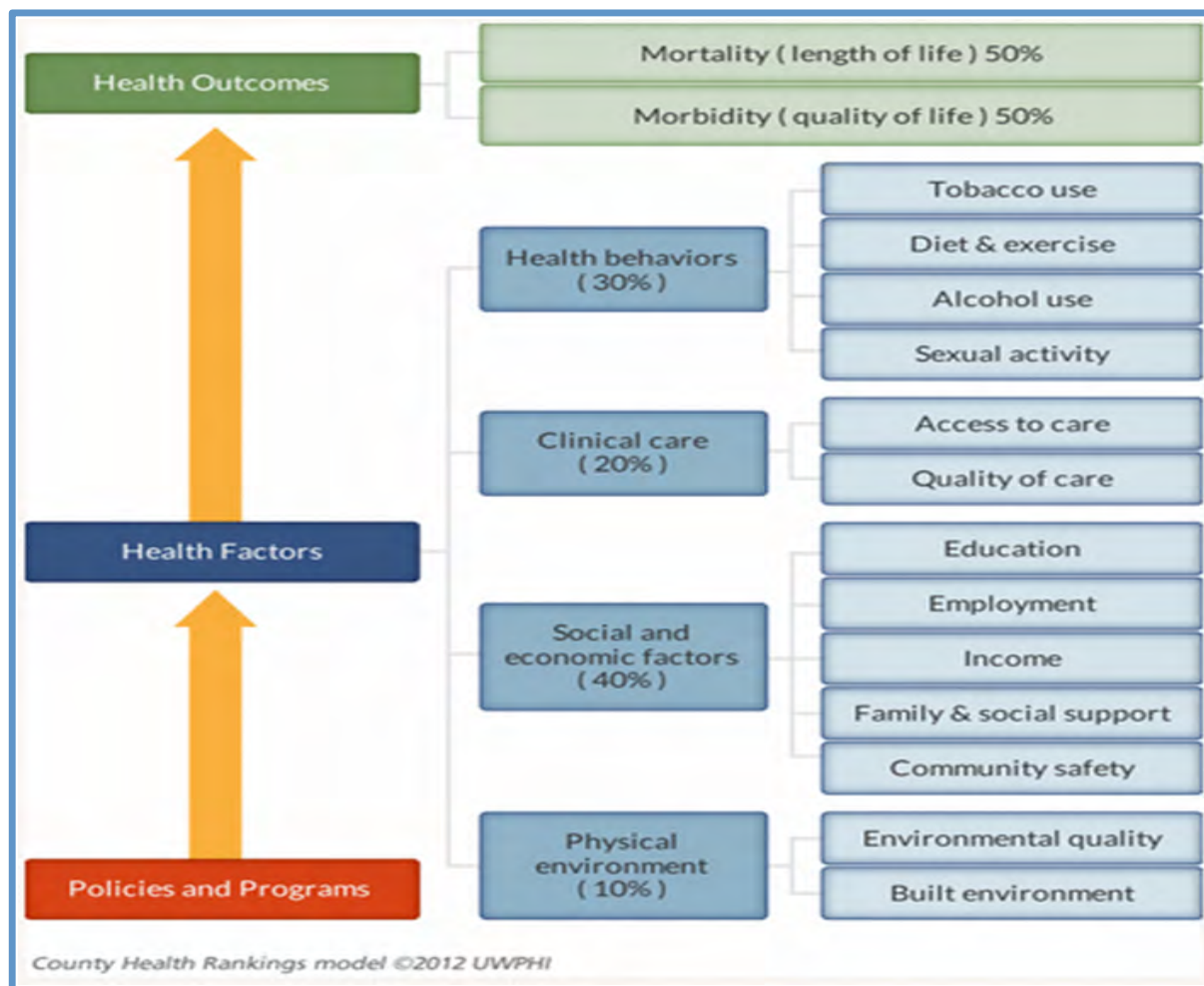
The last area of focus for analysis was whether the priority-setting process was documented in the CHNA or the IS by the hospital. As noted previously, the IRS requires inclusion of the prioritized list of needs and description of the process and criteria *in the CHNA*, in part to provide the opportunity for community stakeholders to review and provide additional input prior to issuance of a hospital’s IS.

Among the forty-four hospitals that posted CHNAs, thirty-seven, or 84%, included a list of prioritized needs and a description of the process and criteria in their CHNA. Seven of the forty-four, or approximately one in six, did not. Because Implementation Strategies were acquired for all seven hospitals, it can be confirmed that the priority-setting process was described in these public documents. Among the seven hospitals, only one was in a large MSA site, and one was in a Micropolitan site; the other five were hospitals in Rural sites.

D. Content Focus of Implementation Strategies

In the examination of content focus, four major categories were drawn from the County Health Rankings (CHR) What Works for Health Framework,³⁵ including Clinical Care, Health Behaviors, Social and Economic Factors, and Physical Environment. Additional analysis focused on the identification of subcategories within each of the four major categories that have been identified in What Works for Health, including but not limited to the following:

Figure 19: What Works for Health Framework



Classification of Priorities by County Health Ranking Category and Subcategory

In the review of priorities, there were numerous instances where judgments were made to categorize priorities based on what appeared to be the primary focus. For the seventeen hospitals for which only CHNAs available, there were numerous cases where insufficient information to allocate to CHR

³⁵ Framework developed by the University of Wisconsin Population Health Institute, in collaboration with the Robert Wood Johnson Foundation; retrieved 1-14-17 from <http://www.countyhealthrankings.org/roadmaps/what-works-for-health>

categories. For the twenty-seven hospitals with Implementation Strategies, the additional information enabled (in most cases) the allocation into categories and subcategories. When the activities outlined for a priority within an IS involved more than one area of focus, a selection of a category was made based upon the number of activities outlined in one area versus another.

For example, one hospital prioritized “access to services to address disparities” and documented comprehensive strategies to target clinical care and health behaviors. Within those strategies, a specific number of respective program activities indicated the intent to improve quality, address violence prevention, and improve access to care. Designations were weighted when closer inspection of the Implementation Strategy indicated that there were a greater number of program activities cited that were quality related and fewer activities for violence prevention or access to care. In this example, the priority was designated to the major *Clinical Care* category and the *Quality of Care* subcategory.

Another example can be found in a mental health priority where a review of its program activities highlighted that the community benefit program would focus primarily on patients’ connection to or provision of social support services beyond delivering care in the clinical setting. Under these circumstances, a program of this nature was assigned the *Social and Economic Factors* category under the subcategory of *Family and Social Support*. Examples of this included homeless programs where hospital staff worked with community-based organizations to connect patients to “needed social services.” This is contrasted with priorities that indicated “access to mental health services”, which reflect a focus on only delivering care in the clinical setting.

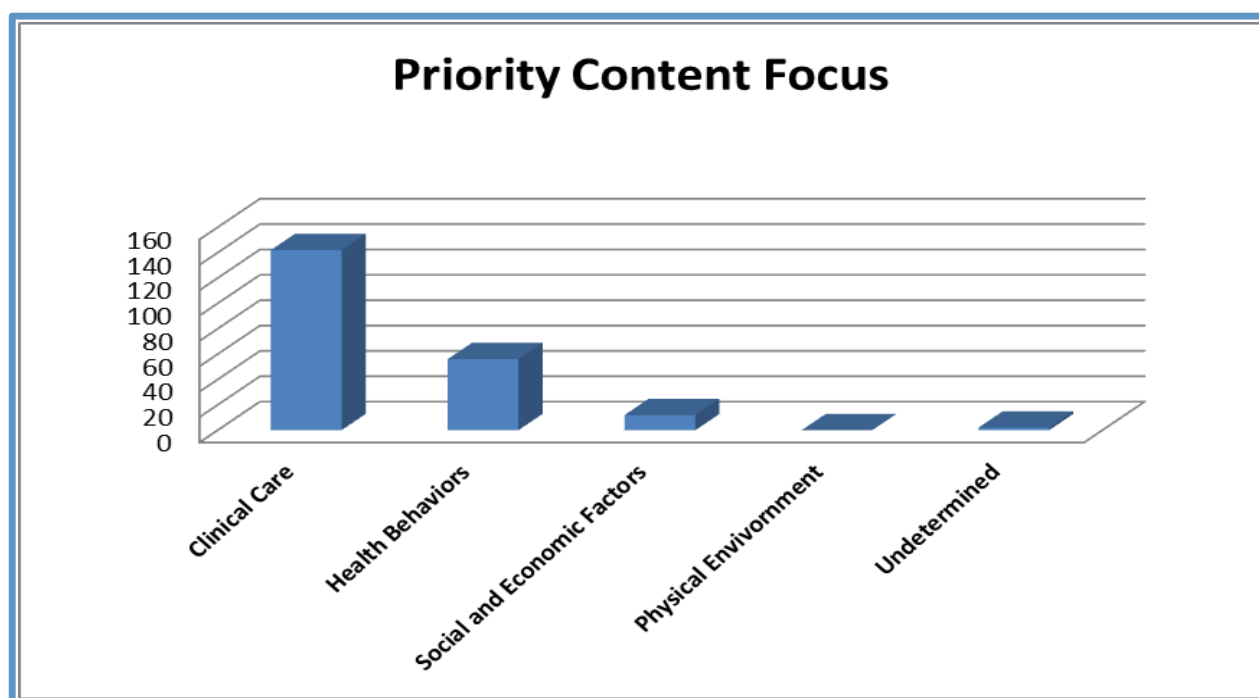
In other examples, a number of hospitals cited “Diabetes” as a priority, but a decision was made to categorize the priority as *Clinical Care* or *Health Behavior* based upon a review of the content of the program activities described in the IS. A diabetes priority with program activities geared toward providing individuals with knowledge to perform self-care and make lifestyle changes would be designated to the major category of *Health Behaviors*. On the other hand, program activities directed toward the provision of screenings or navigation assistance to access to financial resources for care would be designated to the major category of *Clinical Care* and the *Quality of Care – Chronic Disease Management* subcategory. If information was not clear or not provided at all in regards to how the hospital intended to address the priority then it was designated to the *Undetermined* category; specifically to the *Undetermined – Clinical Care* grouping.

Finally, there were instances where there was not enough specificity and therefore priorities could not be assigned any major categories or subcategories. Examples of this include the documentation of “Increasing Collaboration and Strategic Partnerships” or “School Health” as priorities. Upon review of their respective program activities, it could not be determined whether the hospital would assume clinical, community-based, or individual-oriented project activities to address the need. In these instances, it was not possible to determine a clear designation to a specific content area of focus, and those priorities were labeled as undetermined.

Frequencies of Priorities by County Health Rankings Categories

For the forty-four hospitals in the sample, there were a total of 212 priorities selected. Of those 212 priorities, 142, or 67%, were in the *Clinical Care* category. Fifty-six, or 26%, of priorities were in the *Health Behaviors* category. Only twelve of the priorities, or 6%, were in the *Social and Economic Factors* category. No priorities were identified in the *Physical Environment* category. Two priorities were classified as *Undetermined*. Results are illustrated in **Figure 20**.

Figure 20 Priority Content Areas of Focus



Categorization of Priorities Based Upon CHNA Reporting Only

Among the seventeen hospitals that only posted CHNAs, there were a total of eighty-eight priorities. Sixty-four of those priorities, or 73%, were in the *Clinical Care* category. Another seventeen priorities, or 19%, were in the *Health Behaviors* category. Finally, seven priorities, or 8%, were in the *Social and Economic Factors* category and none were in the *Physical Environment* category.

Among hospitals that only posted CHNAs, twenty-eight of the sixty-four *Clinical Care* priorities could be allocated to the *Access* subcategory, and three could be further specified as *Dental Access*. Three priorities could be assigned to the *Quality of Care* subcategory; another two could be specified as *Quality of Care – Chronic Disease Management* focused; and two others specified as *Maternal and Child Health* focused.

Eleven of the seventeen Health Behavior priorities, or 65%, could be allocated to the *Diet and Exercise* subcategory. Only one priority was designated to the *Alcohol and Drug Use* subcategory. Four of the seven social and economic factor-related priorities could be allocated to the *Family and Social Support* subcategory. There were two priorities that could be assigned to the *Community Safety* subcategory and one priority to the *Income* subcategory.

Thirty-one of the eighty-eight priorities, or 35%, posted by hospitals that only posted CHNAs did not provide enough specificity to be designated to a subcategory. The thirty-one undetermined priorities could be generally sorted into *Clinical Care* or *Health Behaviors* categories. Twenty-six were grouped as *Undetermined – Clinical Care* subcategory and five were grouped under the *Undetermined – Health Behaviors* subcategory.

Of the twenty-six *Undetermined – Clinical Care* subcategory, fifteen were chronic disease-related; five were mental health-related; and four were clinical service or access-related. There were two undetermined clinical care priorities that could not be grouped into a general subcategory. Examples of the five undetermined priorities related to health behavior indicated priorities included terms such as: “Wellness”, “Lifestyle”, and “Children-at-Risk”.

Categorization of Priorities Based Upon Implementation Strategies

Among the twenty-seven hospitals that posted Implementation Strategies, there were a total of 124 priorities. Seventy-eight of those priorities, or 63%, were in the *Clinical Care* category. Another thirty-nine priorities, or 31%, were in the *Health Behaviors* category. Only five priorities, or 4%, were in the *Social and Economic Factors* category and none were in the *Physical Environment* category. Two priorities were *Undetermined* as they could not be clearly assigned to any of the four major categories.

Among hospitals that posted Implementation Strategies, forty-two of the seventy-eight *Clinical Care* priorities, or 54%, could be allocated to the health care *Access* subcategory; one could be specified as *Dental Access*, and two as *Mental Health-Related Access*. Seven other priorities could be allocated to the broader health care *Quality of Care* subcategory; another twenty-one, or 27%, could be specified as *Quality of Care – Chronic Disease Management* focused; and three others were allocated to *Quality of Care-Maternal and Child Health*.

A total of twenty-one of the thirty-nine *Health Behavior* priorities, or 54%, could be allocated to the *Diet and Exercise* subcategory, reflecting a growing concern about the epidemic of obesity and related health problems. Another six priorities could be allocated to *Alcohol and Drug Use* subcategory; four for *Tobacco Use*; three for *Sexual Health*; and two for *Violence Prevention*. Four of the five *Social and Economic Factor*-related priorities could be allocated to the subcategory of *Family and Social Support*.

Eight of the 124 total priorities, or 6%, could not be designated to a subcategory even after review of the project activities (two *Undetermined Clinical Care*; three *Undetermined Health Behaviors*; and three *Undetermined – No Category or Subcategory*). A review of these priorities’ documented programmatic activities did not clarify how the hospital intended to address that priority. For instance, a priority indicating “the aging population” as an issue could be categorized under clinical care. However, a review of its related program activities indicated intent to improve both quality and access to care through its existing services.

Combined totals of subcategories from hospitals with Implementation Strategies and CHNAs-only are summarized below in **Figure 21**. A breakout of totals of subcategories from hospitals with Implementation Strategies is provided in **Figure 22**.

