Chapter 6
Community Asset Mapping: Integrating and Engaging Community and Health Systems

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CHAPTER 6

Community Asset Mapping: Integrating and Engaging Community and Health Systems

Teresa Cutts and Ray King with Maureen Kersmarki, Kirsten Peachey, Jason Hodges, Sherianne Kramer and Sandy Lazarus

Community asset mapping can be a crucial component for forging meaningful and useful partnerships between health systems and communities. This chapter describes the history and specifications of select asset-based mapping methodologies, existing mapping tools, as well as their potential integration into the federally mandated Community Health Needs Assessments (CHNAs). The potential use of mapping findings to build, nurture and enhance community health improvement efforts will be explored, as well as key strategies and considerations in use of these processes. Lastly, case studies are used to illustrate how asset mapping can be leveraged to build meaningful clinical-community partnerships with health systems.

Overview

Numerous forms of participatory community asset “mapping” frameworks or methodologies have been used for decades and exist in many iterations. They range from Participatory Rural Appraisal in the 1970’s (Chambers, 1980) to the work of Kretzman and McKnight (1993) in the early 1980’s to more current approaches, such as those used by the National Association of City and County Health Organizations’ (NACCHO) Mobilizing for Actions through Planning and Partnerships or MAPP process (NACCHO, 2015), the African/International Religious Health Assets Mapping Programme Models (ARHAP, 2006), and Dr. Jeffrey Brenner’s hot spotting in Camden, NJ (Gawande, 2011).

Most early asset mapping models were developed by community development, public health or community psychology practitioners and researchers but were of little interest to health systems. However, recent Affordable Care Act mandates and Internal Revenue Service (IRS) requirements that not-for-profit hospitals must conduct meaningful Community Health Needs Assessments (CHNAs) and incorporate those findings into their strategic planning and community benefit efforts, have commanded the attention of health system leaders. Community asset mapping models are ideal for augmenting this requirement, as well as for pushing healthcare upstream by encouraging health systems to move outside their walls (Gunderson & Cochrane, 2012).

Community Asset Mapping: Definition and Models/Frameworks

The following section draws heavily on the work of South African colleagues, for whom community asset mapping is a set of practices that provides communities with multiple opportunities to identify and mobilize previously unrecognized but existing strengths and capabilities (Kramer, Amos, Lazarus, & Seedat, 2012). It is defined as “a process of documenting the tangible and intangible resources of a community by viewing the community as a place with strengths or assets that need to be preserved and enhanced, not deficits to be remedied” (Kerka, 2003, p. 3). These resources may belong to an entire community, or they may be specific to individuals, groups or organizations within communities (Rossing, 2000). A key characteristic of community asset mapping is its participatory nature (Kramer
et al., 2012). Ideally, it reflects the principles embedded in Community Based Participatory Research (CBPR), which aims to develop and foster genuine partnerships between community members and researchers, demonstrated by co-learning, capacity building, mutual benefits, and long-term commitment to achieving equity (Wallerstein & Duran, 2006). Select, recommended models and frameworks are discussed below.

**ASSET BASED COMMUNITY DEVELOPMENT (ABCD)**

The Asset Based Community Development (ABCD) model, derived from the work of Kretzman and McKnight (1993), is often viewed as the seminal mapping approach (see tools and resources at http://www.abcdinstitute.org/). As stated by our ARHAP colleague, the late Reverend Steve De Gruchy, it is predicated on the notion that “one can’t build a community based on what one does not have.” In the introduction to their ABCD guide, Kretzman and McKnight (1993) describe the model as a “community-building path which is asset-based, internally focused and relationship driven.”

Aimed originally at harnessing a community’s own resources against poverty (Mathie & Kearney, 2001), ABCD encourages and empowers grassroots leadership and capacity building locally (Kramer et al., 2012). This approach has been shown to be successful in many settings, including the US and other countries (Mathie & Cunningham, 2008). However, it is important to note that very different objectives may be accomplished in each setting. In this respect, poverty needs to be understood in various ways: absolute deprivation is often easier to work with in the ABCD model as there is a sense of everyone being “equally” poor, whereas relative deprivation, where competition rather than cooperation is more likely, makes it more difficult. In the experience of our South African colleagues, ABCD and other asset mapping models are more successful in rural areas (often absolutely deprived) than in urban ones (usually relatively deprived), which may or may not be generalizable beyond South Africa. Nonetheless, ABCD’s principles and exercises are valuable beyond a focus on poverty and they are foundational to and often incorporated into other mapping models (e.g., Building Communities of Shalom).

**MOBILIZING FOR ACTION THROUGH PLANNING AND PARTNERSHIPS (MAPP)**

Mobilizing for Action through Planning and Partnerships (MAPP) is described as “a community-driven strategic planning process for improving community health” (NACCHO website). MAPP was developed by NACCHO and the Public Health Practice Program Office at the Centers for Disease Control and Prevention (PHPPO/CDC). It is a web-based tool/process/framework that enables local public health agencies (LPHAs) and communities to assess and improve community health (Pullen et al., 2005; http://www.naccho.org/topics/infrastructure/mapp/).

Facilitated by public health leaders, the MAPP framework is a collaborative process that helps communities strategically identify and prioritize health issues, assets and resources. It aims to collectively improve the health of the community, as well as the performance of the local public health systems. Seven elements critical to MAPP success include: systems thinking, dialogue, shared vision, data to inform the process, partnerships and collaboration, strategic thinking and celebration of successes (Journal of Public Health Management and Practice, September/October 2005; NACCHO, 2015). MAPP is “... an interactive process that can improve the efficiency, effectiveness, and ultimately the performance of local public health systems” (NACCHO, 2015), and is suggested by the Public Health Accreditation Board (PHAB) as a standard for assessment and planning. This is achieved with multi-level processes, data triangulation, mixed methods approaches, and partnering with multiple stakeholder systems.

Although there is much variation in how the MAPP process is being implemented, there is increasing emphasis on integrating MAPP into health system CHNA efforts.
Six steps with four critical assessments in the MAPP Process are noted in the diagram below (from the NACCHO website, http://www.naccho.org):

- Step 1: Organize for Success/Partnership Development
- Step 2: Visioning
- Step 3: Four MAPP Assessments: Community Health Status Assessment (CHSA), Community Themes & Strengths Assessment (CTSA), Local Public Health System Assessment (LPHSA), Forces of Change Assessment (FOCA)
- Step 4: Identify Strategic Issues
- Step 5: Formulate Goals and Strategies
- Step 6: Action Cycle Plan
Further MAPP implementation and cost details are found in the Implementation sidebar below.