Figure 21: CHR Subcategory Distribution for All Hospitals

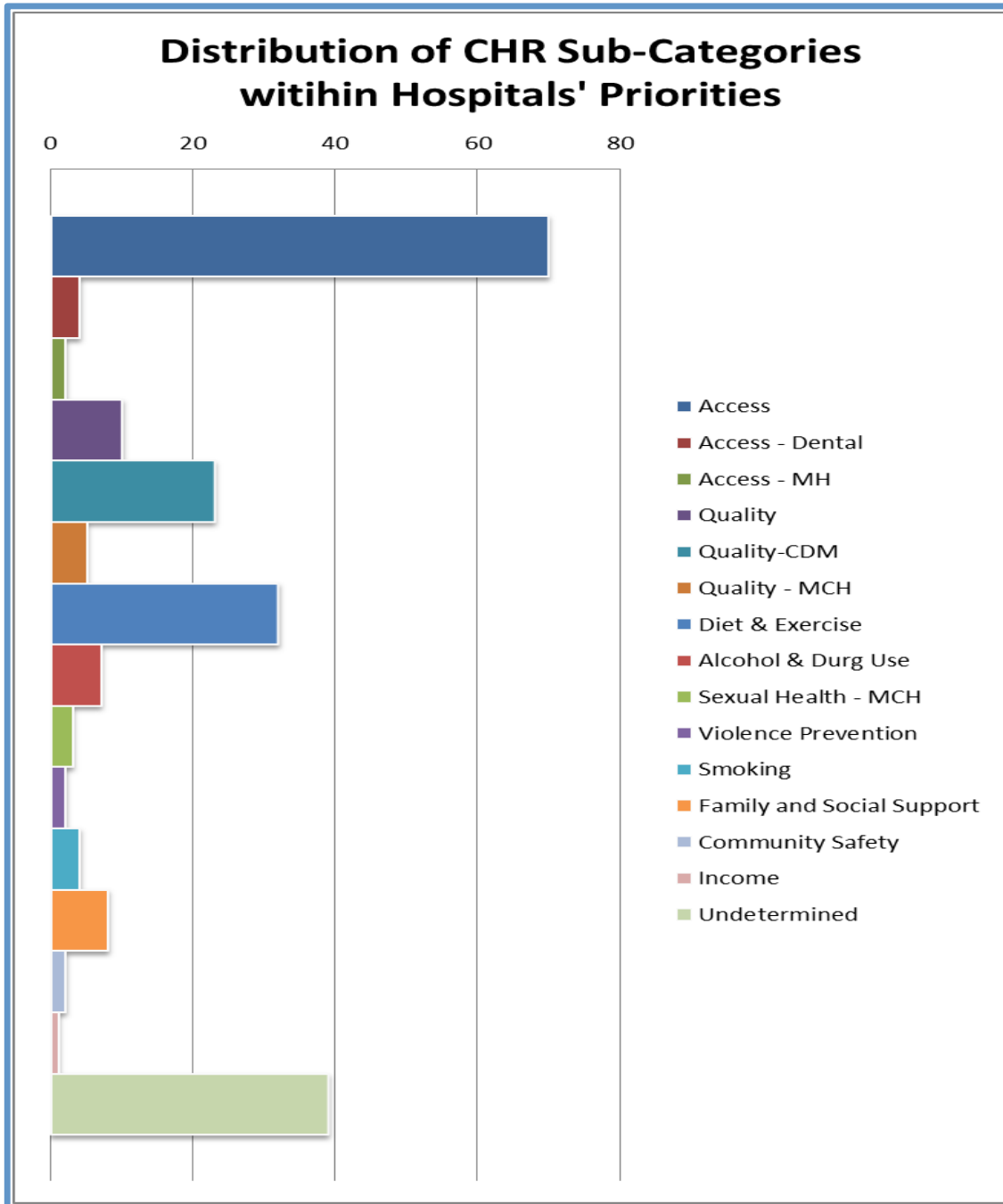
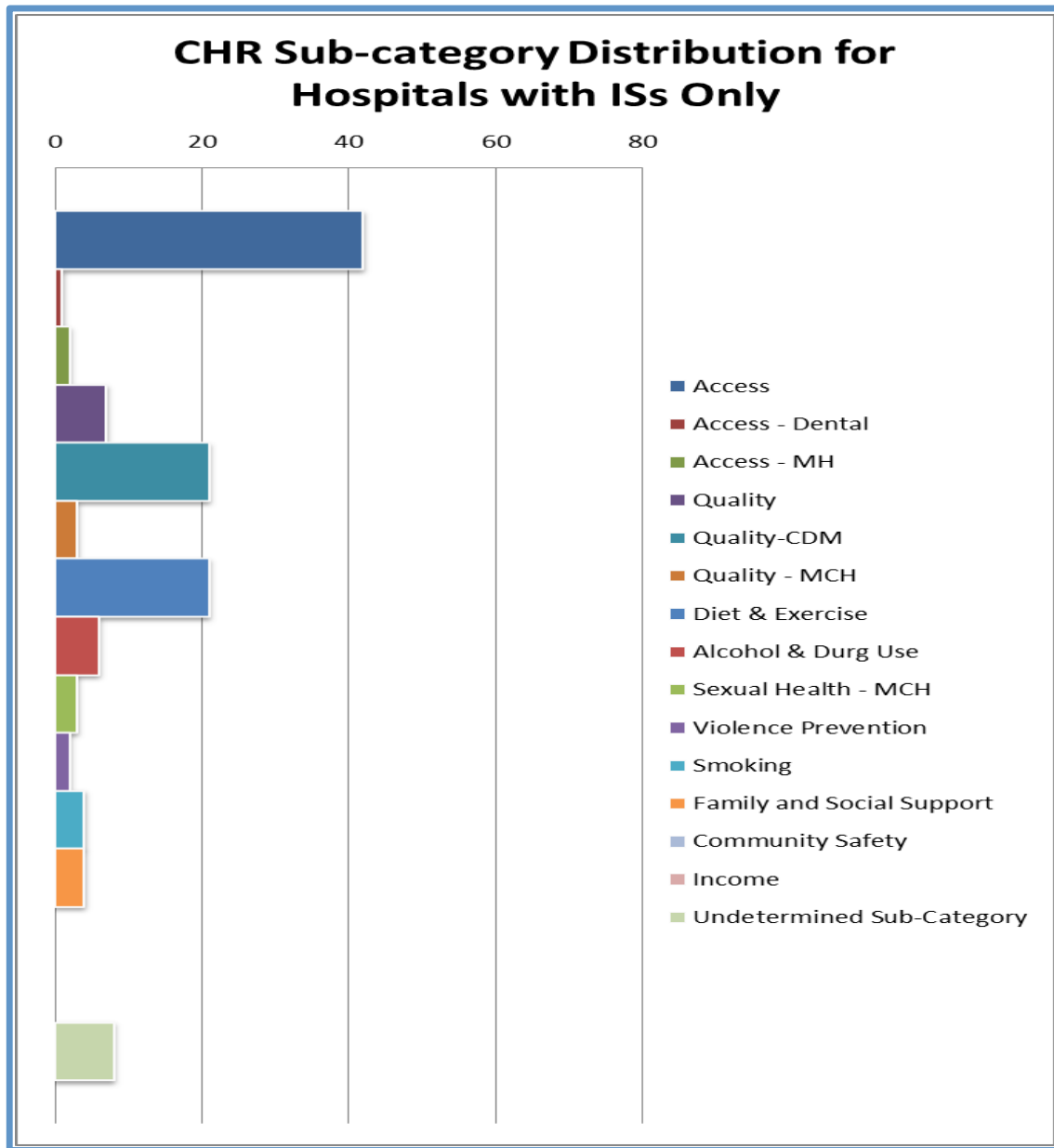


Figure 22: CHR Subcategory Distribution for Hospitals with Implementation Strategies



E. Population and Geographic Focus of Implementation Strategies

Of the twenty-seven hospitals with Implementation Strategies, twelve are hospitals from three of the four large Metropolitan Areas; three are hospitals from two of the four small MSAs; six are hospitals from all three Micropolitan Areas; and six are hospitals from three of the four Rural Areas.

Only one hospital in a large MSA site indicated intent to focus its entire implementation strategy on populations or geographic area health disparities (there was no reinforcing information, however, in their documentation of specific programs). Ten of the remaining twenty-six hospitals (38%) indicated a focus on specific populations for selected individual programs. Another six hospitals (24%) indicated a focus on specific populations **and** geographic areas with health disparities for selected individual programs. The remaining ten hospitals (38%) did not indicate a focus on populations **or** geographic areas with health disparities for any programs.

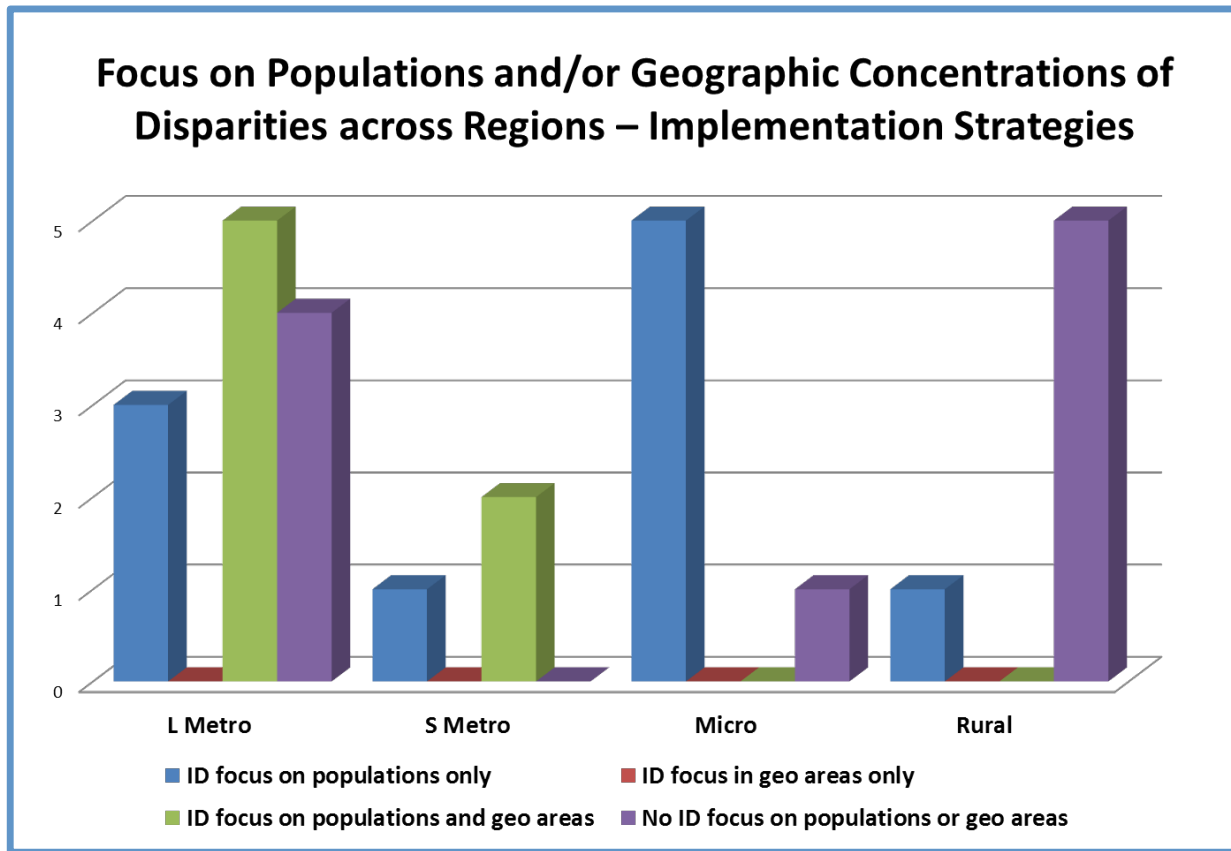
Among the ten hospitals that reported a focus on populations only:

- five identified programs to focus on un/underinsured populations;
- three identified programs to focus on Medicaid populations;
- six identified programs to focus on age groups or gender populations; and
- seven identified programs to focus on populations with disparities.

In terms of distribution by region, it should be noted that all seven Implementation Strategies (including the hospital that indicated a general focus of its implementation strategy) that indicated a focus on populations **and** geographic areas with health disparities are in located in large or small MSAs. It is also notable that four of the twelve hospitals in large MSAs did not indicate a focus either on special populations **or** in geographic areas with disparities.

Among the six Micropolitan hospitals with Implementation Strategies, five identified a focus on specific populations for individual programs. In contrast, among six rural hospitals with Implementation Strategies, five did not identify a focus on specific populations or geographic areas with disparities for any programs. All five of these are CAHs. The remaining rural hospital indicated a focus on the un/underinsured, age groups, and populations with disparities for specific programs. **Figure 23** provides an overview of the distribution of *individual programs* by populations and/or geographic areas with health disparities by regional groupings.

Figure 23: Population and/or Geographic Focus of Specific Activities in IS by Regional Grouping



F. Use of Metrics

As stated previously, four broad categories were used to group the types of metrics reported by hospitals, including:

- process (e.g., numbers of people served, numbers of units of services provided);
- service utilization (e.g., reduced ED utilization for a particular diagnosis);
- community/social metrics (e.g., improved access to healthy foods, improved transportation);
- population health (e.g., reduction in prevalence, acuity for specific conditions).

Among the twenty-seven Implementation Strategies reviewed, four hospitals, or 15%, did not provide metrics for any specific programs, and one other hospital only provided broad metrics for their overall Implementation Strategy. Twenty-one hospitals, or 78%, provided metrics for one or more program activity. Only one hospital provided metrics for all programs in their Implementation Strategy. These results are represented in **Figure 24**.

Figure 24: Use of Metrics by Hospitals for Implementation Strategies

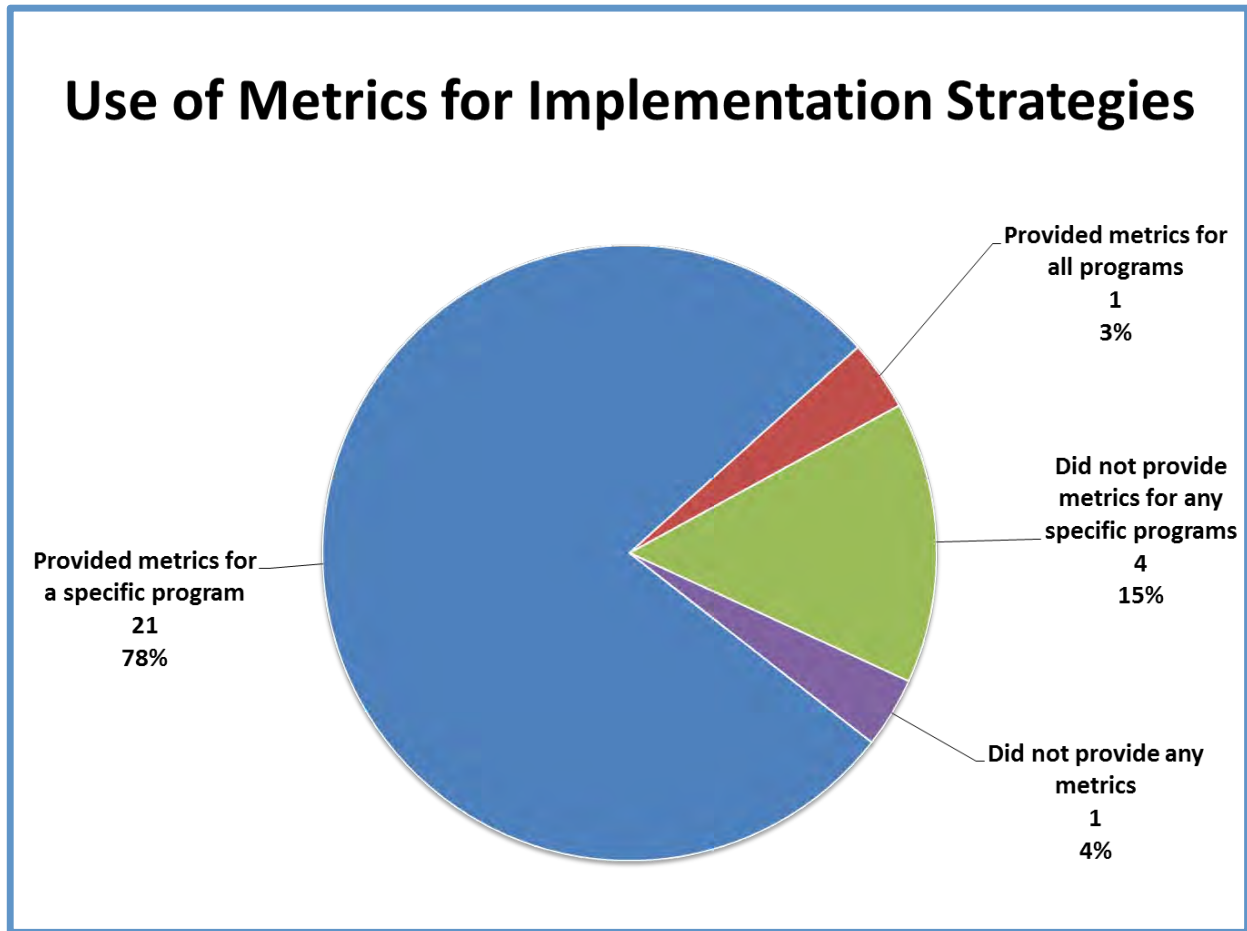
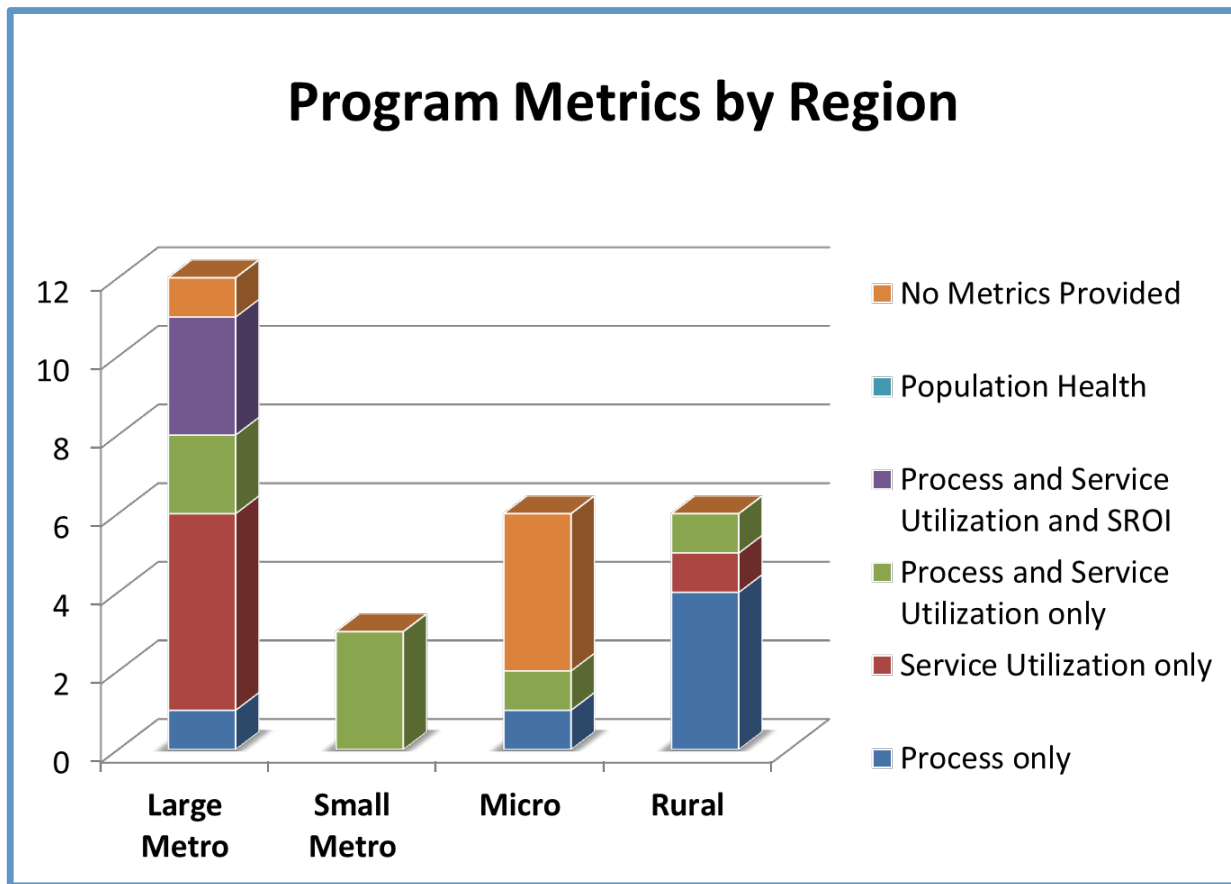


Figure 25 provides an overview of the distribution of different types of metrics reported by hospitals, by regional grouping. As illustrated, rural hospitals in the sample were more likely to select process metrics in the monitoring of program activities than other categories. Large MSA hospitals in the sample were more likely to use service- utilization metrics than the hospitals in the other regional groupings. The Micropolitan hospitals in the sample were least likely to document any metrics in their Implementation Strategies.