**Timeline to Implement:** 18 months is suggested timeline (MAPP Handbook, pp. 22-23).

**Product Generation and Sharing:** Numerous reports are generated and the focus is on sharing transparently on websites and through other media (e.g., hard copy of early draft reports, regular meetings with community partners to discuss findings). Specifically, four assessment reports under the MAPP process provide the foundation for the Community Health Improvement Plan (CHIP). Regularly collected data from the CDC, local and state health departments, and other organizations are also critical, and are found on public websites.

**Staffing Required:** A key dedicated full-time staff planner is critical for “success” of the MAPP process, as related by Pullen et al. (2005). Administrative assistant and epidemiologist services will be needed, at least part-time. A robust group of community partners/volunteers representing sectors of the local public health system is also necessary to insure a diversity of input is included throughout the process.

**Training Required:** Yes. NACCHO provides free online resources and training in the form of webinars and social networking, in addition to a comprehensive MAPP Guidebook. Most of these are located here: http://www.naccho.org/topics/infrastructure/MAPP/TAwebcasts.cfm. Additionally, sponsored in-person MAPP training is available for a registration fee of $1,500 for NACCHO members or $2,000 for non-members. However, local health department staff can apply for a scholarship to waive the registration fees (http://naccho.org/topics/infrastructure/mapp/framework/mapp-trainings.cfm). These meetings are held over 2-3 days typically somewhere in the DC area. Lodging and transportation are not covered by the scholarship.

**Estimated Costs:** Not fully known, but the MAPP Handbook suggests covering personal, contractual, meeting space, equipment, travel, supplies, printing and postage costs. Personal estimates from key leaders in local public health departments suggest a minimum of $150K for the full process (covering a minimum of two FTEs: coordinator and administrative type staff persons) and dissemination of reports.

**Suggested Frequency to Repeat/Update:** Once every 5 years.

**Aligned with CHNA:** Yes, often MAPP serves as a key component in partnership with local health systems who are undertaking the CHNA process.

**Strengths:** Thorough asset-based and strongly participatory process that is well-known, easily comparable across different states and counties, used to certify public health departments by the Public Health Accreditation Board and an integral part of public health infrastructure, used extensively since 2000.

**Challenges:** The process is lengthy, has limited flexibility in implementation and can be costly for under-resourced public health departments. Commonly identified areas for community health improvement focus often seem redundant and face-valid to participants, especially given the expense and work required to undertake MAPP as prescribed. Maintaining community engagement throughout the lengthy process is a challenge. Reports generated and local public health project undertakings are secondary to goals and reporting, and may not have obvious utility for health systems in their strategic CHNA efforts.

**Contact:** NACCHO MAPP Toolkits and Resources www.naccho.org/topics/infrastructure/mapp
PARTICIPATORY INQUIRY INTO RELIGIOUS HEALTH ASSETS, NETWORKS AND AGENCY (PIRHANA)

The work of the African Religious Health Assets Mapping Programme (ARHAP, now the International Religious Health Assets Mapping Programme or IRHAP), in existence since 2002, reflects transdisciplinary thinking at the intersection of faith and community health (Cochrane et al., 2011). The various ARHAP/IRHAP tools described below were derived from a deep bench of both academic theory and practice models. The qualitative data captured from using ARHAP/IRHAP models is an excellent supplement to hospital CHNA efforts, especially in terms of involving community in strategic planning for focus areas.

The original Participatory Inquiry into Religious Health Assets, Networks and Agency (PIRHANA) tool was developed in response to a World Health Organization (WHO) request/RFA in 2005-06 to “map” the religious or faith assets in at least two countries in sub-Saharan Africa experiencing the HIV/AIDS pandemic (De Gruchy et al., 2011). The model drew deeply from four basic domains of work: participatory rural appraisal (Chambers, 1980), appreciative inquiry (Cooperrider & Srivastva, 1987), ABCD (Kretzman and McKnight, 1993) and Paulo Friere’s Liberation Theology (Friere & Shor, 1987). PIRHANA’s main architect was Reverend Steve De Gruchy, PhD (1962-2010) of the University of KwaZulu-Natal, South Africa. The grounded theory of the work was established by implementing the PIRHANA process in Zambia and Lesotho, which resulted in the original PIRHANA manual (De Gruchy et al., 2007). There are four processes included in PIRHANA: GIS, participatory mapping, leadership engagement and deeper case studies (see http://www.irhap.uct.ac.za for more details).

Key differentiators between PIRHANA and its subsequent hybrids (see below for details) are the focus on both tangible (e.g., clinic and services on a map) and intangible factors (e.g., the way that care is delivered in a clinic), as well as a focus on the types and extent of relationships between healthcare seekers and providers in a given area. These differences are illustrated through individual and group exercises, including spidergrams, or social network maps. Two separate workshops (one for health seekers and one for health providers) are held and then detailed findings are reported back to both groups and any interested community members within a 4-6 week timeframe. PIRHANA also builds on a progressive logic of earlier exercises in its process. For health seekers, the maps drawn early on and entities designated as important on those maps are used for subsequent ranking exercises. Identifying exemplary individuals and organizations and teasing out characteristics which define that exemplary status has also been a signature of the ARHAP mapping processes. Also, in keeping with its community development DNA, this model seeks to make grassroots voices audible to policy makers, as well as empowering those agents on the ground to set their own agendas and strengthen sustainability (De Gruchy et al 2011).

The PIRHANA process was piloted in the U.S. in Memphis, TN, where staff were trained and eight PIRHANA workshops conducted from 2007-2008 (Cutts, 2011). Emory University staff from the Interfaith Health Program also developed hybrids of the original participatory inquiry model to map adolescent sexual health (PIRASH) in both South Africa and the U.S. South, as well as to conduct general asset mapping in Kenya (Blevins et al, 2012).
COMMUNITY HEALTH ASSETS MAPPING PARTNERSHIP OR CHAMP

In 2009, the Community Health Assets Mapping for Partnership or CHAMP was adapted from PIRHANA. CHAMP focused more on long-term partnerships with community than PIRHANA originally could in Zambia and Lesotho, with a stronger emphasis on both engaging community and continuing to develop and sustain relationships. The CHAMP language also shifted the focus from the more narrow “religious health assets” (RHAs) to “community health assets” of which RHAs are a subset. This is necessary where religion is not as ubiquitous nor as holistically experienced as in many African contexts, and it avoids the danger of thinking solely of faith communities or congregations versus broader community organizations and assets.

CHAMP was refined and developed further in South Africa in 2009 for the South African Hospice and Palliative Care Association (HPCA) by Reverend Steve De Gruchy, PhD and his team. HPCA staff were trained to conduct CHAMP-Palliative Care (CHAMP-PC) workshops and subsequently rolled out CHAMP in nine districts, with such success that the Primary Care districts of South Africa have explored various uses of the model (Kramer et al., 2012). U.S. Teams have also been trained in CHAMP in Buffalo, NY (local Area Health Education Centers or AHEC and faith community coalition) and Chicago, IL, engaging the Center for Faith and Community Health Transformation, Advocate Healthcare, the University of Chicago and others (Cutts & Peachey, 2014).