Figure 25: Program Metrics by Region



G. Alignment Between Hospitals and Local Health Departments

Existing literature examining legal frameworks in the CHDSS sites were reviewed to identify mandates of CHAs/CHIPs and PHAB requirements as a part of state accreditation/certification, and the degree of alignment with the IRS/ACA requirements of tax-exempt hospitals. Seven of the ten states represented in the CHIDSS sample have some form of mandate related to one or more of the PHAB prerequisites³⁶. A total of sixteen states nationally have a mandate for either a health assessment and/or a health improvement plan at the state and/or local level:³⁷

- Illinois has an implied mandate for local assessments and improvement plans. In order to receive state funds, local agencies must be certified, a process that requires an assessment and plan every five years.
- Maryland has an executive branch mandate to complete a SHIP. There is also statutory language for local assessments and plans, but due to reduced funding it is not enforced.
- Oklahoma has a mandate from a Senate Joint Resolution to create a State HIP.

³⁶ <http://www.publichealthalliance.org/index.php?s=7844&item=7744>

³⁷ Ibid.

- Colorado has recently implemented statutory requirements for a HA and a HIP at both the state and local level.
- New York has statutes and regulations that mandate local health department to conduct a CHA and a CHIP every four years.

Fifteen states nationally have a mandate for strategic planning, examples include:

- Montana has a legal mandate to do a strategic plan every five years.
- Idaho mandates that every state department have a strategic plan.
- Oklahoma requires LHDs, which are operated by the state, to complete strategic plans.
- New Mexico has a statutory requirement to develop a strategic plan that must be updated every four years.

There are twenty-three local health departments and one tribal health department represented in the fifteen sites. Local health department-posted CHAs were available in eight of the fifteen sites. There were ten posted community health assessments in those eight sites. Eleven local health departments did not post community health assessments. Nine of the local health departments posted community health improvement plans. There were a total of five of the fifteen sites had completed community health assessments and community health improvement plans. Local health departments in states with standards were more likely to be aligned with PHAB accreditation standards. Only one local health department that completed a community health assessment and community health improvement plan indicated that they engaged in a collaborative process with hospitals. Two other local health departments indicated the involvement of hospitals in their community health assessment and community health improvement plan development process.

One local health department in a large MSA site indicated that the hospital collaborated with it on one component of the assessment, but not the entire process. Another local health department in a Micropolitan site indicated that their community health assessment and community health improvement plan was conducted in collaboration with the hospital. Three rural, local health departments indicated that their community health assessment was sponsored by, and prepared for, local hospitals.

The search for community health assessments yielded a total of eleven reports, including: eight complete community health assessments; two community health assessment summaries; and one “health status assessment”. One of the eight complete community health assessments was also a collaborative tri-county assessment. The search also yielded eleven implementation plans, including ten community health improvement plans and one strategic plan.

VI. Discussion

As stated in the introduction, the purpose of this project and underlying study is to develop a set of tools that serve as a Community Health Improvement Data Sharing System (CHIDSS). The CHIDSS is intended to provide insights into community health assessments and planning processes by hospitals, local health departments, and other stakeholders in local communities. It is intended for use by the full spectrum of stakeholders – from hospitals, local health departments, local United Ways, and other institutional stakeholders who seek to both improve and better align their assessments and planning processes, to community-based organizations, businesses, and advocacy groups who seek to meaningfully engage in these processes.

As also stated at the outset, the primary area of focus for analysis in the piloting of the CHIDSS were the public reports posted by tax-exempt hospitals in fulfillment of new requirements associated with Section 501r of the ACA and the IRS Revised form 990, Schedule H. A less in-depth analysis was conducted for community health assessments and community health improvement plans that could be acquired from approximately half of the local health departments in the fifteen review sites selected for the study. The focus of the parallel analysis was on relative alignment with the community definitions, community stakeholder engagement, and priority-setting reporting requirements for hospitals. Only two to three assessments by Community Action Agencies or United Ways could be identified in the fifteen review site regions and were thus excluded from analysis in this study. As local health department, community health assessments, and community health improvement plans become more accessible, along with assessments of Community Action Agencies, United Ways, and the other entities identified in this study, a more comprehensive analysis can be conducted to identify opportunities for alignment.

It is important to note that this study is not intended to provide conclusive evidence of the relative quality of hospital and/or local health department community health assessment and planning processes. Rather, the purpose is to provide a preliminary snapshot of current practices across varying types and sizes of hospitals in different kinds of geographic settings across the country, and to provide a basis for the initial development and pilot testing of the CHIDSS tools. Further refinement of the tools will be carried out during a beta implementation phase that will involve direct engagement of diverse stakeholders across the country.

There are numerous examples of exemplary practices in assessment, planning, implementation, and evaluation of community health improvement activities across the country; some are led by hospitals, others by local health departments, and still others through broadly representative groups of individuals and organizations. In some cases, these practices and the organizations involved may be advanced to the degree that the CHIDSS tools may not provide substantial opportunities for enhancement.

For the most part, however, the random sample selected for this project reflects a practical reality that there are considerable opportunities for enhancement in most communities. This applies to how individual organizations undertake community health improvement processes, but also how organizations effectively align their efforts. There is an imperative, given the persistent geographic concentration of health disparities in our communities, to better focus and align community health improvement activities in the coming years.

A. Review of Pilot Study Findings

Community Definitions

The finding that twenty-three of the forty-four hospitals did not offer a methodology with the reasoning for the selection of geographic parameters of their community is notable, particularly given the substantial attention given to the issue in IRS instructions and in Notice 2011-52 and the April 5, 2013 NPRM. This may be a function of a lack of internal expertise and knowledge of both population health and the expectations associated with community benefit. In the absence of this knowledge and understanding, the tendency among some may be simply to cite an internally derived patient service area. More attention is needed to facilitate increased transparency in this area. At the very least, this is an appropriate line of inquiry for community stakeholders in the region.

One may reasonably assume that an underlying intent in the IRS requirement for hospitals to define the geographic parameters of their community in their CHNAs is to ensure that communities where health disparities are concentrated are not excluded, either through an inadvertent oversight or avoidance. At the core of this concern is the expectation that as health care charitable trusts, hospitals are helping to reduce government burden. Such an expectation is reinforced by the NPRM language that cautions against excluding geographic areas and populations who may experience health disparities.

As such, and given that a core criteria for selection of the fifteen sites was the presence of one or more census tracts with at least 30-40% of the population having household incomes below 100% of the FPL, it is notable that only ten of forty-four, or 23% of the hospitals in those areas, identified these geographic areas in their CHNA. Another twenty-three of the forty-four, or 53%, indicated that health disparities existed among their patient populations, but they did not identify them in geographic terms. The remaining eleven hospitals, or 25%, did not identify disparities as a concern in their defined community.

Are these inadvertent oversights, a function of a lack of understanding about the purpose of community health assessments, or a conscious decision? One cannot infer intent based upon the information available in these reports. To the degree, however, that a hospital's marketing department defines their geographic community, one might expect that the geographic parameters identified will give particular weight to the geographic area with the greatest concentration of commercially insured patients. This bias may be reinforced by recent IRS language indicating the prior caution against excluding people with health disparities is limited to those *"who are part of its patient populations, who live in geographic areas in which its patient populations reside...."* As such, a hospital located in a more affluent community may interpret the IRS language as excusing them from identifying relatively proximal sub-county areas with high poverty and health disparities as part of their community (and associated charitable obligations). This may be the case particularly if there are one or more tax-exempt hospitals that are more proximal to those communities (and also subject to higher levels of ED-based charity care).

More clarity is also needed to determine the degree to which geographic proximity confers responsibility and if so, where the line might be appropriately drawn. One might make the case that tax-exempt hospitals in more affluent geographic areas that are relatively insulated from emergency room visits from uninsured residents of low-income communities should be expected to target charitable resources in a manner that reflects a commitment to more equitably share the burden with hospitals

that are in the same region, but much closer to those communities. Just as hospitals indicate that one way they fulfill their charitable mission is by sending donations thousands of miles away to developing countries, an equally compelling case can be made to target resources in communities with concentrated health disparities that are 20 to 30 miles away.

Both hospitals and local health departments describe a responsibility to serve their larger geographic parameters; hospitals describe community benefit programs and services for “the community at large,” and local health departments note their responsibility to preserve and protect the health of all residents in their jurisdictions. As noted by David Fleming, MD, director and health officer for the Public Health Department of Seattle-King’s County;

“Historically, public health resources usually have been evenly and ‘fairly’ distributed geographically within jurisdictions at national, state, and local levels. In fact, competitive grants often result in preferential allocation to communities and organizations best resourced to compete. To improve overall health outcomes, however, allocating resources to communities with the most to gain holds the best potential to maximize overall return. We need to correct the mind-set that larger investments in neighborhoods with the most challenges are in some way unfairly “disproportionate” to a more accurate and fair notion that these investments are proportionate to need.”³⁸

As such, both hospitals and local health departments share responsibility with other stakeholders to give particular attention to populations and communities where health disparities are concentrated.

Community Member Engagement

As noted in the introduction to the report and in the findings, it is difficult at best to determine the manner and degree to which a particular hospital may “take into account” input from diverse community members in the CHNA process. While most hospitals reviewed in this study appear to be in compliance with the IRS requirements for community input, it is less clear whether the opportunities for input were meaningful. In what ways did the input provided by community members influence the scope and/or focus of the CHNA inquiry? In what ways did it inform the review and interpretation of findings? It is likely that there were examples of each type of outcome among many of the CHNA processes that were not addressed in the posted reports. There are certainly examples where this is the case among exemplary practices that have been documented in the field. It is also likely, however, that in many cases the opportunity for community members to provide input was limited and a function of fulfilling legal requirements, rather than to inform the process.

It was not surprising that few of the hospitals identified community member involvement in the priority-setting process, given the fact that community input in this process is given no attention by the IRS. It is also not surprising that the few hospitals (five) that did secure community involvement in the priority setting were in the Micropolitan (three of seven sites) and Rural Areas (two of ten sites), as the relative scarcity of resources and stakeholders contributes to familiarity and engagement on multiple levels.

It is also worth examining the degree to which hospital leadership may view the priority-setting process as an inherently internal process of determining how to allocate “their” charitable resources. There is certainly important expertise that hospital administrators and clinicians have to bring to bear in making informed decisions in this regard. The key questions are whether the breadth and depth of expertise

³⁸ Excerpt from testimony of David Fleming, M.D., Director and Health Officer, Public Health, Seattle and Kings County, Washington to the Robert Wood Johnson Commission to Build a Healthier America, June 2013.

among these individuals is sufficient and/or whether such decisions should be limited to internal leaders. On the first question, one could readily make the case that priority setting should include individuals with a broad scope of expertise, not only in regards to medical services, but also about the broader spectrum of factors that contribute to the health of communities and the external resources available to address them. On the second question, the tendency to lean towards internal decision-making may reflect a lack of awareness, given a highly competitive business environment, that tax-exempt hospitals serve as charitable trusts, and as such, their assets are public assets – not resources owned by the government, but by the public at large. Understanding of the importance of fostering an ethic of shared ownership for health in the broader community should encourage hospital leaders to involve external community members who possess the knowledge to optimally leverage the limited charitable resources of the hospital.

An inclination towards internal decision-making appeared to carry over into the planning and development of implementation strategies, as well, with only three of the twenty-seven Implementation Strategies referencing engagement of external stakeholders. Again, the few examples were limited to Micropolitan or rural hospitals, where there tends to be more of a history of engagement and shared problem solving. These findings highlight the imperative for more focused analysis at the national level to identify, document, and disseminate practices that reflect a commitment to inclusive engagement and shared ownership for health with diverse community stakeholders.

Priority Setting

Findings from the pilot study highlighted an array of opportunities for improvement, both in terms of the development of criteria and the larger process. The finding that forty of the forty-four hospitals identified criteria used in setting priorities indicates that there is attention to compliance, but the lack of specificity in criteria reported by eighteen of the forty (45%) suggests that there is a need for additional guidance. An indication from hospitals that a key priority-setting criterion was alignment with their charitable mission in no way provides a basis to select among alternative options, unless the determination is whether to invest in community benefit or activities that may be viewed as marketing to commercially insured populations.

The exclusive use of institution-relevant criteria by fourteen of the forty (35%) hospitals also suggests a need for additional guidance. Few would question the use of criteria such as “consideration of the scope of internal expertise,” “strategic direction,” and “available internal resources” as a valid component of a larger set of criteria. These institution-relevant criteria must be balanced, however, by more objective criteria such as the prevalence and/or acuity of a health problem and the cost of a health problem (in health care and in broader terms), which provide a critically important context for a selection among options for resource allocation.

It is important to recognize that the new priority-setting requirements must be viewed in the context of the pre-existence of an array of hospital community benefit services and activities that have been in place, in some cases, for many years. There are often strong internal advocates for the program who were responsible for launching the effort. While the program may not be able to point to measurable outcomes (often due to a limited scale or less-than-optimal design), the case may be made that in the absence of such an effort, the health problem would be much worse. A hospital may accumulate twenty, thirty, or in some cases as many as fifty or more of these types of program activities over the course of a few decades. Despite the introduction of the new assessment and priority-setting process that may lead a hospital and its partners in new directions, there may be a strong resistance to the

termination of these program activities. The net result is that otherwise objective processes may be influenced by a desire to preserve as much of the existing slate of program activities as feasible.

The desire to preserve existing activities may be reflected in part by the considerable variation observed in the degree of specificity in identified priorities, ranging from the broad identification of access to care or community health improvement to the identification of something as specific as financial assistance services. The broad framing of a priority provides the flexibility to list an array of activities under a priority. In some cases, the effectiveness of this approach reached its outer boundaries, as some of the listed activities appeared to have limited relevance to the stated content of the priority.

The effort to accommodate a volume of existing community benefit program activities may also be reflected in the number of priorities that was reported by hospitals. Seven of the twenty-seven hospitals with Implementation Strategies (26%) reported eight or more priorities. Another factor in play could be an aversion to providing a justification to the IRS for the deferral of efforts to address needs identified in the CHNA. Yet another reason could be an effort to accommodate advocacy efforts by community stakeholders during the period between the posting of the CHNA and completion of the Implementation Strategy.

Finally, the fact that one in six of the forty-four hospital CHNAs did not include a list of prioritized needs, a description of the process, and the criteria used in setting priorities suggests there is a need for education as to the intent of this requirement. For community-based organizations in the geographic region served by a hospital, having the opportunity to review identified priorities and associated developmental processes provides the means to engage and explore potential areas for collaboration prior to the finalization of the Implementation Strategy later in the hospital's fiscal year. The need for education and support in this area may be particularly important for smaller, rural hospitals that may not be part of information-sharing networks among larger hospitals with dedicated staff engaged in the management of community benefit programming.

Content and Geographic Focus of Implementation Strategies

Consistent with the finding that many of the priorities identified by hospitals were broadly framed, it is notable that the descriptions of program activities in most of the Implementation Strategies were also lacking in specificity. In many cases, the relatively undeveloped nature of program descriptions is understandable, given the time challenges associated with collaborative assessments that must be completed within the same tax year. To the degree that hospitals seek to leverage limited internal resources through the engagement of external stakeholders and the alignment of efforts, the process may not be completed within the time frame necessary for submittal of an Implementation Strategy. The good news, as stated previously, is that the broad framing provides a good starting point for subsequent engagement of community stakeholders on ways in which they may partner, focus, and build on efforts to date.

Some Implementation Strategies were limited to a bulleted list of activities, many of which are and should be a part of daily services, such as "actively screen uninsured patients, " and "ensure appropriate follow-up care for underserved patients". In a number of cases, the listing was limited to "will explore" and "to be identified and developed."

Using the What Works for Health categorical framework, it was not surprising, given the core business of hospitals that two-thirds of identified priorities could be placed in the *Clinical Care* category. The limited number of priorities that could be placed into the categories associated with the social determinants of

health (twelve priorities, or 6%, in the *Social and Economic Factors*, and zero priorities in the *Physical Environment* category) suggests that education is needed in the field to highlight the importance of hospital engagement in these content areas as part of a comprehensive approach to community health improvement that offers greater potential to achieve measurable and sustainable improvements in health status and quality of life.

It may also be a reflection of reluctance among hospitals to select priorities in content areas that may be aligned with the IRS ill-informed decision to relegate community building activities to Part II of the 990H form, where they cannot be documented in financial terms. The more recent addition of language in the IRS instructions indicating that “*some of these activities may also meet the definition of community benefit*” is an important partial step in the right direction. A more substantive step would be the elimination of Part II of the form and the full integration of the community building category into Part I of the form.

It was notable that among the one-quarter of the total priorities in the *Health Behaviors* category, 65% (eleven of seventeen) of the priorities among seventeen hospitals for which only CHNAs could be secured, and 54% (twenty-one of thirty-nine) of the priorities among the twenty-seven hospitals for which Implementation Strategies could be secured, could be placed in the *Diet and Exercise* category. There is growing recognition among hospitals that much more effort is needed to address the epidemic of obesity-related diseases among the general population. As engagement of hospitals in these areas increases, it will become clear that a comprehensive approach that combines efforts to change individual behaviors with strategies to address social and environmental obstacles to desired changes in communities. In the process, business and financial sector stakeholders have significant roles in addressing healthy food access, neighborhood safety, and related land use issues.

In the analysis of the geographic focus of hospital Implementation Strategies, it was not surprising that there was limited focus on health disparities, given somewhat confusing guidance from the IRS, a historical tendency to frame programs as “serving the community at large”, and a lack of internal population health expertise. Only one hospital, from a large MSA, indicated intent to focus their entire IS in communities with health disparities, and only six other of the twenty-seven identified geographic areas with health disparities as a focus for selected individual programs. The remaining twenty of twenty-seven, or 74% of the hospital Implementation Strategies did not identify geographic areas of focus for any individual programs. There is a clear need for increased use of GIS tools such as CHNA.org to bring more geographic targeting of programs where health disparities are concentrated. Similarly, there is a need for more deliberate work to align interventions and investments of competing hospitals and diverse community stakeholders to build the critical mass necessary to produce measurable outcomes.

The findings also indicated a clear need for assistance in the development of metrics and monitoring strategies for identified program activities described in the implementation strategies. Only one of the twenty-seven hospitals identified measures for all the program activities in their IS; another identified broad metrics for their overall IS; twenty-one hospitals identified metrics for selected program activities; and four hospitals provided no metrics. It was not surprising to find that rural hospitals were more likely to use process metrics, given a lack of internal analytic capacity to do more than document units of services provided to individuals. Similarly it was logical to see that service utilization metrics were a significant focus for large MSA hospitals, as they are more likely to be grappling with higher concentrations of un- and under-insured patients coming into emergency rooms for treatment of preventable acute episodes for chronic conditions such as diabetes, asthma, and cardiovascular disease.