CHAMP ACCESS TO CARE

CHAMP Access to Care was developed by Cutts and others and piloted in Memphis (2011) and North Carolina (2012–2015) in response to a need for health systems providing care to vulnerable populations to better align and leverage existing assets. CHAMP Access to Care focuses on promoting dialogue between both health seekers and providers to identify local tangible and intangible assets and gaps in care, and results are often incorporated into hospital CHNA processes. A good example of how intangible assets are identified and used can be seen in the four North Carolina CHAMP Access to Care workshops conducted with the Hispanic community in Forsyth County in July 2014 (Cutts et al., 2016). Findings from these workshops are being used to establish improved policies for care of Hispanic persons in local safety nets (e.g., changing sliding scale guidelines, building trust with providers, promoting delivery of more respectful care). The key focus is building trustworthy partnerships between both health seekers and providers to improve care quality and access, particularly by engaging leaders of local safety net organizations.

CHAMP SPECIALTY MAPPING

CHAMP has also been used in Memphis for specialty efforts to map elder care (2009) and behavioral health services (2010), as well as a System of Care project (2010-2012), in which youth were trained to conduct GIS and participatory mapping workshops. Additionally, North Carolina recently adapted it as CHAMP-Food Pathways. This process makes visible common ways that community members adapt to and work toward food security and to better align provider services (Cutts & Jensen, 2015). See sidebar below for more details on the PIRHANA, CHAMP and other hybrids of these models.

SCRATCHMAPS

SCRATCHMAPS (Spiritual Capacities and Religious Assets for Transforming Community Health by Mobilization Males for Peace and Safety) is another hybrid of the PIRHANA/CHAMP models, developed as a research study led by Professors Sandy Lazarus and Mohamed Seedat. This CBPR study was designed to answer the question, “How can mobilizing spiritual capacities and religious assets promote
How can the mobilization and leveraging of spiritual capacities and religious assets promote safety and peace, particularly in relation to young men, in specific communities in South Africa and the USA?

Based at the Violence, Injury and Peace Research Unit (South African Medical Research Council and the University of South Africa), the study compared workshop findings from Erijaville, South Africa, and Memphis, TN. The project included the mapping of spiritual capacities and religious assets as part of creating a community-based intervention to decrease inter-personal violence among young men of color (Lazarus et al., 2014). Community members and service providers in both South African and U.S. sites identified common intangible factors that promote peace and safety. These included personal values and behavior (such as love, compassion and prayer), family relationships (such as family socialization, care, role modeling, and peer guidance or sharing from peers versus family members), and community connectedness (such as trust and leadership), all with strong implications for prevention (Cutts et al., 2016, accepted for publication).

A recently published concept paper explored the central elements in this project (Cochrane et al., 2015), including spiritual capacity, religious assets, masculinities and violence prevention, and health promotion. It also addressed the concept of Leading Causes of Life (Gunderson with Pray, 2009), including resilience and connectedness as components of health and safety promotion (see figure above, reproduced with permission, from Cochrane et al., 2015).

COMMUNITIES OF SHALOM

Another example of an explicitly faith-based model of mapping with CHNA relevance is the Communities of Shalom model (Communities of Shalom, 2015) or SHALOM ZONES. SHALOM ZONES were initiated by the General Conference of The United Methodist Church (UMC) in response to
**CHAMP/PIRHANA/SCRATCHMAPS IMPLEMENTATION DETAILS**

**Timeline to Implement:** 2 day-long workshops (one for health seekers or community members, one for health service providers), with a minimum 90-minute follow-up meeting within 4-6 weeks post-workshops. Note that SCRATCHMAPS requires a full-day “Action Planning” workshop beyond a simple report follow up.

**Outputs/Product Generation and Sharing:** 2 reports from workshops, enhanced and validated GIS maps and PowerPoint with summary information for follow up meeting. Reports transparently posted on website after follow up meeting, with select number of hard copies of reports produced for participants.

**Staffing Required:** 8 staffers per meeting (minimum of 2 facilitators, 2 scribes, 2 photographers and 2 “runners”).

**Training Required:** Yes. IRHAP staff suggest two days of theory and preparation, then running a seeker/community members and service provider workshop and follow up meeting, as training package.

**Estimated Costs:** To run a set of workshops: $2,500 total ($1,500 for workshop supplies, report production and printing costs; $250 each for each workshop host site, for a total of $500; meals for participants, $500). This does not include training costs.

**Suggested Frequency to Repeat/Update:** Once every 3 years.

**Aligned with CHNA:** Yes, the qualitative data captured is an excellent supplement to hospital efforts, especially as regards community involvement in strategic planning for focus areas.

**Aligned with MAPP:** Yes, the qualitative data captured is an excellent supplement to MAPP efforts.

**Strengths:** Great community engagement strategy and springboard for future involvement of community members; excellent platform for long-term strategic work of trust repairing and trust building in communities and creating a foundation for CBPR.

**Challenges:** Somewhat rigid and lengthy structure that requires extensive training to conduct and a good deal of human resources to implement. The workshops entail moderate costs.

**Contact Person(s):** For CHAMP, CHAMP-Access to Care or CHAMP-Behavioral Health, Teresa Cutts at cutts02@gmail.com; for SCRATCHMAPS, Naiema Taliep at naiema.taliep@mrc.ac.za; CHAMP-Food Pathways, Mark Jensen at mjensen@wakehealth.edu

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The civil uprisings in Los Angeles in 1992 that followed the “not-guilty” verdict for the police officers involved in the beating of Rodney King. According to their website (www.CommunitiesofShalom.org, 2015), seven local United Methodist churches (representing African American, Korean and Caucasian communities) came together to create the first “Shalom Zone” to work on systemic issues and rebuild a community devastated by racial conflict, riots, violence and social injustice. The model combines ABCD with community organizing and faith-motivated coalition building.

Shalom Zone Training entails completing seven sessions of online or onsite training in the strategies and skills of ABCD. It also includes biblical reflection on Jeremiah 29:1-12, reflecting on how ancient textiles from Jerusalem learned to “seek the shalom” of the community to which they had been sent, knowing that “if Babylon prospers, they too would prosper.” Applying the biblical principles of Shalom (health, wholeness, well-being, shared prosperity) as well as mapping local assets across ethnic, cultural and religious lines of difference, it has resulted in an ecumenical network of local churches and other community-based coalitions focused on community health and a higher quality of life. Currently, there are shalom zones in over 20 Annual UMC Conferences in the USA, as well as in Haiti, Northern Ireland, Malawi and Uganda (www.CommunitiesofShalom.org, 2015).
Though Methodist in origin, Communities of Shalom work is ecumenical and inclusive of other faith traditions. It focuses on community health, immigration reform, decreasing youth violence, conflict transformation, after-school education, and economic community development as well as more traditional ministries of care for the poor (www.CommunitiesofShalom.org, 2015). Previously housed within Global Ministries of The United Methodist Church from 2008-2014, the Shalom Initiative was based at Drew University, where it was supported by the Shalom Resource and Training Center on campus. While it is still affiliated with Drew Theological School and its curriculum remains incorporated into its Doctor of Ministries program and summer internships, Communities of Shalom today offers basic and specialized training and support through its certified National Trainers and online through NorthwindInstitute.org (M. Christensen, Personal Communication, November 23, 2015; see sidebar for details).

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<thead>
<tr>
<th><strong>COMMUNITIES OF SHALOM: IMPLEMENTATION DETAILS</strong></th>
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<tr>
<td><strong>Timeline to Implement:</strong> Minimum 7-week (42 hours) training on 7 strategies of community development, the asset mapping process, and biblical reflection on relevant texts that illustrate Shalom principles.</td>
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<tr>
<td><strong>Outputs/Product Generation and Sharing:</strong> Platform for community development efforts; program development and implementation.</td>
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<tr>
<td><strong>Staffing Required:</strong> Voluntary association with no paid staff.</td>
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<tr>
<td><strong>Training Required:</strong> Yes. Online Shalom course offered through Northwind Institute, and onsite Shalom Training offered by certified regional and national trainers affiliated with Drew Theological School, <a href="http://communitiesofshalom.org/online-shalom-course">http://communitiesofshalom.org/online-shalom-course</a>.</td>
</tr>
<tr>
<td><strong>Estimated Costs:</strong> $150 for 8-week online course and/or contracted on-site training.</td>
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<tr>
<td><strong>Suggested Frequency to Repeat/Update:</strong> NA.</td>
</tr>
<tr>
<td><strong>Aligned with CHNA:</strong> Yes, could be a faith-based collateral addition to CHNA process.</td>
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<td><strong>Aligned with MAPP:</strong> Yes, can be useful to guide phases of the MAPP process from faith-based perspective.</td>
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<tr>
<td><strong>Strengths:</strong> On-line training is easily accessible and relatively low cost for users to train to develop their own Shalom Zone focused on sustainable community development vs. simple mapping of assets.</td>
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<tr>
<td><strong>Challenges:</strong> Time commitment requirements and training are substantial. Program is tied to biblical mandates and ministry principles, so the Shalom approach will primarily resonate with people of religious faiths, probably primarily Christian (although interfaith in intent).</td>
</tr>
<tr>
<td><strong>Contact Person(s):</strong> Michael Christensen, Ph.D. at <a href="mailto:shalommaster@gmail.com">shalommaster@gmail.com</a></td>
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PARTICIPATORY HOT SPOTTING

Another version of mapping, often used by health systems as part of CHNA efforts, focuses on using hospital records to track patients to their homes and is termed “hot spotting.” Jeffrey Brenner, MD, and his colleagues at the Camden Coalition of Healthcare Providers (Gawande, 2011) popularized hot spotting in the health system arena, where they GIS-mapped the addresses of hospital patients who were high utilizers of the emergency department, and discovered that many were clustered in a series of high-rise apartments in Camden (Gawande, 2011). Memphis Colleagues in the Congregational Health Network (CHN), a partnership between over 600 congregations and Methodist Le Bonheur Healthcare (MLH), and the business and strategic development staff of MLH took this patient hot spotting model a step further in what they titled “participatory hot spotting” (Cutts et al., 2014). Persons identified as high utilizers through the electronic medical record were engaged on the ground in target zip code 38109 through relationships among those persons, local church members and clergy, including focus groups, home visits and training programs. A place-based navigator, Joy Crawford Sharp, was also involved (her story was shared in Chapter 5), and the outreach effort saw decreases in the need for charity care services from 2010-2012 (AHRQ, 2013) among the residents of the targeted zip code.

Tools for Community Mapping

A variety of tools and databases exist to aid in community mapping efforts, some of which are described briefly below.

GEOGRAPHIC INFORMATION SYSTEMS OR GIS

The most basic of mapping tools is the one that most of us use on our cell phones daily: Geographic Information Systems (GIS). Used for community mapping, GIS combines location data with both quantitative and qualitative information and allows one to visualize, analyze and report information through maps and charts (Kramer et al., 2012; Esri, 2010). This is often easier to grasp and interpret than numerical, tabular or narrative formats (Kramer et al., 2012). GIS “…are computer based systems for the integration and analysis of geographic data,” but also serve as an “enabling technology” that allows other methodologies, like MAPP, to model spatial data “where people live and the environments they experience” (Cromley & McLafferty, 2002, p. 340).

Previously, highly specialized Mapping Laboratories (heavily funded at local universities) were required to create even basic maps. However, by the mid-2000s, technology had improved to the extent that such labs were no longer needed and much more nimble models of mapping assets were available through Esri and other vendors (e.g., Just Maps, GoogleMaps). Esri, founded in 1969 (http://www.esri.com/about-esri/history), was an early pioneer that helped develop GIS as the commonly used tool it is today. MapObjects, Esri’s first component-based software, became its first platform for publishing maps on the Internet in 1996, and in 1997 Esri reached a milestone with the release of ArcGIS Explorer, providing GIS for everyone. The desktop settings, in which hardware, software and data are on local networks, can require significant investment in terms of finances and training staff. The company released ArcGIS Online in 2012, a cloud-based mapping system for organizations that offers collaboration tools for cataloging, visualizing, and sharing geospatial information. ArcGIS 10, now in version 10.4, also debuted at that time, enabling users to deliver any GIS resource as a web service, and putting geographic information in the hands of more people. The cloud-based GIS, although increasingly accessible, and often free, may offer less functionality in creating layered maps.

The power of GIS for participatory asset mapping lies in its ability to enable users to visualize and explore geographic (or spatial) components in combination with communities’ context/interpretation of the
Many of the participatory mapping models described above rely on GIS-generated data to augment or provide a foundation for their particular methodologies. For example, PIRHANA and CHAMP models build on existing GIS maps, which are then “validated” by participants (De Gruchy et al., PIRHANA manual, 2007).