It is notable that the IRS calls for “description of potential measures” in hospital CHNA reports, with the presumed intent to allow time for community- stakeholder input prior to final determination in the Implementation Strategy. Clearly, more dialogue is needed to increase understanding of what is expected by the IRS in this regard, both in terms of what is reported in the CHNA report and the degree to which metrics and monitoring strategies should be clearly described in the Implementation Strategy. In the consideration of options, it must be understood that most hospitals currently lack the internal staffing with requisite competencies to effectively evaluate many, if not most, of their community benefit program activities. An important near term strategy for hospitals is how to effectively engage external stakeholders with the expertise to provide assistance in these areas.

Alignment Between Hospitals and LHDs

While the primary focus of analysis for the pilot study was the CHNAs and Implementation Strategies of hospitals, considerable effort was made to secure and review local health department community health assessments and community health improvement plans. As the findings indicate, there was limited success in securing these reports from local health departments, including only ten community health assessments and nine community health improvement plans from twenty-three local health departments, and only five of the fifteen sites with completed community health assessments and community health improvement plans.

There is currently no centralized database for community health assessments and community health improvement plans at the federal level, though colleagues at the National Association of City and County Health Officials (NACCHO) recently indicated that an informal effort to compile community health assessments and community health improvement plans had yielded the compilation of more than 500 reports.³⁹ Where community health assessments and community health-improvement plans could be accessed, they largely demonstrated the ability to define community in a manner that included: explicit identification of geographic concentrations of health disparities; in-depth engagement of diverse community stakeholders (though it is unclear the degree to which it has done so in an ongoing manner); stronger processes and criteria in priority setting; and more explicit targeting, broad content scope, and use of population health metrics in the implementation plans that were available.

The level and form of engagement with local hospitals in assessment processes was unclear in most cases. Only three of the local health departments indicated some form of collaboration with hospitals in their CHA/CHIP process, but the specific form of collaboration was unclear. Similarly, there were a number of hospitals that referenced collaboration with their local health departments in the CHNA process, but there was no specific information on the form of engagement. Moreover, there was no corroboration of collaboration with hospitals in the local health department documentation of their CHA or CHIP. One possibility is that the hospital(s) involved engaged their local health department to assist in a specific element of the CHNA (e.g., providing secondary data, facilitating focus groups, conducting a survey), and the local health department proceeded with their CHA and CHIP processes on an independent basis.

Continuing obstacles to alignment between hospitals and local health departments in the community health improvement process include perceptions of roles and target populations, competition for resources, timing issues, and perhaps most importantly, a lack of understanding of the opportunities to leverage internal resources. Where dialogue has been established, there is growing recognition of the

³⁹ Personal communication with David Dyjack, Associate Executive Director, programs, NACCHO

overlap between roles and target populations, and the opportunities to leverage limited resources. Focused effort is still needed at multiple levels to address the misalignment in assessment and planning processes.

In the few months since the completion of the analysis for this study, additional assessments have been identified in a number of localities. For example, a new CHA was discovered through a more recent spot check that was released by the local health department in September. This and other post-analysis discoveries suggest the need for ongoing surveillance at the regional level to ensure that the latest information is uploaded from online resources. Perhaps more importantly, it highlights the need for proactive dialogue, not only between hospitals and local health departments, but also more broadly among other entities such as United Ways, Community Action Agencies, and others to determine how best to align assessments and planning processes as a more responsible approach to community health improvement.

B. Public Use of CHIDSS

The CHIDSS provides a structure for the review of publicly available documents from tax-exempt hospitals, local health departments, and other organizations. The combination of the online VPF tool at www.chna.org, the online CHIDSS templates, and the associated CHIDSS User's Guide provides the tools needed to objectively examine key geographic characteristics and identify and upload specific elements from publicly reported documents.

The review of structured data and information provides a basis for the formulation of core questions about the relative effectiveness and alignment of community health improvement processes. These questions can serve as a starting point for a thoughtful review of practices to date and a discussion of ways in which to better align and enhance existing efforts. The purpose is **not** for confrontation; rather, for a thoughtful, proactive approach to quality improvement and the responsible use of both public and private sector resources. Key questions include:

Does the community health assessment identify and provide insights into geographic sub-county regions with concentrations of health disparities?

For tax-exempt hospitals in particular, the imperative for a thoughtful review and response to this question includes:

- optimal fulfillment of charitable purpose (and in many cases a religious imperative) given limited resources;
- relative fulfillment of the legal expectation to relieve government burden through a focus of charitable resources where unmet needs are concentrated;
- degree of commitment to shared ownership among stakeholders in the region, including institutions in more affluent areas with limited exposure to communities with high concentrations of health disparities;
- a societal mission to eliminate health disparities, in terms of timely access to quality care and addressing social and environmental inequities;

- a pursuit of scientific excellence that encourages the focus and design of interventions that are most likely to produce measurable outcomes; and
- a business case that recognizes the imperative to partner with other stakeholders to take action that will ensure economic viability in a global budgeting framework.

The findings from this study clearly indicate that much more attention is needed to identify geographic concentrations of health disparities in local communities, most often using proxy metrics such as poverty and high school non-completion. The VPF tool available at www.chna.org provides a ready means for identification of these concentrations in any community across the country.

As noted previously, the language provided by the IRS to tax-exempt hospitals contributes to confusion, particularly among hospitals that are new to the community health assessment process. Examples of this confusion are reflected among numerous hospitals in this study, where marketing departments or administrative leaders are called upon to make a determination without consideration of where unmet needs may be geographically concentrated in a region:

“...staff determined the community served through a market share analysis that highlighted the zip codes from which a majority of community members came to receive care from the facility, as well as internal discussions to determine specific populations which needed to be included in focus groups (i.e. low-income, minority, etc.).”

“The community was identified through a facilitated meeting with senior staff as a geographic area determined to be the current primary hospital service area, which includes all or portions of the zip code service areas surrounding...”

Hospitals in localities that are not proximal to geographic concentrations of poverty should be encouraged by local stakeholders to look beyond their immediate service area and patient populations in setting the parameters of their CHNAs and in targeting their Implementation Strategies.

Are diverse community stakeholders engaged in a manner that acknowledges their shared ownership for improving health in our communities?

This question moves far beyond the minimalist requirements by the IRS and ACA for tax-exempt hospitals and views diverse community stakeholders as having explicit roles as partners in improving community health. Hospitals, local health departments, and other institutions in the private and public sector are well served to set aside proprietary inclinations and look instead towards how best to leverage limited resources through more strategic engagement of other institutions and the community at large. In this context, the charitable contributions of hospitals are only one component of a portfolio of investments, interventions, and actions that are needed to achieve both measurable and sustainable improvement.

This form of ongoing engagement is not an abstract concept, but a practical reality in a number of communities across the country. While it may be impractical and/or inappropriate for federal or state agencies to mandate such behavior, it is completely reasonable for stakeholders at the local and regional level to raise these issues and call for more deliberate and strategic approaches to community health improvement by key stakeholder institutions.

Few hospitals in the sample selected for this study referenced other hospitals in its service area or in proximal counties. The section in the 990 Schedule H where community assets can be listed is the logical starting point for this to take place. In general, however, the IRS has no way of determining the presence or density of hospitals in a particular area, and their relative responsibility to work together to address geographic concentrations of health disparities. It will largely be up to local and regional stakeholders to work together with hospitals and other institutions to determine how best to frame, configure, and work together to address identified unmet health needs.

Many hospitals are contracting out with consultants to conduct CHNAs; some are doing so on an individual basis, some in collaboration with hospitals and other stakeholders. This may be most feasible in the near term, particularly for smaller hospitals in rural areas with limited internal capacity, and as a way of bringing competitors together to assess and plan strategies to improve health in the community in more holistic terms.

At the same time, it is important to recognize that there is a difference between community consultation and community engagement. Allowing a consultant to survey and conduct focus groups in a community can be considered community consultation. Community engagement occurs when there is direct interaction between an institution (in this case the hospital(s) conducting the CHNA) and the community people or representatives it serves.

It is important for hospital staff and leadership to establish more direct and ongoing working relationships with diverse community stakeholders to determine how best to leverage limited internal resources. There will be an increasing demand in the coming years for individuals at the staff and leadership level in hospitals with competencies in areas such as epidemiology, community health education, and program evaluation.

Does the priority-setting process reflect a commitment to make the optimal use of limited resources through a thoughtful deliberation of options and implications?

The findings from this study suggest that there is considerable room for improvement in the design of priority-setting processes and the selection and use of criteria, as well as in the engagement of external stakeholders. As noted previously, priority setting has often been overlooked or poorly implemented by others prior to the more recent entry of hospitals into the CHI process. While complexity is certainly an option in the consideration of processes and criteria, it is by no means a necessity. Hospitals and other stakeholders need only consider the following:

- Do we have all key local stakeholders participating in the process?
- Is the process both inclusive and articulated in a manner that is understood by all?
- Are the criteria of sufficient specificity to support a selection among alternatives?
- Are there objective criteria that address external factors in the community context?

Few of these elements were adequately addressed by hospitals reviewed in this study, as might be anticipated at this early phase in their engagement in community health improvement processes. As such, there are many opportunities for improvement through the substantive engagement of local stakeholders.

Does the implementation strategy give focused attention to populations in geographic sub-county areas with high concentrations of health disparities?

Just as it is essential to identify geographic concentrations of health disparities at the regional level as part of the community health assessment process, it is of course equally important to develop an implementation strategy that gives focus to these areas. For some time, hospitals have been encouraged both to focus where needs are concentrated and to serve the “community at large.” The latter framing is an important *part* of a larger population health improvement strategy, but it does not in any way preclude a major focus in physical *places* where health disparities are concentrated.

The findings in this study clearly indicate that there is insufficient focus in these geographic sub-county areas. The lack of focus in these areas, not only by hospitals and local health departments, but also by a broad spectrum of business, financial institutions, and public sector agencies is both lamentable and untenable in the coming years. Targeted investment is needed in these areas as the *centerpiece* of larger population health strategy – not as a marginal afterthought.

Does the implementation strategy reflect an understanding of the need to address both the symptoms and causes of health problems in the community?

The findings in this study indicate that there is limited understanding of the linkages between poor health outcomes, medical care utilization, and social, economic, and environmental factors in the community context. This lack of understanding is driven by multiple factors, not least of which are the perverse incentives for treatment of illness in our system of fee-for-service financing. There is a need for dialogue with diverse community stakeholders that includes, but moves beyond, a focus on “personal responsibility” to address the immense array of obstacles to health behaviors in the community context. This dialogue will not occur if it remains within the purview of internal medical care providers and hospital administrators. In order to stimulate more inclusive dialogue, local stakeholders are well advised to review proposed Implementation Strategies and community health improvement plans and challenge these key institutions to work together and develop more focused and comprehensive approaches to community health improvement that offer greater potential to achieve measurable outcomes.

C. Recommendations

The following recommendations suggest actions by private and public sector institutions across sectors, as well as community and consumer groups, and policymakers at the local, state, and federal level.

R1: Take steps to harmonize disparate, but similar community health improvement practices among community stakeholders.

Given the array of stakeholder organizations engaged in parallel and often duplicative community health improvement practices as outlined in Table 2 (pages 30-31), there is a clear imperative to better align current efforts. For both public and private sector institutions seeking to build public trust, taking definitive steps communicates a commitment to be better stewards of limited resources and to hold themselves accountable for producing measurable outcomes on the ground. We recommend two immediate actions by relevant institutions:

R1a: Encourage local health departments, Community Action Agencies, United Ways, community health centers, and other institutions to post assessment findings on their web sites in a timely manner and easily accessible format.

With few exceptions, the hospitals at the review sites selected for this study demonstrated an understanding and commitment to transparency through clear posting of their CHNAs on their websites. While the IRS has not provided final direction regarding the posting of hospital Implementation Strategies, it was also a positive reflection of hospital commitment that most also posted these documents on their websites.

Local health departments, and to a lesser degree other key institutions, have a longer and more established history than hospitals in conducting community health assessments and addressing health-related needs in local communities. At the same time, a lack of consistency in making assessments and implementation plans publicly available impedes efforts to align, focus, and improve practices over time. Leadership is needed by individual organizations, related trade associations, and/or oversight agencies to make all community health improvement processes and reports available to the general public in a timely manner.

R1b: Encourage institutional stakeholders to develop proactive strategies to align schedules for assessment and planning processes

Variations in cycles and time frames for periodic community health assessments and different fiscal cycles for hospitals, local health departments, and other stakeholder institutions all conspire to complicate efforts to align processes. Many of these obstacles can be overcome in the coming years through *voluntary* adjustments by individual institutions, as well as through exceptions authorized by oversight and accreditation entities.

It is important to note that there should be **no** point in the community health improvement process when adjustments in timing, focus, content, and strategy are not possible. While collaborative community health improvement is best when diverse stakeholders are engaged at the beginning of the process, a quality improvement approach involves making ongoing adjustments that integrate emerging lessons and increase the potential for success. Where assessments have been completed and implementation strategies are already in play, the introduction of new stakeholder resources and expertise should be viewed as an opportunity to strengthen efforts to date. It is time to set aside the unrealistic expectation that **all** stakeholders are fully engaged at the outset, and focus on how best to welcome and integrate new players along the way.

R2: Increase focus of community health improvement resource allocations in communities where health disparities are concentrated.

More definitive focus of stakeholder institutional resources is needed in geographic sub-county areas where health disparities are concentrated. While local public health agencies, hospitals, and others retain the responsibility to serve broader populations, a significant proportion of resources should be directed towards aligned actions in geographic sub-county areas where

there are both the greatest needs and most significant potential to produce measurable outcomes.

Local and regional stakeholders should expect to see clear evidence that hospitals, local health departments, and other key stakeholders are focusing resources primarily in these communities. To the degree that this is not clear (based upon the use of the Vulnerable Populations Footprint tool and targeted review of publicly available reports through use of the CHIDSS tools), it represents an excellent starting point for dialogue between these institutions and a broad spectrum of community stakeholders.

R3: Tax-exempt hospitals use findings/tools to implement a quality improvement approach consistent with a commitment to transformation.

There is an opportunity for hospitals to play a major role in the advancement of the community health improvement field through the implementation of the Guiding Principles for Community Health Improvement outlined in Table 1 of this report (pg. 15). This approach will help hospitals build the population health capacity needed to thrive economically as financing incentives shift from filling beds and conducting procedures to keeping people healthy and out of hospitals.

Core concerns will be to a) build an ethic of *shared ownership* that calls for ongoing engagement of diverse stakeholders and sectors, b) *align* investments and interventions into a *balanced portfolio* that optimally *leverages* the limited resources of hospitals and all stakeholders, and c) focus on the design and implementation of comprehensive approaches in geographic areas where health disparities are concentrated. A good starting point for hospitals would be to evaluate current CHNAs and Implementation Strategies related to the areas of focus for analysis in this pilot study.

R4: Identify and support investment in organizations with the capacity to serve as conveners and facilitators of collaborative community health improvement.

Few, if any of the stakeholder institutions engaged in community health improvement processes possess the resources and breadth of expertise to serve as the convener, facilitator, manager, and monitoring entity for a collaborative community health improvement process. In some communities, hospitals, local health departments, and United Ways have served as conveners for assessment processes, but less often as ongoing managers of a collaborative community health improvement process. In many respects, it may be optimal to identify a private sector entity that is not perceived as having a direct interest or perceived “agenda” to serve as what FSG refers to as a “backbone organization.” In some cases, it could be a local or regional foundation, or a nonprofit organization with experience and expertise in the management and/or evaluation of community health improvement processes to provide support.

Perhaps the most important consideration is the need for direct investment in the establishment of this infrastructure by diverse stakeholders. All too often, collaborative assessments have failed to produce substantive partnering in the design, implementation, and evaluation of comprehensive implementation strategies. If this proposition is to become a reality, it is essential to invest the resources necessary to foster, establish, reinforce, and sustain an ethic of shared ownership – across stakeholders, and across sectors.

R5: Clarify the roles of diverse stakeholders in setting priorities, as well as in the planning, implementation, evaluation, and oversight of community health improvement practices.

There is a need for increased transparency in determining the respective roles and contributions of different stakeholders in the community health improvement process. For example, in the pilot study there were a number of hospitals that indicated that they had collaborated with the local health department in the assessment process, but the specific contributions of the hospital(s), local health departments, or other stakeholders are not addressed. It is also unclear whether there was any effort to sustain that engagement beyond the initial assessment process. There was reference to community partners in some of the specific programmatic descriptions in selected Implementation Strategies, but in most cases the nature of the partnership was unclear.

The imperative for more clear articulation of partner relationships and contributions is less an issue of public accountability than it is a validation of partner contributions and a statement of good stewardship – making optimal use of limited resources through the mobilization of other community resources and expertise. It also provides a practical means of disseminating innovative approaches to comprehensive community health improvement.

R6: Provide peer-led education in areas of focus for this pilot study.

There is a clear need for engagement of the broader field of hospitals and other stakeholders to advance practices in the specific areas of focus for this study, including a) how community is defined to ensure inclusion of geographic sub-county regions with concentrated health disparities, b) strategies and the benefits of the engagement of diverse community stakeholders at all phases of the community health improvement process, c) a more thoughtful approach to the priority setting process that optimally leverages the limited resources of hospitals and fosters an ethic of shared ownership for health, d) a critical approach to the development of an implementation strategy that focuses on fewer, more comprehensive strategies that are more likely to produce measurable outcomes, and e) a practical approach to the development of metrics and monitoring strategies that emphasizes quality over quantity.

In the next phase of CHIDSS development, outreach will be conducted to engage the hospitals that were the focus of the pilot study, as well as local health departments, United Ways, Community Action Agencies, community health centers, and other key stakeholder groups. A cohort of eight to ten stakeholder groups will be identified from across the country to pilot the implementation of the CHIDSS tools. Selected sites will participate in educational webinars, receive technical assistance to use tools and templates, provide input on potential enhancements to be implemented in the tools, and receive guidance on strategies for engagement of institutional and community stakeholders.