**CDC COMMUNITY HEALTH IMPROVEMENT NAVIGATOR**

The Community Health Improvement (CHI) Navigator, developed by the Centers for Prevention and Disease Control (CDC), is vital for both community members and health systems, and was first made available to the public in 2015. Information on the CHI Navigator was excerpted from an interview with the CDC’s Denise Koo, with her permission. The CDC developed the CHI Navigator (www.cdc.gov/CHInav/) in response to the passage of the Affordable Care Act (ACA) and its section 9007 regarding Community Health Needs Assessment for Charitable Hospitals following a request for technical assistance from the Internal Revenue Service (IRS).

CDC staff first worked with IRS to help shape the initial guidance and Final Rule, but quickly realized that resources and tools were vitally important to help translate the regulation into implementation strategies that could truly affect the health of the community. CDC then created the CHI Navigator (www.cdc.gov/chinav/) as a unifying framework and source of tools and resources to be used by hospitals, health systems, public health agencies, community organizations, and other stakeholders interested in improving the health of their communities.
The CHI Navigator differs from other, similar resources in several ways. Its signature infographic (see above) provides an evocative visual tool that facilitates dialogue about what affects health, where to focus one’s efforts, with whom to collaborate, and how to have the greatest impact on health. This infographic has been downloaded an average of 150 times a week since the site went live in May 2015, in addition to being an exceedingly popular handout at meetings.

The CHI Navigator provides succinct, focused examples of health systems collaborating with others outside of the health care field, but still identifies strategies that address bottom-line outcomes important to the health care system (such as decreased admissions or readmissions, decreased emergency room visits, and increased per-patient per-month cost savings). These stories show the importance of collaborative partnerships crucial to the new value-based healthcare system.

There are numerous tools in the marketplace and on the Internet, but many of them are just extremely long lists. The CHI Navigator tools section “curates” these tools. The CDC carefully reviewed hundreds of tools to find those that both conceptualized and operationalized some key concepts. The tools are also presented to the user in a community health improvement—process framework that provides some sense of what each tool offers and exactly where to go for the appropriate guidance (not only the general URL for the tool, but what section or page).

The unique CHI Navigator search engine pulls together evidence-based interventions from multiple sources for specified high volume, high impact conditions underlying the leading causes of disease and death. Many people do not know that individual-source databases exist, much less, how to comb through them for focused interventions that target their desired risk factor. CDC has done the work of identifying these sources, reviewing interventions from them and adding useful filters or tags to make it easier for users to find those that work that they might consider using with their partners (see sidebar below for more details about the Navigator tool).

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<thead>
<tr>
<th>CHI NAVIGATION TOOL IMPLEMENTATION DETAILS</th>
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<tbody>
<tr>
<td><strong>Timeline to Implement:</strong> Only time required to review the website and use tool; estimated 1-2 hours maximum.</td>
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<tr>
<td><strong>Outputs/Product Generation and Sharing:</strong> Free website: <a href="http://www.cdc.gov/CHInav">www.cdc.gov/CHInav</a>. Can help health systems create their own plan, adapting resources and programs that have been used in other settings.</td>
</tr>
<tr>
<td><strong>Staffing Required:</strong> Local staff reviews website or partnerships explore together.</td>
</tr>
<tr>
<td><strong>Training Required:</strong> None specifically, but webinars are archived to expedite use (e.g., at <a href="http://www.stakeholderhealth.org">www.stakeholderhealth.org</a> and <a href="http://CommunityCatalyst.org">http://CommunityCatalyst.org</a>).</td>
</tr>
<tr>
<td><strong>Estimated Costs:</strong> Free.</td>
</tr>
<tr>
<td><strong>Suggested Frequency to Repeat/Update:</strong> NA.</td>
</tr>
<tr>
<td><strong>Aligned with CHNA:</strong> Yes, tool/site was developed to aid in creating more robust CHNA processes.</td>
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<tr>
<td><strong>Aligned with MAPP:</strong> Yes, can be useful to guide phases of the MAPP process.</td>
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<td><strong>Strengths:</strong> Free and easily accessible for all users; aligned with ACA and IRS thinking about creating CHNAs and community benefit plans that are robust and useful. Looks at various social determinant domains beyond usual health system programming.</td>
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<tr>
<td><strong>Challenges:</strong> Offers prototypical best practices and ROI when available for programs in other settings. May be difficult to generalize that information to other settings and apply to those settings.</td>
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<td><strong>Contact Person(s):</strong> Denise Koo, MD, MPH at <a href="mailto:dxk1@cdc.gov">dxk1@cdc.gov</a> or <a href="mailto:healthpolicynews@cdc.gov">healthpolicynews@cdc.gov</a></td>
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Hospitals and health systems can use the CHI Navigator’s examples, framework and tools to strengthen their partnerships with public health and other partners, conduct needs assessments, and develop community health improvement plans collaboratively. They can use its database to identify evidence-based interventions for population management plans or community health implementation strategies, move their partnership from planning to action and, in the end, improve community health and well-being. The Navigator also includes quotes from the IRS Final Rule on CHNAs for Charitable Hospitals (2015) that underscore the connection to hospital community benefit work (although we believe that much of the CHI Navigator can be helpful for all of their work, especially as we move to a value-based healthcare system).

COMMUNITY COMMONS

Community Commons, managed by the Institute for People, Place and Possibility, the Center for Applied Research and Environmental Systems, and Community Initiatives, is a website for data, tools, and stories to inspire change and improve communities (www.communitycommons.org/about/). Run by a dedicated team from a wide variety of backgrounds, it provides public access to thousands of meaningful data layers. The data allows mapping and reporting capabilities that thoroughly explore community health, and focuses on three domains: blending the art and science of change and making meaning of the data and tools; making public data available with easy-to-use visualization tools: and, bringing deep expertise and broad experience in coaching, training and supporting local and national change efforts. Driven by Kaiser Permanente, other partners include the Robert Wood Johnson Foundation, the American Heart Association, CDC and the University of Missouri.
The goal of Community Commons is to increase the impact of those working toward healthy, equitable, and sustainable communities by helping users access tools to gain a deeper understanding of community assets and opportunities, and to use data visualizations to convey that knowledge through partnerships and collaboration (http://www.communitycommons.org/about/, 2015). The Commons works best when those collaborations create and implement plans of action and return their knowledge of what works and what does not back to the greater Commons’ community. The sidebar above offers a visualization of the Community Commons Platform for their general theory of action.

Users of Community Commons can build maps down to census tract level, and focus on the different “channels” of economy, education, environment, equity, food and health. Additionally, users can build a comprehensive CHNA, identify populations without health insurance, identify mortality data by certain conditions (e.g., heart disease), and construct a “vulnerable populations footprint.”