Outreach will also be conducted with a broad spectrum of stakeholder groups. Educational webinars will be offered to build knowledge and understanding of the opportunities for engagement and alignment of community health improvement efforts in local communities. Input provided by key informants at the beginning of this project and national experts at the

two-day convening provided a wealth of information to inform both the outreach processes and practical challenges in the implementation of data tools.

R7: Provide funding to state and local health departments, schools of public health, and other entities to provide TA to hospitals and other key stakeholders for the development of metrics and monitoring strategies.

In the years to come, there will be a need for hospitals to be fully integrated into a place-based, population health network that combines high quality clinical services with proactive primary, secondary, and tertiary prevention activities. Other stakeholder institutions must also build the understanding and capacity to strategically invest resources in a manner that is more likely to produce results. As such, there is a pressing need for targeted technical assistance from external sources that informs program design, increases scientific rigor, increases accountability, and supports collaborative approaches with diverse community stakeholders.

Targeted funding to state and local health departments, regionally focused research institutions, and public health training programs in the region would help these entities play an important role in accelerating the transformation process. For local health departments in particular, it would be an important way to build their capacity to play an ongoing role as a partner with local hospitals in the monitoring and continuous quality improvement of community health improvement programs.

D. Moving Forward

The imperative for transformation in the health sector is well understood by key stakeholder organizations in the field. In the near term, hospital leaders are consumed with the implementation of EHRs; establishing clinical protocols to improve outcomes; reducing errors and re-admissions; engaging in mergers and acquisitions that strengthen regional market position; and streamlining functions to increase efficiency in the face new constraints on reimbursement.

In the face of these many new challenges, it is difficult to secure the attention that is needed to build internal population health capacity. While the movement towards global budgeting is generally accepted as a necessary reality, the incremental steps in this direction such as the ACO shared savings models do not provide sufficient near-term impetus to substantially shift the focus of resource investment and staffing. In this context, we must rely on the voluntary leadership of colleagues in the hospital sector to take definitive proactive steps; in the words of hockey legend Wayne Gretzky, “to skate where the puck is going to be.” We must also rely (and encourage) leaders of other stakeholders in diverse sectors to come together with hospitals and local health departments to align their efforts, demonstrating a commitment to shared ownership for health in our communities.

The American Hospital Association (AHA) has demonstrated a commitment to leadership with the establishment of an internal Population Health Task Force. The task force has developed a rolling 2014-16 strategy that includes the formation of a member advisory group to provide ongoing input and guidance. Key actions include the documentation and dissemination of exemplary practices in the field and the identification of population health quality metrics for use by hospitals and health systems. In addition to the development of a web page and in-person and online educational sessions through a broad spectrum of member and partner organizations, the AHA plans to work with data at the local and

national level to support development of population health strategies at the local, regional, and statewide level. Leadership by the AHA is critically important to facilitate the timely re-design of care delivery systems, the development of new financing structures, and of equal importance, the development of substantive working relationships with a broad spectrum of stakeholders with shared ownership for health of local communities.

Particular attention is needed to identify and address disparities in the clinical and community context. A recent survey by the Institute for Diversity in Health Management at the American Hospital Association determined that only 18% were tracking data to identify disparities in their facility.⁴⁰ The same study indicated that 51% were collecting data on race, ethnicity, and language preference in community/patient population assessments. Findings from this pilot study suggest that much of this data is not geocoded to provide the community context. As Eugene Woods, the Chairman of AHA's Equity of Care Committee notes, "We simply must do better. Our teams should be representative of our communities, and we must understand the root causes behind why fellow citizens receive inferior care."⁴¹

The imperative for a geographic focus on reducing disparities is clear, particularly in the context of the movement in health care financing towards global budgeting. In a study commissioned by the Joint Center for Political and Economic Studies, researchers from Johns Hopkins determined that health disparities contributed to an additional \$229.4 billion in direct medical care expenditures between 2003 and 2006.⁴² These expenditures represent not only savings that that would inject additional economic vitality into other sectors, but more importantly, could contribute to increased functioning, productivity, and quality of life among our fellow citizens. In this context, reducing health disparities is a business proposition for our society that pays dividends not only in the health sector, but also across the economy.

On December 30, of 2013, the Internal Revenue Service issued Notice 2014-3.⁴³ The Notice sets an important precedent by outlining disclosure and corrective action procedures that nonprofit hospitals can take to avoid tax penalties for non-egregious or willful violations in their public reporting process. The notice and proposed rule is aligned with a safe harbor concept that is commonly used in regulated industry laws, and the proposition is that it serves to incentivize compliance. Regulated entities, in this case tax-exempt hospitals, find it to be in their best interests to proactively review and correct errors. The IRS has taken the right approach at this early stage of the process to focus on encouraging the advancement of practices, rather than a punitive "gotcha" approach to oversight. The notice offers the potential to move mind-sets beyond simple compliance to a more salutatory focus on quality improvement.

That having been said, and given the fact that it is unlikely that the attorneys and accountants in the IRS have either the competencies or the capacity to provide oversight for the broader set of reporting elements review in this study, it becomes increasingly important to establish more of a public

⁴⁰ American Hospital Association and Institute for Diversity in Health Management. *Diversity and Disparities: A Benchmark Study of U.S. Hospitals*. Chicago: June 2012. Accessed at www.hpoe.org

⁴¹ Woods, Eugene, *Ending health inequities starts at the top*, Modern Healthcare, January 20, 2014.

⁴² LaVeist, Thomas, Gaskin, Darell, and Richard, Patrick, *The Economic Burden of Health Inequalities in the United States*, Joint Center for Political and Economic Studies, Washington, DC, September 2009. Accessed at www.jointcenter.org/hpi/sites/all/files/Burden_Of_Health_FINAL_0.pdf

⁴³ <http://www.irs.gov/pub/irs-drop/n-14-03.pdf>

framework of oversight and accountability. As such, it may be more appropriate and effective for local/regional stakeholders to review and encourage the improvement of practices on a voluntary basis.

As it relates to the “safe harbor” approach outlined in the most recent IRS notice, if the imperative is to operationalize transparency at the federal level, where do community stakeholders fit into the equation? Do community stakeholders have the “standing” to notify the IRS if there is a compliance issue? Might there be a consideration of a process whereby an oversight can be brought to the attention of a hospital, and the hospital has the opportunity to correct it? If the hospital doesn’t respond to the community stakeholder, does s/he have the standing to bring it to the attention to IRS/Treasury? How are the corrections validated?

What is the scope of issues that are valid for consideration? The notice focuses on financial assistance and the CHNA in broad terms. On the latter, the notice cites as example 1 that “A hospital facility that has failed to adopt a CHNA report that contains all of the elements required by section 1.501(r)-3 may correct the failure by preparing and adopting a CHNA report containing all the required elements...” It’s not clear the degree to which these elements include required reporting elements in the 990H instructions, including, but not limited to:

- a. whether the definition of community presented by the hospital excludes geographic areas with concentrated health disparities that would reasonably be viewed as part of their charitable responsibility;
- b. whether community members experiencing disparities or other classes of persons identified in the instructions are not given the opportunity to offer input that could be considered by the hospital;
- c. whether the hospital provided the criteria and process used to set priorities (and whether those criteria are of sufficient specificity to inform a selection among alternative options);
- d. whether the hospital provided metrics and a monitoring strategy to be used in evaluating the effectiveness of their implementation strategy; and
- e. whether the content and geographic focus of the implementation strategy is aligned with areas where unmet health needs are concentrated in the community.

These are the issues examined in this study and are the framework for the online tools that will be piloted in the next phase of work.

Appendices

Appendix A: Summary of Key Informant Interviews

Advancing Practices in Community Health Improvement: Emerging Tools for Collaborative Planning Key Informant Interviews – Emerging Themes

Health Inequities Mapping Tool

Utility of health disparities as a starting point for assessments, planning, and implementation

- Start with “Big Picture” - assure attention to broad framework of health
- Starting point dependent on current context & priorities of community
- Disparities should be a primary focus that informs larger processes & discussions
- Mapping must be contextualized with other data/information
- Important to explore links to quality metrics in engagement of hospitals

Relativeness effectiveness of tool

- Mapping is a compelling visual tool
- Effective when can drill down past county level to specific locales with quality/up-to-date information
- Where health care and population health intersect, there is a need for potential monitoring at multiple levels (e.g., neighborhood, city, county, MSA).
- Optimize by integrating with a suite of other existing tools
- Effective to extent its user-friendly, well referenced, documented, efficiently disseminated

Other potential uses of tool

- Utility as epidemiological resource (i.e. communicable disease data, tracking, etc.)
- Identification of areas for expansion/contraction, areas to avoid, potential partners, investment
- Inform decision-making to influence upstream determinants (housing, transportation, built environment)
- ID problems isn't enough, need to provide entry points for mobilization of assets

Other potential metrics, indicators, or features

- Frame beyond hospitals – include other point locations (schools, churches, etc.)
- Provide means to contextualize data (i.e. create a risk index, link to ACA-related indicators)
- Map upstream determinants/downstream outcomes (truck routes, air quality, housing, food access, etc.)
- Flexibility for users - capacity for public upload of data, customize data

Other tools or related resources for potential users

- Health Equities Index, Diversitydata.org, gapminder.org, UDSmapper.org, healthlandscape.org, graham-center.org
- DMV data for obesity v. zip code

Emergent issues in health equities field research

- Non-traditional collaboration with other agencies/sectors for data (DMV, planning, eco development)
- Small populations' considerations – carving out small or hidden populations
- Identification of undercounted populations and their service needs (i.e. non-insured under ACA)

Potential practical/political concerns to take into consideration

- Access to appropriate, clean, uniform, and up-to-date datasets
- Stigmatization of populations/communities & community distrust
- How to get input and updating from community stakeholders
- Functionality of website (user training & support, disclaimers, etc.)
- Be clear about what can be done now; what in terms of sustainable funding is needed to take to next level
- What are plans to update data; think about moving beyond descriptive tool to support evaluation
- Consider development or link to existing consortium who will help advance the work
- Polarized political environment
- People in communities with disparities tired of talking about their communities in negative terms
- Is a challenge to build a common language that is compelling to stakeholders across sectors

Advancing Practices in Community Health Improvement: Emerging Tools for Collaborative Planning Key Informant Interviews – Emerging Themes

Community Health Improvement Data Sharing System (CHIDSS)

Potential uses and benefits of CHIDSS

- Enhancement of existing data sources
- Create synergy/connectivity of activities within geographic areas
- Potential value as asset to organizations without sufficient capacity to collect/assess data
- Potential value as a resource within academia
- How to push out to community groups, and give traction to what is beginning to move
- Help local non-profits justify certain projects (demonstrate a need) and seek funding for projects

Other sources of data to consider for inclusion

- Non-public health/health care-related indicators to characterize community environment
- NFP Hospital data (readmissions, charity care, utilization)
- Incidence of disease, chronic conditions, etc.
- Link to other assessment information from food, transportation, economic development agencies
- County Health Rankings – but county might not be best way to look at these locales
- Adverse childhood experience (ASIS) data tracking these scores across communities (now in 21 states)
- Health workforce data
- WIC data could be useful; Income eligibility is higher, so you're not just getting the most poor

Potential challenges in interpretation of data

- Differences in definitions, agendas, etc. – everybody wants to do what they're good at
- Varying level of analysis
- Consistency of interpreting data
- Front-end structure to allow for use/comparison over time
- Capacity to test purpose and assumptions of data sharing model
- Misuse/misreading by end-users

Where should be the home of CHIDSS

- Neutral agency that can provide an open-source product
- Large foundation would be ideal
- Should not be housed in academic or government institutions

How could CHIDSS support implementation of ACA

- Inform priorities
- Increases transparency (significant to ACA)
- Could link interventions to piece of ACA it is intended to address
- Resource for community members to engage policymakers about action

Potential practical/political concerns to take into consideration

- "Ensuring" focused stakeholder investments in geographic areas is political landmine
- What is the value add to what is already available?
- Who are the champions advocates for this product?
- Accessibility/usefulness/ease of use to end-user
- Maintenance/sustainability of proposed system; who provides oversight?
- Backlash & territoriality/competition
- Oversaturation of available data & resources
- Structure (centralized/decentralized; open/closed sources; data presentation)
- What form would the data need to be in in order to be relevant to residents in particular neighborhoods

Appendix B: Field Research and Practice Convening Participant List

Advancing Practices in Community Health Improvement: Emerging Tools for Collaborative Planning

**A Project of the National Network of Public Health Institutes and the
Public Health Institute, with Funding from the
Centers for Disease Control and Prevention**

Field Research and Practice Working Meeting

Emory Conference Center

May 28 – 29, 2013

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Appendix C: Field Research and Practice Summary of Proceedings

Advancing Practices in Community Health Improvement: Emerging Tools for Collaborative Planning

**A Project of the National Network of Public Health Institutes and the
Public Health Institute, with Funding from the Centers for Disease Control and Prevention**

Field Research and Practice Working Meeting

Emory Conference Center

May 28 – 29, 2013

Summary of Proceedings

This summary provides an overview of a one-and-a-half-day meeting in Atlanta on May 28 and 29, 2013 that convened approximately sixty experts from across the country engaged in research and practice on health equity, health services, and community health improvement. Participants included public and private sector researchers, public health practitioners, hospital and health system community benefit leaders, community and consumer advocates, and representatives of government agencies, trade associations, and health foundations. The purpose of the convening was to provide early input to inform the development of two related products; 1) the enhancement of an existing geographic information system (GIS) tool that assists in the establishment of geographic parameters that include sub-areas with concentrations of health disparities, and 2) the development of a community health improvement data sharing system (CHIDSS) to support the advancement of practices and broader surveillance functions.

A key area of interest in the process is to support the alignment of resources and expertise at the local and regional level among hospitals, public health, community health centers, community-based organizations, and business interests. Greater alignment of resources and expertise offers increased potential both to make optimal use of available resources and to produce measurable improvements in health status and economic vitality.

In preparation for the meeting, a series of key informant interviews were conducted with many of the participants and other key stakeholders who could not attend to solicit advance input on a draft GIS tool and data sharing template. The purpose was to inform the design of the meeting and provide a starting point for discussion at the convening. A structured summary of the input from the key informant interviews was provided to participants prior to the meeting and was included in their meeting packets.

The central purpose of the meeting and the larger project is to support the advancement of practices in community health improvement, with attention to opportunities created by the passage of the Patient Protection and Affordable Care Act (PPACA). PPACA includes a new requirement for tax-exempt hospitals to conduct community health needs assessments to inform the development of an implementation strategy that helps to fulfill their charitable obligations. This new requirement is aligned with accreditation standards that encourage local public health agencies to conduct community health assessments and develop health improvement plans, as well as with a variety of other local stakeholder organizations that conduct related assessments.⁴⁴

The development of a GIS tool and a data sharing system supports the advancement of practices by providing access to relevant information in a user-friendly format for a broad spectrum of stakeholders. Examples of potential beneficiaries include a) organizations seeking to learn from and/or replicate innovative practices, b) community-based organizations seeking to better understand and engage key institutional stakeholders in their

⁴⁴ Examples include, but are not limited to United Ways, section 330 community health centers, Community Action Agencies, and financial institutions in fulfillment of their Community Reinvestment Act obligations.

localities, c) research entities seeking to advance knowledge in the field, and d) public sector agencies seeking to fulfill their oversight responsibilities.

The meeting was divided into a first half-day of presentations to provide an overview of relevant GIS tools and preliminary work on the development of a draft data sharing system template. The second day was primarily comprised of a series of small-group discussions in the two areas to address a focused set of questions, as well as large-group report outs and further discussion of key issues that were raised in the small groups. Meeting presentations are available through these links:

May 28: https://app.sugarsync.com/wf/D6344583_71110957_66513

May 29: https://app.sugarsync.com/wf/D6344583_71110957_66636.

The following structured summary focuses primarily on input provided by participants in response to a set of prepared questions addressed in small-group sessions and large-group report outs. They focus in two primary areas: input for the enhancement of a draft GIS health equity mapping tool and input to inform the development of a data sharing system.

Health Equity and Mapping

The starting point for discussion of GIS tools was www.chna.org, a full public-access online GIS platform developed by the Center for Applied Research and Environmental Systems (CARES), in cooperation with Community Initiatives and Transtria. Users can access CHNA.org directly or through www.CommunityCommons.org. Funding support for the development was provided by the Centers for Disease Control and Prevention, Kaiser Permanente, and indirect funding from a variety of philanthropic institutions.

Of particular focus for discussion at the meeting was a tool on the platform entitled the **Vulnerable Populations Footprint** (VPF), the primary purpose of which is to support the establishment of geographic parameters for community health assessments. In particular, the VPF assists in the identification of geographic sub-regions where there are concentrations of health inequities, as identified through the use of two indicators that serve as proxy measures for poor health; percentage of the population under the federal poverty level (FPL) and the high school non-completion rate. Among the features on the VPF are location indicators for hospitals and county jurisdictional outlines.

The day one session opened with a series of three presentations of data platforms, starting with a presentation from CARES leadership on the CHNA.org site development, related features on the Community Commons site, and the VPF tool. This was followed by a presentation of UDS Mapper (www.udsmapper.org), a Health Resources and Services Administration (HRSA)-funded GIS tool that supports evaluation of the geographic reach, penetration, and growth of the Section 330-funded Health Center Program and its relationship to other federally-linked health resources. UDS Mapper was developed by the Robert Graham Center, in collaboration with John Snow, Inc., and is driven primarily from data within the HRSA Uniform Data System (hence the UDS term) that was previously not publicly accessible at the local level. A third presentation provided an overview of Policy Map (www.policymap.com), a GIS platform for financial institutions and other entities seeking information to support planning and decision-making. Policy Map is a project of The Reinvestment Fund, a national Community Development Financial Institution (CDFI), and provides a combination of data on real estate values, neighborhood conditions, education, and demographic data.

The three presentations were intended to provide a demonstration of the utility of GIS platforms in informing community health assessments and associated planning processes. They also provided insights into ways in which the overlapping content and different approaches may inform the further development of the Vulnerable Populations Footprint. The following is a structured summary of input associated with the enhancement of the VPF.

1. **Given an imperative to keep the VPF relatively simple and accessible to a broad spectrum of stakeholders and it's intended purpose, what *additional features* should be considered for integration, and why?**

Input from participants included the following:

- community health centers
- additional geopolitical boundaries (beyond counties)
- more-detailed representation of hospitals (e.g., sizing, CAHs)

2. **What might be incremental additions to the HEMT that accomplish the following?**

a. **ID and locate *stakeholders from other sectors* (e.g., K-12, health-professions education institutions, banks) that can make substantive contributions to comprehensive CHI.**

Develop incremental map (after setting initial parameters with VPF) that highlights other potential stakeholder partners in other sectors.

b. **ID *different scale & types of actions* taken at the neighborhood, city, county, and regional level.**

Acquire geographic information about what services are being provided where and ensure geocoding when collecting data (at least by zip code).

Use maps to create a mobile market to serve areas where there are food deserts. Help food-desert issue and work with producers and businesses (Chattanooga).

Align data and data possibilities within public areas. The ability to upload local and regional data is important because there isn't a lot of that data at the national level.

In the determination of mapping boundaries, need to:

- allow diverse users to define "community" in different ways;
- consider potential users: community residents, health care providers, public agencies; and
- provide flexibility and options with regard to mapping boundaries:
 - census tract
 - legislative district
 - "community-defined" boundaries

c. ***Metrics that support convergence approaches* to major SDOH-related issues such as obesity and diabetes, youth criminal and gang behavior, and a lack of career opportunity.**

In specific communities, look at what issues are driving outcomes and how the measures and outcomes correlate. Figure out the process between a measure liquor stores and outcomes (e.g., low birth weight), so that we can determine the *process*.

One participant suggested the use of a *hierarchy based on the action/ability of a proposed indicator* or its direct connection to health.

Look at modeling tools (PRISM going more broadly; modeling; intended for policy and planning; modeling impacts of investment in different areas; housing, etc.)

Include an incremental *map of assets* to highlight what is already in play and potential entry points for action/investment.

Ensure a *long-term outcome frame* to account for concentrated poverty interventions.

Participants discussed various forms of *social capital* as an important area of focus in the identification of metrics. Though consistent with the field, there are a rich array of potential metrics to consider, ranging from the number of social networks in which individuals may be involved to the scope, strength, and relationship of those networks to other networks. One participant referenced the *Civic Index*, developed by the National Civic League, which includes a set of ten skills and processes needed by communities to address their unique concerns. Others cited specific metrics such as voting rates. Participants identified Robert Putnam’s work and the Social Capital Benchmark Survey by the Roper Center at the University of Connecticut. One participant cited the 2002 HHS/CDC publication, “Shaping a Health Statistics Vision for the 21st Century” as an excellent resource that is still quite relevant.

Many participants identified *economic-related metrics*, including, but not limited to:

- housing insecurity (paying more than 30% for mortgage, utilities, and insurance);
- retail banking; degree of unbanked or under-banked in an area; percent of households with or without a bank account;
- CRA eligibility, new-building permits, SNAP;
- economic segregation (e.g., Gini coefficient);
- employment with benefits;
- unemployment rate and labor-force participation (BOL statistics instead of unemployment); and
- concentration of poverty – One participant noted that we may want to provide guidelines for adjusting the poverty-metric slider upward or downward in different states, regions.

Potential *community-condition metrics* identified by participants included:

- crime, homicide rate;
- housing access (source: Center for Neighborhood Technology; NSP13 for foreclosure density);
- food access and security (food deserts); modified retail food environment index (MRFEI), proxy for food security;
- access to transportation (source: Center for Neighborhood Technology);
- air quality, brownfield sites, environmental quality;
- access to smoke-free environments (California and smoke-free housing);
- quality of anchor institutions;
- vacancy rates – proxy for blight;
- existence and distribution of youth centers;
- juvenile/delinquency rates;
- job Corps training slots; and
- rate of abuse.

Possible *health-related metrics* suggested by participants included:

- life expectancy
- low birth weight
- American Human Development Index
- disability status
- veterans, functional limitations (health status of these populations may likely be worse)
- insured and uninsured
- age (broken down by life stages to visualize pockets of differing needs in a community)

A number of metrics related to *race/ ethnicity* were identified, including:

- API population, non-aggregate;
- segregated communities;
- segregation index;

- primary language is not English; and
- foreign-born.

In the examination of *educational metrics*, participants identified a number of possible measures and issues of concern, including:

- free and reduced-price lunch;
- enrollment in pre-K programs, Head Start;
- high school graduation-rate data is not collected consistently, and may not account for older students. It also doesn't capture variations in educational standards (e.g., California has eliminated algebra as a graduation requirement). It was suggested to consider 3rd-4th grade graduation rate as an alternative indicator of critical childhood development. It is a good indicator of core competencies related to reading, writing, and is collected consistently nationwide; and
- Rather than modeling high school graduation rates as is, project outcomes based on advancing social determinants (key thresholds met, how would it affect outcomes).

3. What kinds of community stakeholders would you identify as *potential users of the tool(s)*, and what kinds of outreach, support, and design elements are needed to facilitate their engagement?

Need to *distinguish between users* (who could be the planners and policy makers) *and audiences* (what are the products that can reach the community audience and be accessible and actionable).

The potential to monitor trends is very powerful. Present information to users on how dollars are being spent so that the community can begin to see a greater investment on the part of hospitals, outside the walls of those hospitals.

A wide array of *potential users* was identified by participants, including:

- community residents (include in the design and implementation planning of the tool);
- foundations; public and private sector;
- education resources, universities and schools of public health, social work, public health certification, offices of student engagement;
- economic-development associations (for grant applications);
- community-development corporations;
- state and local health departments working with their national organizations to orient to the tools (accreditation coordinator);
- Indian reservations comprise many counties and geographic areas. Maps should delineate boundaries of reservations. Draw-in data from Indian Health Service and Bureau of Indian Affairs to fund many of the data points that they already have;
- faith community;
- regional metropolitan areas and city councils;
- hospitals/health centers (American Hospital Association toolkit as a potential model), health facilities, FQHCs, for-profit health care;
- elected officials and their staff, local government;
- businesses, retail, grocery stores, and chambers of commerce;
- financial institutions, banking regulators;
- neighborhood associations, PTAs;
- transportation, transit access, urban planning (housing, parks);
- organized labor;
- advocacy groups and community action agencies, YMCA; and
- sustainable-action groups, green movement, climate change and environmental groups.

Outreach and support considerations identified by participants included:

- It is important to distinguish between “users” and “audiences.”

- Be careful about labeling communities as vulnerable (VPF to be changed).
- Ensure data-upload capacity (include caveats in the report).
- Provide technical assistance.
- Develop summary guidance on how to use the tool (differences for different users/audiences, e.g., guiding questions for using data).
- Create videos, webinars for community members.
- Support an agenda to institutionalize community partnerships.
- Institutionalize community partnerships.
- Mix visually within a map along with tables. Have content areas geared around demographics. Have pre-canned reports that speak to that topic, user can choose additional indicators.
- Use Google Analytics.
- Use NACCHO/ASTHO profiles for data collection because they have rich information.
- Ensure tool is simple and transparent. Translate data and provide easy tool for end users go deep enough.
- Create data sets that would be relevant and pertinent to youth and families. Utilize social media to reach broader spectrum of younger stakeholders.

Specific *developmental concerns* and *potential contributions* identified by participants included:

- See how much work we need to do in relation to issues of privacy and mobility.
- Determine how to use this tool to change the political culture and drive conversation to break through political gridlock.
- Survey communities regularly and upload data to PolicyMap.
- Allow stakeholders to see data and where certain kinds of responses are clustered (neighborhood level).
- Need to have the capacity to continuously respond to user needs and revamp as necessary.
- Help communities write successful grants, compete against larger organizations in order to level the playing field for all organizations looking for FQHC dollars.
- Roll up the data into a simple narrative. There is a danger in oversimplification of the data. Ultimately it's not the data, it's the stories that we want to tell with that data.

4. Given the practical issues and political concerns, what are specific suggestions you have in the design process that *support ACA implementation*?

Conduct a health-provider shortages simulation, tipping points for improved care.

Document the distribution of assistors and navigators within communities (result of ACA).

Hospitals, building jobs in their vendor relationships to increase employment (Evergreen model in Cleveland as an example)

Leverage opportunities on the "how" to take action: What does improving high school education predict about outcomes across all sectors, not just health?

Include ACA-related eligibility, enrollment, and form of coverage in mapping.

Develop system to track community health-center development and those with data and other forms of coordination with hospitals in the proximity.

Community Health Improvement and Data Sharing Systems

1. What are the strategies for consideration to resolve the issue of scale/unit of analysis (census tract, city, county) and comparability?

Some participants expressed concern and hope about how this work will better protect low income-communities, noting that many do not have either the political power or legal authority to take action that is needed now—particularly in food systems. We need to overlay the local authority over that state authority.

One participant referenced the CHA/CHIP-linked processes and different units of analysis being applied, noting that some are being coordinated at the state level and are working with hospital associations. As such, there are opportunities for economies of scale, and in some cases, cross-state coordination. At the same time, there is a need to focus attention on smaller units of analysis.

Other relevant input is summarized as follows:

- Use this information across the different analytical levels, allowing for creativity of partnering.
- Focus on smallest unit of analysis that allows flexibility for definition of community as need demands.
- We need flexibility in defining community as it varies from service to service.
- Is the boundaries issue real or theoretical?
- One strategy would be to create natural toggles – clicking to get to what level you want, with presets (default) and/or manual-level selection
- Don't want to be too prescriptive (e.g., focus on service area). This can be addressed with geo-tagging, which allows you to overlay to customize level you're looking at, to create a way to compare.
- Seek user feedback on value of specific databases and usability (crowd sourcing).
- Drill down as far as we can—e.g. Census tract, census block.
- Advocate for federal standards for granular data.

2. To successfully monitor and evaluate requires the ability to compare apples to apples. What strategies are needed to inform a movement towards:

a. A common language and definitions

Collect definitions across sectors; used for accreditation, ACA requirements, HRSA→develop inventory. CDC, HRSA & others can influence getting the same language and definitions across communities.

Determine what language resonates with a variety of audiences. For example, the terms “metric” and “outcomes” alienates some folks.

Need to engage entities like IRS/PHAB to strengthen uniformity of definitions.

Take a community development approach – community involved in developing definitions what they want.

Transform the language of community development to healthy-community development.

b. Common metrics and monitoring strategies

See how people are using/track usage (especially repeat usage) of different datasets as a proxy for usefulness. We must stay closely collaborative as we do this and communicate the value of data to various stakeholders. We talk about data all the time, but they mean different things to different stakeholders. We do what we value, so we need to look at the human-behavior reaction to confirm that everyone sees the value of data.

Look at simple benchmarks from a simple health-in-all-policies approach. We should use few indicators. What can we get uniformly that will tell 90% of our story? Then we can have a conversation around platforms, equity used differently between different professions. How can some of these changes and benchmark patterns be translated to dollars?

How can the tool serve as a translator/portal for accessing different data, more like a clearinghouse or user-support/tool? People need guidance, e.g., which dataset do we use to find out X?

In the design process, participants offered a number of suggestions, including:

- Develop a standard 20-slide, 20-map presentation with key health indicators, transportation, education, segregation.
- Make sure there's potential to model threshold benchmarks (tipping points).
- Develop tools to document and model mutually reinforcing strategies.
- Provide education for uniform collection of data.
- Give community and key audiences a voice in determining metrics/menu

c. Shared ownership of the CHIDSS

In building shared ownership for the CHIDSS, participants offered the following input:

- What are the values? What's important to translate to the user/audience?
- Don't start with data; start with shared values as the framework.
- Think big picture, focus on shared values, and define what those values mean. Don't be overly prescriptive – take what we can get.
- Consider investments in training and education prototypes before going bigger scale. Think of the value of this information and the appropriate use of it.
- Engage a wide variety of users for input for usefulness in more than one area
- Is there value in a central repository for all reports/plans? Need early analysis of time and effort compared to return

We need to define multiple levels of audiences and communities targeted. We hear about competition and lack of coordination, but we don't seem to agree who's at fault. It would be helpful for community leaders to make their systems better in absence of community health planning, so that we can see overlap in that competition. We need to look at organizations so that we have a better understanding of what hospitals are doing. We're considering creating a hospital-level report—not just for community benefit, but for community utilization and population-health service. It's imperative that hospital leadership understands this.

d. Mutually-reinforcing interventions and services

We need to find ways to work together to build capacity and engage with each other to make the pie bigger. Understand what's happening with United Ways and financial institutions. Instead of talking about programs and services, let's talk about how we produce outcomes.

Identify success of best practices and cost savings of interventions.

Make a list of potential interventions and conduct a meta-analysis for return on investment.

Determine who brings dollars to the table for community development: financial institutions, local, state, and federal government, philanthropic organizations (looking for others to begin contributing towards costs)?

Linkages /connections between housing and health improvement may present an opportunity.

Bricks-and-mortar development in most needy areas may not be aligned with financial institution's needs/best interests.

Implications for care and availability of access points (or lack thereof) are important to community development. (e.g., health center development).

3. How can community conversation be fostered about different uses of the tool, including:

a. Priority setting and planning

b. Research

Value = **Validity**: that means constantly updated. "I want a seal on your web site that tells me that your data is vetted (set of protocols, a standard, defined vetting process), a label with level of validity and what that means."

c. Oversight

Think about value in relation to stories. Use info-graphics – a picture being worth a thousand words. Value = Transparency: Does it mean open source, open access, free access?

If a repository is voluntary there is skepticism about participation. Should/can it be required? Should we create a set of crosswalk requirements of each sector's plans?

The tool is intended to facilitate the advancement of practices, not increase regulations. The focus should be on democratizing the data for a more thoughtful, informed discussion on the ground.

ID who needs to be in the conversation (need staying power/community commitment), and who we need to bring together to overcome "parochial" interests in terms of creating a much more strategic "harmonized approach" on a common set of measures.

4. What are characteristics, strengths, and weaknesses that would inform the selection of a "home" for the CHIDSS?

Evaluate the effectiveness utility of decision-making tools beyond looking at the number of users.

Objectivity, nonalignment, neutral – universities, nonprofits

Nongovernmental – (because of government lack of nimbleness, e.g., due to requirements such as paperwork reduction act. Also, government can conflict with trust; Data capacity, experience

Need a center that is independent of special interests

Will need an advisory group with people from prominent organizations

Funder(s) must be vested in this – you can't disassociate home from funding.

Is it possible to find one home for all of this?

Non-partisan – neutral, but tied to another place that people use for this work

Remind hospitals that this is just a tool. We are doing our best to understand how hospitals are doing their business plans and incorporating their thinking on hospital readmissions, etc. Keep in mind that Section 9007 says that there are people in the public health community that have expertise. It is difficult in constrained economy for some PhDs and officials to play a beneficial role vis a vis local hospitals.

Within public health it would be good if we could all try to support each other in our efforts. 20% of GDP in health care and they're now trying again to shrink it. Public law 9361 and ACA mirror each other. We need a way to have energized critical review by having a local comment period.

Stop and reimagine what's possible – adopt a phased approach. Start with something and create a demand. Others will innovate.

Become involved in health-related conferences with different audiences. This will give us the chance to listen to how hospital folks struggle with this same issue. They struggle with how to get senior leadership in hospitals more motivated to reach out to communities. Some of our more sophisticated health systems have been doing this for so long. How can we help them move forward as well? Some hospitals are more sophisticated than others. Some are looking for toolkits and need help to do this work. They're looking for information on how to talk to CEOs and how to communicate the value that we can bring to them.

Strategies and research to foster conversation about different uses of the tool

- Determine if the people who have the access to this data are going to use it.
- Conduct a gap analysis. Part of the purpose of this project is to look at what data is not available. Once we know that we must demand data at a lower level than the county, so that those who are capable of getting it will get it.
- The Schedule H tool can help us look at trends by regions or states, which can lead to conversations about doing things in different ways.
- We will have elements of the health-equity mapping tool to inform the CHIDSS tool. The CHIDSS tool provides more narrative than the mapping tool. This will help show us how to leverage resources.
- We need data that catalyzes action. Essentially what we're looking to capture would be the narrative information from the reports. What are the priorities set by the institutions, what communities targeted, what problems have they faced?
- There's not a lack of data, but a lack of equity for action. We can learn from the places that do have data and capacity and determine what are the problems there. Communities may not be able to act, even though they have the data because they do not have the resources.
- Disappearing dollars related to serving uninsured dollars – (i.e., DSH) or potentially disappearing hospitals.
- Ensure we aren't in the assessment phase forever. We need data that catalyzes action.
- How do we engage key players in discussions in a non-regulatory framework?
- Balance demands of place and people in terms of impact strategies. Potential focus the measures on regions rather than specific communities. We are fundamentally supporting regional rather than local planning.
- We need an entrepreneurship index: Kaufman index
- What to do with data in system to begin to create community cohesiveness/community obligation?
- Do we need a "rosetta stone" for needs assessments? Guides to working together- figure out which stakeholders do not know how to talk to one another.
- Example: community benefit and community reinvestment act officers.
- How do we incorporate regional planning in communities to avoid poor placement decisions and squandering scarce resources.
- Old planning levers are gone – what new levers do we need to encourage more rational, non-regulatory community planning?
- Engagement process. Data in the context of communities. "It all comes down to trust."
- We need a way to translate and share the lessons.
- We need resource to bring players in community together.
- Determine how to get broad spectrum of users with wide availability.
- Encourage research by making it publicly available and commission studies.
- Begin with Mass. data and see what kind of conclusions can be drawn
- Stories of examples about how it can be used
- National organizations continue to lead/facilitate dialogue
- House centrally (Attorney General Office)

Appendix D: CHNA Accessibility Summary

CHNA Accessibility Summary

A key requirement in section 501r of the PPACA is the requirement for tax-exempt hospitals to conduct community health needs assessments (CHNAs) and to “conspicuously” post a report that outlines their CHNA process and findings on their organizational web site. The summary below describes the search process for the CHNAs at hospitals in fifteen sites selected for inclusion in the CHIDSS project. A total of **fifty-one** hospitals were included in this sample, of which **forty-four** provided CHNAs on their web sites within the time frame of the study.