COUNTY HEALTH RANKINGS & ROADMAPS WHAT WORKS FOR HEALTH (WWFH)

The County Health Ranking Roadmaps (CHR&R) has been briefly described in earlier chapters, but one of its key tools that can be used for mapping is What Works for Health (WWFH). Developed by the University of Wisconsin Population Health Institute in collaboration with the Robert Wood Johnson Foundation, WWFH is an on-line tool to help find policies, programs and systems changes that affect the factors that we know make communities healthier places to live, learn, work and play (WWFH one pager, 2016; found at https://countyhealthrankings.org/what-works-for-health). WWFH contains ratings of intervention effectiveness, literature summaries and implementation resources for over 360 policies and programs. The site can be searched by keyword (e.g., obesity) or browse by health factor (e.g., Community Safety), decision maker (e.g., Business) or evidence rating. WWFH also offers expected beneficial outcomes, key points from relevant literature, examples of toolkits and other resources to help move toward action steps and an indication of the strategy’s likely impact on disparities. Lastly, WWFH not only includes policies and programs that hospitals or health systems might want to consider to help improve greater community health, but also summarizes evidence-based approaches to improving the value of clinical care.

Community Members featured on RWJF County Health Rankings & Roadmaps and What Works for Health Website (used with permission from RWJF)
**Key Strategies and Considerations**

We now shift focus to key strategies and considerations that relate to the planning, implementation and utilization of asset mapping, particularly at the intersection between health systems and community partnerships. We begin with a series of case studies on how CHNAs can be better integrated with community asset mapping efforts to enhance health systems strategic planning and long-term work.

**CHNAS, “MAPPING ASSETS” AND HEALTH SYSTEM STRATEGY**

Multi-sectoral collaboration, shared outcome goals, improved health, and health equity are all aspirations, as well as “healthy communities” tools for hospitals and community partners to integrate broad community needs into hospitals’ strategic planning by deeply listening to community members and incorporating that “learning” into their ongoing work. Often, these tools are not top priority for hospitals. The pressing issues of providing quality care, readmissions and overuse of Emergency Departments can spawn internal efforts to manage disease—without consideration of the factors that cause poor health and chronic conditions. Traditional projects measure the effectiveness of clinical projects but are not applicable to evaluating investments in population health, social determinants and community health improvement.

The ACA requirement for broad CHNAs gives hospitals the keys to the healthy communities “tool box” and a path to broad, strategic thinking around health improvement. Carefully conducted CHNAs look at disease and mortality rates, but also identify the “determinants” of health in communities, especially those with high rates of disease (CDC, 2013). But these same assessments can also map or make visible the assets often not seen by health systems that are key building blocks in strengthening community health. In this sense, the terminology of “needs” assessment falls short for, as we have stressed in the models discussed above, “assets” (especially those held by communities themselves, whether latent or actively utilized) are as important if not more important than needs. An asset focus can better and more sustainably empower community members and instill hope.

A dynamic example of building on the CHNA can be seen in Adventist Florida Hospital’s work with the Bithlo community in Florida (reported initially in the HSLG Monograph, 2013, p. 30). Florida Hospital in Orlando, part of the 44-hospital Adventist Health System in 10 states, is also part of a broad coalition called the Bithlo Transformation Effort. Bithlo is a semi-rural community of 8,200 residents just miles from Orlando, the “Happiest Place on Earth.” After 80 years of generational poverty, Bithlo residents still endure high unemployment, substandard housing, minimal public transportation, and high illiteracy rates. Drinking water (from shallow wells) is tainted by rust and carcinogens from an eight-acre illegal landfill, sixteen junkyards and an old gasoline leak.

Not surprisingly, Bithlo has high rates of diabetes, heart disease, asthma, low birth weight babies, and depression. Many residents appear “non-compliant” with diet, medication adherence, exercise, and so on, but the reality is that health and health care are people’s least concerns. Their issues revolve around basic needs: food, clothing and shelter, and they often lack access to venues that make healthy choices easier to make.

A small 501c3 called United Global Outreach (UGO) began work in Bithlo in 2010. Residents, through a participatory mapping process, had identified education, housing, transportation, the environment, health care, basic needs and sense of community as their most urgent challenges. Florida Hospital joined the Transformation Effort in 2010.

“Hospitals typically focus on health care and are used to leading community projects,” said Lars Houmann, Florida Hospital CEO. “This commitment is different. Health care will not be our primary focus,” he continued. “Instead of health care only, we will join with UGO and other community partners to address the deeper issues identified by Bithlo residents,” (L. Houmann, Personal Communication, April 26, 2016).
With support from Florida Hospital and other partners, Bithlo now has a town center with a private school, public transportation, library, GED program, and a community garden. A community health center and other partners offer primary care, mental health, dental and vision services. There is a plan for environmental cleanup and clean water. The hospital contributed some dollars but more importantly, engaged its community, business, education and faith partners in the Transformation Effort.

The Bithlo Transformation Effort is an example of a hospital moving outside of its walls to address social health determinants. There is recognition that good health is based on a complex interaction of factors that contribute to hospital utilization, improved outcomes and improved conditions in the broader community. CHNAs challenge all hospitals to recognize that good health is not as simple as diabetes education or blood pressure checks. Rather, health foci must be strategically driven by data, needs and assets, and contextualizing the lives of those served in our respective communities.

Similarly, Advocate Health Care used the CHAMP model with BroMenn Medical Center in Bloomington/Normal, IL, to bring together their congregational network, faith leaders and service providers to identify how faith communities are contributing to the health and well-being of people in the community. Across four workshops with community members, faith leaders, congregation members and service providers, the common theme was a desire for strong, diverse, connected communities. All participants thought that one of the main ways that faith-based entities could help foster health and wellness was by leading efforts to build community among residents. Health seekers wanted to know each other better and wanted communities to be safe and welcoming for all people, while providers wanted to come together more regularly to connect and network. This information will be incorporated into Advocate’s regional Community Health Needs Assessment and help inform the implementation planning process.

Other examples include Tacoma, WA, where two competing health systems (Multi-Care Health Systems and Catholic Health Initiatives [CHI] Franciscan Health) have joined together to work on achieving health equity in Pierce County. Led by the Northwest Leadership Foundation and their Leaders in Women’s Health community network, some of whom are African-American and Hispanic breast cancer survivors, this group is undertaking CHAMP Access to Care in 2015-16 to supplement the critical health equity work already being done by the Tacoma Pierce County Health Department and their Community Health Improvement Program (CHIP). The group will focus on three of the most vulnerable Pierce County neighborhoods, which coincide with the areas the health department identified through key hotspot mapping foci on health and other disparities.

**NON-INSTRUMENTAL COMMUNITY ENGAGEMENT**

Besides being a critical part of ongoing CHNA assessments, community asset mapping can be seen as a specific form of community engagement (Kramer et al., 2012). However, with the push to make CHNAs more relevant (via the federal mandate mentioned earlier), hospital leadership may fall into the trap of using both CHNAs and other mapping efforts as a means to “check the box” on their community engagement strategies or delivery of community benefits. Such leaders, who focus on harvesting and “using” community intelligence without a commitment to building genuine and trustworthy partnerships, can damage fledgling collaborative efforts.