Section 501(r)(3)(B)(ii) provides that a CHNA must be made “widely available to the public” and be “conspicuously” posted on a hospital/or hospital system’s web site in order to be in compliance⁴⁵. The treasury and IRS intend that a CHNA will be made widely available if the hospital’s respective web site “clearly informs readers that the document is available and provides instructions for downloading it” ([Notice 2011-52](#)⁴⁶). The relative ease of accessibility was assessed for each of the forty-four CHNAs by documenting the number of clicks in the search process for the reports on the respective hospital’s web site.

Accessibility ranged from:

- Low difficulty 1-2 clicks
- Medium difficulty 3-5 clicks
- High difficulty 5 clicks or more

Low difficulty, 1-2 clicks

- A CHNA-related icon, link, or tab on the home page indicated access to a CHNA.

Medium difficulty, 3-5 clicks

- CHNAs were found under headings/ tabs such as “about us”, “in the community”, “community health” and “community benefit.

High Difficulty, >5 clicks

- CHNAs that were difficult to access took a series of steps to navigate on a hospital’s web site.
- No CHNA-related indicator visible on home page or under related headings or tabs.
- CHNAs not found on the hospital web site and/ or no indication on web site for redirect to the health system’s web site to access CHNA

Only fifteen out of forty-four (34%) hospitals had a CHNA-related indicator/icon on the home page of their respective web sites. Regulations also state that a hospital organization will be considered in compliance of making the CHNA widely available to the public by posting the written report of the CHNA findings on the hospital facility’s web site or the hospital’s organization web site, if a facility does not have its own separate web site. Three hospitals that are part of larger health systems did not post their CHNA on their own individual site. It was necessary to go to the parent health-system site for two of those hospitals to acquire their CHNA. The third hospital posted their CHNA on a separate news site for their hospital system. A CHNA can be posted on a web site by another entity if 1) the hospital’s organization or facility’s web site provides a link, along with clear instructions for accessing the report;

⁴⁵Retrieve from: <http://www.irs.gov/pub/irs-drop/n-11-52.pdf>

⁴⁶ Ibid.

2) the hospital facility or organization does not have a web site, they must provide to an individual requesting the report a link (web site address or url) to where they can access the document ([Notice 2011-52](#) .7). All three hospitals also did not provide any indication or directions to access the report on their web sites.

Of the forty-four hospitals that completed CHNAs in this sample, six CHNAs were found under subheadings with the title “community benefits”. A total of ten hospitals posted their CHNAs under subheadings with similar titles such as “community services”, “serving our community”, “community commitment, and “community impact”.

**Appendix E: Geographic Information Systems and the
Advancement of CHI Practices**

Geographic Information Systems and the Advancement of CHI Practices: A Literature Review

The following literature review examines the role of Geographic Information Systems (GIS) in the field of health planning and ways in which it may inform the advancement of practices in the future. Sections of the review include:

- evidence of the value of GIS mapping
- limits of GIS tools and platforms
- emerging uses
- data sharing across institutions
- data sharing across jurisdictions
- collaborative approaches to community health improvement

Evidence of the Value of GIS Mapping in Health Planning

Substantial evidence exists now for the value of using GIS data mapping for a wide range of health planning activities. This project and the VPF tool focuses on those related to the identification of geographic concentrations of health inequities. GIS mapping has been used to identify health inequities down to the neighborhood level, offering a valuable tool for identifying and targeting interventions to address “hot spots” within communities. Studies have used GIS to identify and study inequities in access to health care, as well as other resources such as parks, grocery stores, and public transportation. See, for example Pampel (2008)⁴⁷, Beyer (2009)⁴⁸, Kruger (2007)⁴⁹; Nykiforuk,⁵⁰ and Zenk (2005)⁵¹. Higgs (2004)⁵² summarized studies that examined the value of GIS in determining accessibility of health care services, noting that increasing the ability to disaggregate data and break out utilization data in spatial terms offers significant potential to focus on geographic areas where disparities are concentrated. See also Passalent (2013)⁵³ as it relates to spatial access to rehabilitation services. Higgs’ review cites a strong body of research that examines “potential access,” i.e. distance or travel time to available service points.

Thoughtful use and understanding of the limitations of GIS have helped to highlight questions such as the importance for disadvantaged populations of incorporating public-transit travel times and point-of-service open hours when calculating access. Few studies, however, were found with GIS mapping of

⁴⁷ Pampel, Fred C., Patrick M. Krueger, Justin T. Denney, Annu Rev Sociol. Author manuscript; available in PMC 2011 September 9., Published in final edited form as: Annu Rev Sociol. 2010 August; 36: 349–370, doi: 10.1146/annurev.soc.012809.102529.

⁴⁸ Beyer, Kirsten M M. "Exploratory spatial data analysis in community context: integrating geographic information science and community engagement for colorectal cancer prevention and control." PhD diss., University of Iowa, 2009. <http://ir.uiowa.edu/etd/643>.

⁴⁹ Kruger, Daniel J., Jan Brady, Lauren Shirey, "Using GIS to Facilitate Community-Based Public Health Planning of Diabetes Intervention Efforts, Health Promotion Practice, May 9, 2007, doi: 10.1177/1524839906293396.

⁵⁰ Nykiforuk, Candace, and Laura Flaman, Geographic Information Systems (GIS) for Health Promotion and Public Health: A Review, Health Promotion Practice, Published online before print June 22, 2009, doi: 10.1177/1524839909334624.

⁵¹ Zenk, Shannon N., Amy Schulz, Barbara Israel, Sherman James, Shuming Bao, and Mark Wilson, "Neighborhood Racial Composition, Neighborhood Poverty, and the Spatial Accessibility of Supermarkets in Metropolitan Detroit," Am J Public Health, 2005 April; 95(4): 660–667. doi: [10.2105/AJPH.2004.042150](https://doi.org/10.2105/AJPH.2004.042150).

⁵² Higgs, Gary, "A Literature Review of the Use of GIS-Based Measures of Access to Health Care Services," Health Services & Outcomes Research Methodology 5: 119–139, 2004.

⁵³ Passalent, Laura, Emily Borsy, Michel D. Landry, and Cheryl Cott. "Geographic Information Systems (GIS): An Emerging Method to Assess Demand and Provision for Rehabilitation Services." *Disability and Rehabilitation* (January 24, 2013): 1–10. doi:10.3109/09638288.2012.750690.

actual utilization, largely due to poor availability of utilization data; and finally, very few studies that in turn link access to health outcomes. Overall, Higgs concludes that GIS measures of access to health care services hold potential to provide valuable information to guide changes to health service provision locations, to assess impacts of changes to health policy, and to identify gaps in services by location as well as by social factors.

On the issue of food access, The Reinvestment Fund (TRF), a national Community Development Financial Institution (CDFI), has an online GIS platform entitled PolicyMap that recently uploaded USDA data from an updated 2010 study. The mapping of these data clearly delineates census tracts where people live beyond a specified distance from the nearest grocery store. Areas designated as low access can help to qualify for federal programs such as the New Markets Tax Credits and public/private initiatives such as the Healthy Foods Financing Initiative.

Several studies emphasize the importance of considering spatial data in combination with other data that reflects user experience. For example, disparities in access to health care are not well captured simply by assessing straight-line distances (strict spatial analysis) between populations and health care providers. Understanding users' modes of travel prompted inclusion of transit data such as schedules in the mapping of health care access. In addition, for low-income working individuals, hours of service were found to be an important component of access.

A review of the literature on spatial factors relating to health disparities by Hayward, 2008⁵⁴ highlights several important considerations for spatial analyses of disparities, regardless of the tools or techniques selected for conducting the analysis. Among the review of factors, for example, scale of the analysis matters and may produce different results. The review looked at several studies that have compared data taken at different scales (census block, census tract, and zip code) and found that these studies found health disparity gradients that became visible at the micro-scale (census block or census tract) that were not apparent at the larger scale.

This same review found that area-based socioeconomic measures (ABSM) were good predictors of health outcomes; that some individual measures were found to be linked to contextual measures; and that some individual measures were independent contributing predictors of outcomes. Among the contextual indicators, research led by Krieger (2003)⁵⁵ in the Public Health Disparities Geocoding Project found that economic deprivation was a particularly strong predictor at the census tract and census block level. The review examined multi-level modeling (e.g., individual, census tract) as a way to capture and integrate both contextual and individual factors. Multi-level modeling enabled researchers to develop more nuanced understandings to factors influencing health outcomes and also "quantifies the influence of both population composition variables and contextual variables on the health of individuals."

In an update to their book first published in 2002, which looks in depth at the uses of GIS for public health practice, Cromley & McAfferty (2011)⁵⁶ have added a chapter that focuses entirely on health disparities. They examine uses of GIS to: define or describe the composition of a community; visualize

⁵⁴ Hayward, Peter, Brandon Cramer, Ava Nepal, Jeffrey Osleeb, and Alexander Vi, "The Spatial Context of Health Disparities: A Literature Review, 2008, Manuscript, University of Connecticut Department of Geography, The Connecticut Health Disparities Project, Connecticut Department of Public Health.

⁵⁵ Krieger, N., Chen, J., Waterman, P., Rehkopf, D., & Subramanian, S. (2003b). Race/ethnicity, gender, and monitoring socioeconomic gradients in health: a comparison of area-based socioeconomic measures—The public health disparities geocoding project. *American Journal Public Health*, 93: 1655-1671.

⁵⁶ Cromley, Ellen K. and Sara L. McAfferty, GIS and Public Health, 2012, Second Edition, The Guilford Press, New York, NY.

and measure area characteristics; define neighborhood contexts; model neighborhood effects on health; and understand location processes and the link between location and well-being. In an examination of scale, Cromley and McLafferty move beyond areas defined by administrative or political units (census tract, jurisdiction), and note that, using qualitative data, GIS can be used “to map that area that an individual considers to be within his or her neighborhood.”

Limits of GIS Tools and Platforms

Drawing conclusions from a 2003 review of the literature, McLafferty⁵⁷ notes several challenges to effective use of GIS for assessing health care access and utilization, and for health care evaluation and planning. Challenges include:

- structural barriers: data on utilization, treatments and outcomes are often unavailable or provided at different time frames and spatial scales;
- privacy and confidentiality limit access to data for individuals or small areas;
- treatment and utilization data are treated as proprietary and/or are in formats that are incompatible with data from other institutions; and
- health planners and others see and understand GIS as strictly a mapping tool, and lack understanding of the relationships and influences.

McLafferty notes that GIS will need to develop the capacity to absorb and reflect qualitative data; more recent studies indicate movement in this direction.

While there are increasingly sophisticated methods to protect patient confidentiality, it is important to ensure that protections cannot be reversed, or that the scale of analysis is insufficiently granular (e.g., census block level) to identify individuals. The issue of confidentiality will need to be addressed in a robust manner to ensure that health planners can take advantage of the full benefits of GIS mapping.

Additional cautions in the use of GIS tools and platforms to identify and address disparities have been outlined by Hayward (2008),⁵⁸ and include:

- longitudinal studies are needed to model and understand how neighborhoods change and spatial factors influence health over time;
- census tracts are useful units of study but may not map accurately onto neighborhoods;
- modeling to date fails to take into account relationships between and among neighborhoods, treating them as isolated entities; and
- research to date has not accounted for residential mobility; this is problematic because of the higher degree of mobility among residents of low-income neighborhoods.

⁵⁷ McLafferty, Sara L. “GIS and Health Care,” Annual Review of Public Health, Vol. 24: 25-42 (Volume publication date May 2003), DOI: 10.1146/annurev.publhealth.24.012902.141012.

⁵⁸ See reference 32

Some of these challenges are being addressed as the field and use of GIS tools and platforms evolves, but bear attention in the analysis and interpretation of data.

Emerging Uses of GIS

The ability of GIS platforms to allow for analysis of multiple layers of social, cultural, economic, and environmental data with an overlay of health services utilization has opened the door to a new chapter of inquiry into the interaction between location, context, and health status. A recent study by Brown (2013)⁵⁹ examined mental health through an analysis of both service utilization and place-based factors (socioeconomic, environmental) at the neighborhood level.

The use of Spatial Decision Support Systems (SDSS) (GIS used in the service of planning) is evolving in two directions. One is increasingly customized, complex, and with more sophisticated analytical tools developed for use by experts. The other focuses on dissemination, community involvement, and participatory decision-making. There is a need for integration of these approaches in order to better inform strategic investments by health care providers in community health improvement.

The capacity of GIS to layer data allows for a number of significant emerging uses. In Rhode Island, layering measures of segregation over data identifying health disparities in relationship to commonly used indicators (FPL and educational-completion rates) revealed that racial and ethnic segregation is an independent pernicious factor in health outcomes when other factors did not fully account for disparities. A series of analyses provided the impetus for the establishment of a Commission of Health Advocacy and Equity that brings together a cross-section of state agencies and community members to focus on the determinants of health, with a requirement to produce a biennial report. The report uses GIS technology to highlight spatial disparities on multiple levels, and identifies potential public policies to reduce health inequities (Richie and Nolan, 2013).⁶⁰

Mahmoud (2013)⁶¹ describes the use of GIS in Saudi Arabia to develop a “spatial decision-making support system” for health care planning, specifically, planning around hospital and clinic service area and access to support decision-making around clinic placement. Three GIS models created “catchment areas, demand profile, and patient flows” to assess service provision. The approaches provide a basis for a flexible approach to determining different kinds of boundaries based upon the analysis of different aggregations of factors and metrics.

Use of spatial micro-simulation (Ballas et al, 2006)⁶² to examine health inequalities may offer a way to work around privacy and confidentiality constraints, offering a way to use data from survey samples to construct simulated individuals and families and produce models of status within neighborhoods where census data shows that similarly situated families and individuals live. Micro-simulation can be used to create a static, one-time model of the area, or, promisingly, to create a dynamic model showing changes

⁵⁹ Brown, James S. “Emerging Applications of Geographic Information Systems (GIS) in Community and Local Mental Health Research.” *Journal of Local and Global Health Perspectives* no. 2013 (March 2013): 1. doi:10.5339/jlghp.2013.5.

⁶⁰ Richie, Dannie, and Patricia Nolan, “Health in All Policies: A Start in Rhode Island,” *Rhode Island Medical Journal*, July 2013.

⁶¹ Mahmoud, Magdy Sahyboub Ali, and Samir Mahmud Adam Abdalla, “Development of Local Health Care Planning and Demanding in Saudi Arabia By Using GIS,” *Open Science Repository Computer and Information Sciences*, doi: [10.7392/openaccess.70081998](https://doi.org/10.7392/openaccess.70081998).

⁶² Ballas, Dimitris, Graham Clarke, Danny Dorling, Jan Rigby and Ben Wheeler, “Using geographical information systems and spatial microsimulation for the analysis of health inequalities,” *Health Informatics Journal*, Volume 12(1): 65–79 [1460-4582(200603)12:1;65–79; DOI: 10.1177/1460458206061217].

over time. Dynamic micro-simulation may prove especially useful for projecting the impacts of health policy changes.

An important emerging development in GIS is the use of mixed methods – the combination of qualitative data with quantitative data, pointed to by McAfferty in 2003 and now being implemented. Access to health care services (Hawthorne 2012),⁶³ incorporating in-depth interviews to gather perceived distance, perceived access, and perceived quality of care, then using GIS to map not simply raw distance, but user-experience weighted access. The incorporation of mixed-methods data and qualitative data in spatial analyses promises to produce much richer understandings of the factors that affect illness, health, access to services, and the multiple complex factors that create community hot spots, and that shape individual experience for the heaviest health care users.

Data Sharing Across Institutions

More than fifteen years ago, the American Medical Informatics Association highlighted the need to develop an information strategy, rooted in a population health framework, that provides shared access to population health information, modeled on the shared information access for individual data being developed through electronic health records. This population health record (PopHR), intended to be “a repository of statistics, measures, and indicators regarding the state of and influences on the health of a defined population, in computer processable form, stored and transmitted securely, and accessible by multiple authorized users,” has seen little progress to date. (Friedman 2009)⁶⁴

Few studies exist that examine data sharing among organizations and agencies collaborating in community health planning. The uses of GIS to map health disparities, support collaborative community *engagement*, and assist in health planning have been studied in depth. However, research into the challenges of data systems to support cross-agency and cross-organization health planning is limited. Planning support systems that go beyond the general capabilities of GIS or spatial DSS, and are tailored specifically to planning, have been discussed (Geertman and Stillwell, 2010),⁶⁵ but this research has not examined the needs of the type of collaborative planning and information sharing that would be essential to coordinated intervention to address community health inequities.

The “collective impact” approach (Kania 2010)⁶⁶ has stimulated new interest in the development and monitoring of aligned strategies across the US using data-driven, coordinated approaches to tackle persistent social problems such as low educational achievement, obesity, or homelessness. These have in turn led to the development of data sharing tools and systems tailored to the needs of these efforts in cross-sector collaboration and coordination. Examples include: E3 Alliance (Thomas 2013),⁶⁷ Calgary’s homelessness management information system (HMIS), and Cincinnati’s Learning Partnership

⁶³ Hawthorne, Timothy L., and Mei-Po Kwan, “Using GIS and Perceived Distance to Understand the Unequal Geographies of Healthcare in Lower-income Urban Neighborhoods,” *The Geographical Journal* 178, no. 1 (2012): 18–30. doi:10.1111/j.1475-4959.2011.00411.x.

⁶⁴ Friedman, Daniel J., and R. Gibson Parrish, “The Population Health Record: Concepts, Definition, Design, and Implementation.” *Journal of the American Medical Informatics Association* 17, no. 4 (July 1, 2010): 359–366. doi:10.1136/jamia.2009.001578.

⁶⁵ Geertman, Stan, and John Stillwell, *Planning Support Systems in Practice*, Springer, 2003.

⁶⁶ Kania, John, and Mark Kramer, “Collective Impact,” *Stanford Social Innovation Review*, Winter, 2011.

⁶⁷ Thomas, Shawn. “FSG - Knowledge Exchange - Blogs - Collective Impact - From Information into Action: Using Data to Drive Collective Impact.” Accessed July 31, 2013. <http://www.fsg.org/KnowledgeExchange/Blogs/CollectiveImpact/PostID/421.aspx>

Dashboard (Hanley Brown 2012).⁶⁸ These projects may offer conceptual insights that may be usefully applied to health planning and action, though the transfer of specific tools or approaches may likely be limited by the specific types of data, such as hospital utilization or prescription data that may be needed when working to address health disparities.