This is the reason why our colleagues in the ARHAP/IRHAP group stress that its PIRHANA and CHAMP methods should not be used instrumentally or as an end unto itself (Cochrane & Gunderson, 2012). Instead, community asset mapping must be viewed as a first step or “springboard” to engage community partnerships that integrate both hospital and community assets. Hospital leaders must see that community members are agents capable of shaping their own contexts with the use of appropriate and available resources (De Gruchy et al., 2007; Kramer et al., 2012).
Indeed, as we will share later in this chapter and in Chapter 8 (outlining the financial impact), we see community asset mapping as a critical first step to building viable and sustainable health systems and community partnerships that have demonstrated true impact in improving disparity, healthcare utilization and finances. In addition, finding synergies between community asset mapping efforts and internal “mapping” of health system data and indicators provides a very rich data set that can be leveraged strategically to inform program development, plan initiatives, allocate resources and evaluate progress.

**ADDRESSING HISTORICAL TRAUMA**

In addition to becoming an integral aspect of health system CHNAs, strategic planning and implementation efforts, community asset mapping is also useful in exploring historical trauma through truth telling, reconciliation and community healing, and trust building. This is especially apparent where fractured relationships among marginalized communities, health systems or other power brokers negatively affect services and delivery.

“Historical trauma” is a term first used by Brave Heart and DeBruyn (1998). It draws on the literature of Jewish holocaust survivors (Brown-Rice, 2014) and links the current problems facing the Native American people (among others) to the “legacy of chronic trauma and unresolved grief across generations” enacted on them by the European-dominant culture (Brave Heart & DeBruyn, 1998, p. 60). Historical trauma, transferred to subsequent generations through biological, psychological, environmental and social means, is thought to result in cross-generational cycles of trauma (Sotero, 2006).

Historical trauma is present in virtually all communities (Mohatt, Thompson, Thai & Tebes, 2014), and is also particularly relevant to the understanding of community health disparities in minority populations, which are often made visible in CHNAs. Health systems, sadly, have sometimes been anchor institutions either complicit with or actively engaging in those traumatic events (CDC, 2013). In Memphis, for example, mapping exercises unearthed a widespread distrust of the hospital system, particularly among older members of the African-American community who held the belief that “a hospital is where you go to die,” (Personal Observation, Teresa Cutts, 2013). In Forsyth County, North Carolina, the academic health system’s history included running a decades-long eugenics program until 1973, through which both poor whites and blacks were involuntarily sterilized (Begos, Deaver, Railey & Sexton, 2012). Marginalized communities’ long memories of such medical injustices rendered the academic medical hospital worthy of distrust, a place where persons are “experimented upon,” to be used only as a last resort. Such distrust is dislodged only by new, credible and trustworthy actions.

Historical trauma can also extend beyond hospitals to supposedly trusted agents in the community. In Chicago, mapping efforts in two low-income African American communities (in July 2011) unveiled a strong dynamic of mistrust, collective grief and disappointment in institutions that were meant to serve the community. The church was also a source of mistrust; participants noted that even clergy could be agents of abuse as well as complicit with power and political systems. The CHAMP process opened a powerful space for people to name and reflect on their experiences, and engage in a social analysis of their context. This experience led organizers to adapt the workshops to include ritual space to acknowledge wounds as well as to name those things that are whole and good in the community.

While the CHAMP process has helped make visible these past injustices and sets the stage for a dialogue to rebuild trust, we recognize that holding a few workshops will not repair decades of historical trauma and unjust actions. Nonetheless, asset-mapping workshops can signal that this is a “new day” in which the health system (and other community support services) begin to own their past unjust acts and make efforts to reconcile with the community. Often these efforts coincide with long overdue state restitution programs, such as that related to eugenics in North Carolina (Mennel, 2014). Stakeholder Health believes that speaking truth to power, while acknowledging past injustices and authentically attempting to
rebuild trust between health systems and communities, is essential for both health and equity in general (Health System Learning Group, 2013). This has been particularly evident where community members have had direct access to, and engaged in dialogue with, local health system providers in a more active and mutually accountable fashion.

BUILDING MUTUAL ACCOUNTABILITY BETWEEN HEALTH SYSTEMS AND COMMUNITY MEMBERS

Mutual accountability between health systems and communities has been most evident in sites where the mapping process led to internal health system policy changes, as well as energizing and mobilizing community members as active participants in self-management of chronic diseases, in addressing neighborhood problems, and in improving the educational and workforce status. Additionally, mapping efforts in some instances have resulted in improved healthcare utilization or community indicators. In Memphis, for example, based on the education that health seekers identified as needed, the Congregational Health Network (CHN) developed 14 training programs (Care at the End of Life, Mental Health First Aid, Navigating the Healthcare System, Hospital Visitation, Cancer, Medicine and Miracles, Chronic Diseases You Can Live With, etc.) offered over 7 weeks; over 4,000 persons have taken the programs. These events have helped empower congregational and community members both to care for their own and their peers’ health more actively and to begin to build trust with providers (Cutts, 2011). These trainings, coupled with the work of Paula Jacobs and her team at Methodist North Hospital (MLH), also resulted in a decrease in disparity in sudden cardiac death in African Americans in Memphis (Cutts, Jacobs & Bounds, 2013). As part of the Aligning Forces for Quality (AF4Q) work on race and ethnic disparity, Paula’s team was charged with establishing an ideal clinical practice for cardiac disease. Although the hospital achieved this goal in treating Congestive Heart Failure (96%) and Acute Myocardial Infarction (100%)—rates which were the highest of 8 sites—the work also unearthed the fact that African-Americans were dying at twice the rate of Whites in its Emergency Department. CHN leaders then engaged the CHN Liaison Advisory Council (a self-organizing group of women who serve as “gatekeepers” of CHN’s interaction with researchers and other community agents and organizations) and CHN members to tap into community wisdom about why these death rates were so high.

Findings from the CHN members were then used to improve both community and medical staff education, led to simplification of discharge materials for cardiac patients, and to co-branding and teaching of those modules in CHN Chronic Disease sessions. These combined efforts helped MLH decrease its disparity in sudden cardiac death among African-American persons at its Methodist North hospital by 16 % between 2010 to 2012 (Cutts, Jacobs & Bounds, 2013). Additionally, CHN and community members have begun their own efforts to create community gardens, reclaim and take over ownership of blighted properties, and work as a group to apply for state level funding to maintain these properties. These examples have taught health system leaders and staff the value of community members in activating and engaging partners in improving their individual and community-level health.

CREATING A FOUNDATION FOR COMMUNITY-BASED OR ENGAGED RESEARCH

Community asset mapping also creates a foundational platform for Community Based Participatory Research or CBPR (Wallerstein & Duran, 2006). CBPR, in its best iteration, can build trust, focus on long-term and sustainable partnerships and help design, implement and conduct research, with equal voices in terms of determining shared risks, benefits and allocation of resources across communities, academics and health systems (Sandy & Holland, 2006). Lessons about how best to conduct and implement CBPR with cultural sensitivity and strong ethical standards (Burhansstipanov & Schumacher, 2005) can make asset mapping a potent investment in long-term, authentic health system and community partnerships.
An example of such efforts comes from Dr. Stacy Tessler Lindau and her team from South Side Health and Vitality Studies at the University of Chicago, (http://uhi-dev.uchicago.edu/what-are-south-side-health-and-vitality-studies). This group has developed the innovative “Community Rx” program that connects patients in doctors’ offices and clinics with community health resources in Chicago’s South Side in order to help patients stay healthy, live independently and manage disease, while supporting local businesses and organizations. Funded by a 2012 Centers for Medicare & Medicaid Health Innovation Award, their system processes patient data and prints out a “Health-eRx” for patients, including a customized map and list of health and social resources in their community. The initiative includes MAPS Corps (Meaningful Active Productive Science in Service to Communities), the engine that powers Health-eRx, by training and employing local high school students to map a community’s health assets (Lindau, 2014). The South Side Health and Vitality Studies, in partnership with Chicago Health Information Technology Regional Extension Center (CHITREC) and the Alliance of Chicago Community Health Services, developed the MAPS Corps system through which data is captured via smart phones with web-enabled applications called “MapApp” (http://healtherp.org/mapscorps/about-mapscorps).

Every summer, local youth go out on foot in the neighborhood to identify and update existing (and often inert and outdated) community resources data. MAPS Corps student researchers continuously update this electronic database of community health resources, which is shared publicly and linked to the electronic health record database of local safety net providers. This partnership, leveraging healthy local resource “prescriptions” for primary care patients and a mapping program run by student researchers, uniquely builds relationships and trust, refreshes resource listings, and engages local youth to validate the information on the resource maps that Dr. Lindau’s team uses in primary care settings (Lindau, 2014). This partnership model, which nurtures trust, creates the foundation for a pipeline for a future workforce and aids the career development of youth of color embedded in this community.

DATA GATHERING, USE AND SHARING ACROSS STAKEHOLDERS

Another unique example illustrating how data and community asset mapping methodologies can be used to integrate data sets across public and community health initiatives and health systems, while also engaging community members, is seen in the work of King and others (2016, submitted for publication). King and his team have developed a Community Health Record Project in Shelby County, TN, supported by the CDC’s Division for Heart Disease and Stroke Prevention. This work builds upon the electronic health record (EHR) in hospitals, the personal health record (PHR), and the University of Wisconsin-Madison Population Health Institute’s Mobilizing Action Toward Community Health (MATCH) county level tools, standardized information and measures, and guidance for improving population health. While the MATCH system (Kindig, et al., 2010) web-based County Health Rankings tool integrates a broad array of health information for end-users to characterize a county’s health and make comparisons over time to others and the nation, there is a missing piece.

The Community Health Record (CHR) (King et al., 2016, submitted for publication) aims to provide relevant and timely information to help end-users with health-related decision-making. The principal difference between the CHR and other systems is that it proposes to integrate and presents standardized multi-stakeholder information at community levels ranging from the address to census block, census track, neighborhood and/or zip codes. Moreover, the CHR is communally owned and therefore requires a significant social component to initiate and sustain collaboration and information exchange among stakeholders. The goal is to inform, target, monitor and evaluate a portfolio of community health interventions, recognizing that these issues can be simultaneously addressed across the spectrum of health by multiple groups. Collectively, these efforts provide a foundation for health care, public health and community partners to better understand and manage the health of their population.
The CHR Framework (illustrated here) is a multi-tiered, multi-stakeholder model to facilitate CHR development. It describes an iterative and participatory process for achieving collaboration and information exchange between healthcare, public health and community organizations. Identifying key concepts and a technical infrastructure to facilitate CHR development, its aims are to: 1) enable meaningful collaboration, 2) facilitate a shared approach, 3) build workforce and infrastructure capacity, and 4) establish a new way of doing business that enables the transformation of community health data into information and information into knowledge to aid decision makers in collectively improving population health. Although still in its early development phase in Shelby County, TN, the CHR model has great potential to make data more useful to a variety of stakeholders in ways that can truly transform community health.

**MAKING GRASSROOTS VOICES HEARD BY POLICY MAKERS**

Lastly, community asset mapping also makes grassroots “voices” audible to those who influence health policy. The 2014 Forsyth County mapping of Hispanic seekers and providers described earlier in this chapter (Cutts et al., 2016) generated information that highlighted the need for, and expediting the development of, a healthcare identification card for undocumented persons, so that they could legally obtain necessary prescription medications. These mapping findings were critical in engaging local governmental officials and in enlisting two competing health systems in providing health ID cards to undocumented Hispanics. The first FaithAction ID drive, held in Forsyth County on Jan. 8, 2016, attracted 580 undocumented persons seeking a picture ID. It was supported by both local health systems, city police and sheriff department staff, as well as a nearby coalition that produced the ID cards; unprecedented trustworthiness was demonstrated by those participants. Keeping elected officials invested in providing this form of justice in healthcare for undocumented people is especially critical in North Carolina, where an anti-immigrant focus has grown in the past several years (White & Gill, 2015).

Reports from those mapping workshops have also been incorporated into several other vital initiatives, such as the Latino Migration’s Project of Building Integrated Communities, which is designed to better integrate immigrants into local North Carolina communities (White & Gill, 2015).
Summary

Stakeholder Health strongly promotes the use of the community asset-mapping models shared in this chapter (or some hybrid of them). The models are strong vehicles for building and strengthening a system of health outside hospital walls, even as they are integrated with CHNAs as part of health system strategic planning. Further, such mapping also aids in fostering mutually accountable partnerships, dealing with historical trauma, building trust and promoting equity and justice in health and healthcare, and in general.

We deeply suspect that those health systems that can intentionally de-center their own power base in the community, as well as actively listen and partner with community members, will in the future be the most successful in their efforts to improve healthcare upstream and reduce their charity care margins. Implementing such mapping efforts can result in positive social return on investment for systems that care for vulnerable populations but need to view their own landscape with fresh eyes. This process can instill hope for overall health improvement and social justice-focused change via truly transformative partnerships.

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