Cowan et al (2011)⁶⁹ discuss advances in “collaborative information infrastructures” being widely used in environmental and economic planning and decision-making but not yet applied in the health realm, and make the case for adopting these tools to address health. A series of studies out of Australia (Gudes et al, 2010, 2011)^{70,71,72} articulate the need for a framework and information systems to support collaborative health planning, present a framework, and examine the value of GIS and the development of a Decision Support System (DSS).

Case studies of integrated care initiatives, such as integrated behavioral and medical care to serve high need, high usage individuals with serious mental illness have highlighted the importance of real-time data sharing of patient utilization, and demonstrated successful models for such data sharing (Jung 2012)⁷³ (Alcalde 2012).⁷⁴ Health information exchanges have been used to provide hospital data to public health agencies to support outbreak surveillance (Grannis 2010).⁷⁵ Looking beyond the peer-reviewed literature, data sharing between emergency room and law enforcement reduced intentional injury (violence) substantially in one case study (Quigg 2012).⁷⁶ Guidelines were developed for data sharing (anonymized data) between ER and law enforcement to reduce intentional injury by identifying “hot spots” for increased policing. (House 2008)⁷⁷

⁶⁸ Hanley Brown, Fay, John Kania, and Mark Kramer, “Channeling Change: Making Collective Impact Work.” *Stanford Social Innovation Review*, Accessed August 8 (2012): 2012.

⁶⁹ Don Cowan, Paulo Alencar, Fred McGarry, Daniel McCarthy, “Collaborative Geomatics for Innovation in Health Research and Policy,” *Electronic Journal of Health Informatics*, Vol. 6, No. 4, (July 15, 2011): e32.

⁷⁰ Gudes, Ori, Elizabeth Kendall, Tan Yigitcanlar, Virendra Pathak, and Scott Baum. “Rethinking Health Planning.” *Health Inf. Manage. J* 39, no. 2 (2010): 18–29.

⁷¹ Gudes, Ori, Elizabeth Kendall, Tan Yigitcanlar, and Virendra Pathak. “Online Geographic Information Systems for Improving Health Planning Practice: Lessons Learned from the Case Study of Logan-Beaudesert, Australia.” In *Faculty of Built Environment and Engineering; School of Urban Development*, 1–23. Atlanta, Georgia: URISA, 2011.

http://www.scribd.com/doc/66721749/GIS-PUBLIC-HEALTH-PROCEEDINGS-2011?secret_password=2owhl7g6qg6e5cnucviy.

⁷² Gudes, Ori, Tan Yigitcanlar, Elizabeth Kendall, and Kavita Pathak. “Using a Knowledge-based Approach: the Way Healthy Communities Make Decisions.” In *The Fourth Knowledge Cities World Summit (KCWS)*, edited by Tan Yigitcanlar and Anna Cristina Fachinelli, 164–171. Bento Goncalves, Brazil: The World Capital Institute and Ibero-American Community for Knowledge Systems, 2011. http://www.knowledgecities.com/KCWS_2011_Proceedings.pdf.

⁷³ Jung, Kim, Tricia Higgins, Angela Gerolamo, Dominick Esposito, and Allison Hamblin, “Early Lessons from Pennsylvania’s SMI Innovations Project for Integrating Physical and Behavioral Health in Medicaid,” *Center for Health Care Strategies, Inc* (2012). http://www.chcs.org/usr_doc/PA-RCP_Early_Lessons_Brief051412.pdf.

⁷⁴ Alcalde, Gabriela. *Integrating Care for Better Health: Charting a Course Together for Better Health for All Kentuckians*. The Foundation for a Healthy Kentucky, September 2012. <http://healthy-ky.org/sites/default/files/Final%20PDF-IC%20White%20Paper.pdf>.

⁷⁵ Grannis, Shaun J., Kevin C. Stevens, and Ricardo Merriwether, “Leveraging Health Information Exchange to Support Public Health Situational Awareness: The Indiana Experience,” *Online Journal of Public Health Informatics* 2, no. 2 (October 29, 2010). doi:10.5210/ojphi.v2i2.3213.

⁷⁶ Quigg, Zara, Karen Hughes, and Mark A. Bellis, “Data Sharing for Prevention: a Case Study in the Development of a Comprehensive Emergency Department Injury Surveillance System and Its Use in Preventing Violence and Alcohol-related Harms.” *Injury Prevention* 18, no. 5 (October 1, 2012): 315–320. doi:10.1136/injuryprev-2011-040159.

⁷⁷ House, Churchill, “Guideline for Information Sharing to Reduce Community Violence,” Accessed August 2, 2013. http://www.alcohollearningcentre.org.uk/library/projects/files/College_of_Emergency_Medicine_Guideline_for_Information_Sharing_to_reduce_Community_Violence_157.pdf.

Electronic health records data collected from multiple institutions has been used to assess childhood obesity. Results of one study (Bailey 2013)⁷⁸ found data sharing highly feasible, with initial effort required for query development and validation, but substantial lower effort entailed for ongoing surveillance. “The low cost of EHR queries suggests that as the nation’s health care system becomes increasingly digitized, it will become possible to readily combine data from additional geographic areas and clinical settings, and increase the generalizability of results based on data sharing.” This study specifically chose to compare measured data (height, weight, and body mass index), so as to focus on technical and procedural feasibility of data sharing, and notes that comparing data involving subjective findings or clinical decisions will introduce additional considerations.

Early research into data sharing between public health and transportation planning highlights the many opportunities for information sharing to support collaboration, but notes that little significant information sharing has been undertaken (Berry 2011).⁷⁹ The research found technical and organizational barriers, as well as barriers related to the policy environment for proposed information sharing and collaboration. Some of the barriers identified may be issues in many situations where collaborative action requires data sharing across different sectors of the community.

Some barriers exist even in the more straightforward context of sharing health data among health care providers. Fontaine et al (2010)⁸⁰ look at Minnesota’s implementation to its e-Health Law in response to ACA goals of establishing a national Health Information Exchange (HIE), examining specific benefits and barriers to the participation of small primary care practices in a community-wide HIE. Motivators and anticipated benefits included: “state and federal mandates, payer incentives, and increasing expectations for quality reporting. Internal motivators were anticipated cost savings, quality, patient safety, and efficiency.” Barriers to participation by small practices included: “lack of interoperability, cost, lack of buy-in for a shared HIE vision, security and privacy, and limited technical infrastructure and support.” (p.622)

While these examples of data sharing point both to the value of cross agency and institution sharing, and to some of the challenges, needs, and considerations, no systematic study as yet would appear to have been done specifically of the data needs and challenges of sharing CHNAs and other community health plans from multiple institutions or agencies, with the goal of collaboration and coordination to improve community health.

Data Sharing Across Jurisdictions

Access to health care and social services and a broad spectrum of social and environmental factors have a profound impact upon health behaviors and health status, and all are closely related to spatial location. In many cases, however, these factors are not clearly defined by jurisdictional boundaries, and there is a need to consider ways in which data, interventions, investments, and public policies transcend those borders. To address the real needs of populations grappling with significant disparities, not only

⁷⁸ Bailey, L. Charles, David E. Milov, Kelly Kelleher, Michael G. Kahn, Mark Del Beccaro, Feliciano Yu, Thomas Richards, and Christopher B. Forrest, “Multi-Institutional Sharing of Electronic Health Record Data to Assess Childhood Obesity,” *PLoS ONE* 8, no. 6 (June 18, 2013): e66192. doi:10.1371/journal.pone.0066192.

⁷⁹ Berry, Michele. “Data Sharing Between Transportation Planning And Public Health: Issues And Opportunities Using A Regional Eco-logical Framework.” M.C.R.P., October 11, 2011. <http://dspace.uta.edu/handle/10106/6198?show=full>.

⁸⁰ Fontaine, P., T. Zink, RG Boyle, and J. Kralowski, “Health information exchange: participation by Minnesota primary care practices,” *Archives of Internal Medicine*, 2010, Apr 12;170(7):622-9. doi: 10.1001/archinternmed.2010.54.

must CHI involve collaboration (and data sharing) across institutions, but across geopolitical jurisdictions.

This issue has arisen in other contexts where cross-jurisdictional data sharing is needed. In 2006, for example, the EPA and the CDC co-convened a symposium⁸¹ to examine the challenges related to conducting research and environmental health tracking related to air pollution. A core focus of the symposium was the “barriers to sharing of exposure and health information between institutions and jurisdictions.” Recommendations included: working with the CDC and state agencies to improve data collection, standardization, and centralization; having insurance companies and health care providers make records available; build capacity to facilitate standardized data collection; and making government reimbursement dependent on participating in data development. In addition, it was recommended that state agencies collaborate to develop a common approach to the interpretation of privacy regulations.

Emergency preparedness efforts also require multijurisdictional collaboration and coordination, particularly to ascertain and share the resources required during an emergency event. Grier et al. (2011)⁸² explain that despite numerous examples of successful cross-jurisdictional planning and collaboration to share information and resources to address emergencies, public health agencies across the US are hampered by lack of easy access to the legal and liability information they need and to sample agreements that they could adapt locally.

To address this gap, public health administrators and managers across the US were surveyed to assess needs, and a web-based tool was developed to make resources readily available to public health and partnering agencies. The resulting tool provides examples of successful collaborations, sample agreements, legal background, and implementation strategies, and is designed to be regularly updated with input from users to evolve as needs change. Grier et al. note that “the topics inscribed within [the web-based resource tool] can be applied to many types of events such as disease outbreaks, immunization clinics including point-of-dispensing clinics, and other public health activities involving one or more governmental or non-governmental agencies.” (89).

Data have also been successfully shared across jurisdictions during the H1N1 flu outbreak of 2009 and used to track the outbreak using the ESSENCE Surveillance System (Holtry et al. 2010).⁸³ The system collects both military and civilian data, across the complex of jurisdictions in the Washington, DC Region.

Collaborative Approaches to Community Health Improvement

While community health needs assessments are not new, a component of the Affordable Care Act now makes them mandatory, every three years, for all not-for-profit hospitals. Other organizations and agencies may also conduct such assessments. Some do so voluntary (e.g. United Way, YMCA), some are incentivized to do so (local health departments, as prerequisites for accreditation), or are required (federally-qualified health clinics). Because a community health needs assessment includes assessing

⁸¹ February 26, 2013 Symposium entitled “Environmental Health: Strengthening What Works and Reintegrating it into the Broader Health Landscape to Enhance the Public’s Health, George Washington University, Washington, DC.

⁸² Grier NL, GG Homish, DW Rowe, and C. Barrick, “Promoting information sharing for multijurisdictional public health emergency preparedness,” *J Public Health Manag Practice*, 2011 Jan-Feb;17(1):84-9. doi: 10.1097/PHH.0b013e3181ec41d5.

⁸³ Holtry, Rekha, Lang Hung, and Sheri Lewis, Utility of the ESSENCE Surveillance System in Monitoring the H1N1 Outbreak, *Online J Public Health Inform.* 2010; 2(3): ojphi.v2i3.3028, Published online 2010 December 23. doi: [10.5210/ojphi.v2i3.3028](https://doi.org/10.5210/ojphi.v2i3.3028).

social determinants of health and health disparities, data collection for the CHNA should include input from public health and other community entities.

Because multiple entities in the community may be conducting CHNAs, and because data from multiple entities and stakeholders will be needed to inform some components of the assessment, the CHNA process, together with development of the related Community Health Improvement Plan, are important opportunities for collaboration across the agencies and organizations concerned with community health, and provide an opportunity to develop shared goals, modes of data sharing, and plans for optimizing use of resources to achieve the best health outcomes and improvements in health equity.

Promising examples of community collaboration to improve health outcomes can be found in self-reported case studies, grey literature, as well as in the peer-reviewed research literature. For example, Charles Cole Memorial Hospital in rural Pennsylvania cut its 30-day readmissions by 15.9% by convening and partnering with community agencies in the five-county area served by the hospital and its clinics. The group collaboratively developed standardized transition forms for discharge from the hospital to skilled nursing, and from there or directly to home health services, so that providers along the chain of care would have the information they needed. The hospital also continually examined its readmission cases and its processes to look for additional improvements or to persist in a needed improvement until it was successfully in place.⁸⁴ While this effort did not target community hot spots, it provides an example of what can be accomplished through coordinating across the continuum of care.

A tool called the Community Needs Index (CNI) has been developed and tested that combines census data elements into an index to identify areas of the community facing barriers to health and health care. The nine indicators used for the index include income, culture/language, educational attainment, and health insurance and housing (related to housing stability). The index was then tested in the communities served by the hospital system that developed it.

The system assessed, by zip code, the communities in its service regions, and then compared the results to hospitalization rates for ambulatory care conditions (conditions which, with good access to health resources, could be treated without hospitalization). Marker conditions were identified that generally require hospitalization regardless of community conditions, as a point of comparison. While hospitalization rates for these marker conditions were comparable across all of the communities examined, hospitalization rates for ambulatory care conditions correlated closely to scores on the CNI. In other words, the CNI proved to be an effective tool for using consistent, quantitative data to identify high-need areas of the community toward which to direct resources. This methodology has since been made available to other health systems. The CNI is also proving useful for hospitals and hospital systems to develop partnerships with other stakeholders working to improve health outcomes in communities (Roth and Barsi 2005).⁸⁵

⁸⁴ No author listed, "Community Collaboration Cuts Re-Admits," *Hosp Case Manag.* 2012 Sep;20(9):133-4, 139.

⁸⁵ Roth, Richard, and Eileen Barsi, "The Community Needs Index." *Health Progress* 86, no. 4 (2005): 32.

Appendix F: Table 2 References

Review Sites Table 2 References

- ii Retrieved from: <http://www.humanimpact.org/component/jdownloads/finish/12/151/0>
- iii Retrieved from: <http://www.naccho.org/topics/infrastructure/profile/>
- iv Notwithstanding the foregoing, a community may not be defined in a manner that circumvents the requirement to assess the health needs of (or consult with persons who represent the broad interests of) the community served by a hospital facility by excluding, for example, medically underserved populations, low-income persons, minority groups, or those with chronic disease needs. Retrieved from: http://www.irs.gov/irb/2011-30_IRB/ar08.html
- v <http://bphc.hrsa.gov/about/>
- vi <http://apps.unitedway.org/myuw/>
- vii Public CAA, standard 3.2 (proposed regulations) Retrieved from: http://www.communityactionpartnership.com/index.php?option=com_content&task=view&id=21&Itemid=164
- viii <http://www2.fdic.gov/crapes/peterms.asp>
- ix <http://www.humanimpact.org/about-us>
- x http://www.cphfoundation.org/documents/Role-local health department_000.pdf
- xi Catholic Health Association.(n.d.). What counts as community benefit. Retrieved June 8, 2010, from www.chausa.org/pages/our_work/community_benefit/what_counts/overview/.
- xii <http://www.bphc.hrsa.gov/about/index.html>
- xiii http://www.communityactionpartnership.com/index.php?option=com_content&task=view&id=21&Itemid=50
- xiv http://www.communityactionpartnership.com/index.php?option=com_content&task=view&id=21&Itemid=50
- xv http://www.federalreserve.gov/communitydev/cra_about.htm
- xvi <http://www.phaboard.org/wp-content/uploads/PHAB-Standards-and-Measures-Version-1.0.pdf>
- xvii <http://www.irs.gov/pub/irs-drop/n-11-52.pdf>
- xviii <http://www.unitedway.org/our-work/>
- xix Minimum Elements of HIA (North American HIA Practice Standards Working Group) Standard 2.2. *Solicits and utilizes input from stakeholders*. Retrieved from: <http://www.cdc.gov/healthyplaces/hiareources.htm#factsheet>
- xx <http://www.naccho.org/topics/infrastructure/CHAIP/>
- xxi <http://www.cdc.gov/nphpsp/essentialservices.html>
- xxii Section 501(r)(3) requires a hospital organization to conduct a CHNA at least once every three years and adopt an implementation strategy to meet the community health needs identified through the CHNA. The CHNA must take into account input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of or expertise in public health. The CHNA must also be made widely available to the public. Retrieved from: http://www.irs.gov/irb/2013-21_IRB/ar09.html#d0e3142
- xxiii Retrieved from: <http://bphc.hrsa.gov/policiesregulations/governance/>
- xxiv The Critical Role of Collaboration in the Health Center Program: Since its inception, the Health Center Program has placed a strong emphasis on collaboration between health centers and other area safety net and social service providers in the provision of services to the center's target population. The Health Center Program statute, located at section 330 of the Public Health Service (PHS) Act, as amended, specifically requires that health centers demonstrate that they have made and will continue to make every reasonable effort to establish and maintain collaborative relationships with other health care providers in their catchment area. Health Center Collaboration Program Assistance Letter 2011-02)
- xxv Retrieved from: <http://www.unitedway.org/partners/>
- xxvi <http://www.managingmymoney.com/links/standards-2013.pdf>
- xxvii http://www.federalreserve.gov/communitydev/cra_about.htm
- xxviii <http://www.cdph.ca.gov/pubsforms/Guidelines/Documents/HIA%20Guide%20FINAL%2010-19-10.pdf>
- xxix Retrieved from: <http://www.irs.gov/pub/irs-drop/n-11-52.pdf>
- xxx Notice 2014-2. IRS Regulations. Retrieved from: [http://www.irs.gov/Charities-%26-Non-Profits/Charitable-Organizations/New-Requirements-for-501\(c\)\(3\)-Hospitals-Under-the-Affordable-Care-Act](http://www.irs.gov/Charities-%26-Non-Profits/Charitable-Organizations/New-Requirements-for-501(c)(3)-Hospitals-Under-the-Affordable-Care-Act)
- xxxi Retrieved from: <http://bphc.hrsa.gov/about/requirements/>
- xxxii Retrieved from: <http://www.unitedway.org/pages/accountability>
- xxxiii Retrieved from: <http://www.managingmymoney.com/links/standards-2013.pdf>
- xxxiv Retrieved from: http://www.federalreserve.gov/communitydev/cra_about.htm
- xxxv Retrieved from: <http://www.irs.gov/pub/irs-drop/n-11-52.pdf>
- xxxvi Retrieved from: <http://bphc.hrsa.gov/about/requirements/>
- xxxvii Retrieved from: <http://www.unitedway.org/pages/accountability>