Mapping an Emerging National Health Equity Network

Findings from a Social Network Analysis of Organizations Serving Asian Americans, Native Hawaiians, and Pacific Islanders
AS THE FASTEST GROWING RACIAL GROUP IN THE NATION, the Asian American, Native Hawaiian, and Pacific Islander (AA and NHPI) population encompasses almost 19 million Americans who trace their heritage to more than 50 countries, speak more than 100 languages, practice a wide range of religious beliefs, and come from countless cultural traditions.

The extreme diversity within this population, while adding to the tapestry of our nation, has also historically posed significant challenges to assessing and ensuring its health and well-being. The documentation of health disparities and dissemination of effective evidence-based models of care have been particularly difficult tasks within the AA and NHPI context, and gaps in health research and interventions for AAs and NHPIs have resulted in persistent health disparities remaining largely invisible to the public.

Effective and coordinated advocacy is then essential for increased research, more responsive interventions, greater resources to support these endeavors, and ultimately more equitable health outcomes for AAs and NHPIs. Yet, the AA and NHPI community does not have a long history of advocacy, particularly at the national level. The establishment of national AA and NHPI advocacy organizations is a relatively new phenomenon that has emerged within the last 20 years, with advocacy efforts historically concentrated in Chinatowns, Little Tokyos, Little Manilas, and other local urban ethnic enclaves.

National collaboration across local AA and NHPI communities to improve policies and programs for these populations is a foremost priority. There is growing acknowledgement that issues of health cannot be addressed by any one organization and collectivist-oriented approaches are key in improving community health and well-being. This is particularly so within the AA and NHPI context, given the diversity of the group and the potential power gained in connecting the many vibrant AA and NHPI communities to advocate collectively for greater health equity.

Identifying and mapping an emerging network is a first critical step towards fostering greater national collaboration across partners invested in improving the health and well-being of AA and NHPI communities. In this paper, we explore, what are the organizations that currently make up a growing network of those committed to AA and NHPI health and well-being? Where are they located? Are they connected to each other, and if so, how? Taken together, what can be learned about strengthening a national network so that these organizations can leverage the larger network as they collectively work toward equitable AA and NHPI health outcomes for the respective AA and NHPI communities that they represent and serve?
The Focus of this Study

Since 2007, the W.K. Kellogg Foundation has invested more than $20 million to support development of health equity collaboration within and across AA and NHPI communities throughout the nation. As a result of this investment – in partnership with the Asian Pacific Islander Health Forum (APIAHF) and Social Policy Research Associates (SPR) – significant learning has already been surfaced focusing on the unique opportunities and challenges of building health equity collaboratives within the AA and NHPI population. In 2013, the Kellogg Foundation commissioned SPR to expand a social network analysis of a closed group of APIAHF-funded grantees, to a broader national network of organizations working to advance the health and well-being of AA and NHPI communities. Through this expanded focus, the hope was to shed light on how this rapidly growing racial group is currently organized to advance health equity, as well as inform opportunities for strengthening this emerging movement of leaders from around the country.

**METHODOLOGY.** The social network analysis findings presented in this paper are informed by two administrations of an online survey that were conducted over the course of a year (April 2013 to May 2014) and that involved “snowball sampling,” originating with the core group of 47 organizations supported by the APIAHF. These grantees were asked to provide basic organizational demographic information, identify who they partnered with in their efforts to advance the health and well-being of AA and NHPI communities, and to rate their relationships with these partners using a four-point interaction scale ranging from no interaction to collaboration. These identified partners were then surveyed for the same information. Based on these two waves of survey administration, a total of 598 organizations and individuals were invited to complete the survey, with 256 completing the survey in full (42.8% response rate). In total, 1,470 organizations were ultimately identified through this mapping process.

While we present some findings on the broader network of 1,470, unless noted, the findings reported focus on the 256 organizations that completed the survey in full (represented by colored nodes with the network maps) and for whom we have complete demographic and networking information. These 256 organizations represent the vast majority of organizations that comprise the core of the network; as such, in analyzing this group, we hope to gain some insight about the network as a whole.

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**What is social network analysis?**

Social network analysis is an approach to understanding relations among a set of actors. Using network analysis software, social network analysis allows for quantitatively describing specific network aspects, as well as graphically presenting information about network patterns and structures.

In the networking maps shown in this paper, the circle “nodes” represent individual organizations, and “lines” represent the connections between them. The location of nodes relative to each other on the map is significant, as these maps are scaled using mathematical formulas that take into account all of the connections in the network. This means that: (1) the proximity between organizations generally reflects their strength of connection, including direct and shared connections; and (2) organizations with more connections tend to be located towards the center of the network.
Mapping the Network

In the next four sections, we will share key findings that emerged from our social network analysis of organizations that were identified as working to advance the health and well-being of AA and NHPI communities across the country – which we refer to as the National AA and NHPI Health Equity Network. We begin with a look at the types of organizations that are found in this network and the ways in which they are similar and distinct from one another based on various organizational characteristics. We then look at where these organizations are located in the U.S. relative to the geographic distribution of AA and NHPI populations. Next, we explore the ways in which organizations in the network are connected to each other, along the dimensions of geographic affiliation, organizational development, organization type, and AA and NHPI communities served. Lastly, we pursue a focused inquiry into what characterizes key leaders in the network.

What types of organizations make up the AA and NHPI Health Equity Network?

The AA and NHPI Health Equity Network is characterized by a range of organizations dedicated to advancing the health and well-being of AA and NHPI communities.

**NON-PROFIT ORGANIZATIONS COMPRISE A STRONG MAJORITY OF THE ORGANIZATIONS THAT MAKE UP THE AA AND NHPI HEALTH EQUITY NETWORK, REPRESENTING 73% OF ALL ORGANIZATIONS WITHIN THE NETWORK.** This group is very diverse, encompassing direct service organizations, community health centers, youth organizations, community organizing groups, national advocacy organizations, professional associations, and churches and temples. They are also inclusive of both AA and NHPI multi-ethnic (50% of all non-profits) and ethnic-specific organizations (15% of all non-profits), who collectively represent and serve

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**Exhibit 1. Profile of Non-Profit Partners in the AA and NHPI Health Equity Network**

**Most non-profit partners are locally focused.** About one-fifth of organizations reported working primarily at the state level.

- Local: 51%
- Statewide: 23%
- Regional: 4%
- National: 2%
- International: 2%

**Most non-profit partners have annual budgets under $500,000.** In fact, nearly one-third of non-profits in this field have budgets of less than $100,000.

- Under $500,000: 53%
- $500,000 to $3 million: 24%
- Over $3 million: 24%

**Most non-profit partners serve multiple AA and NHPI ethnic communities.** Collectively, these organizations serve over 21 distinct AA and NHPI ethnic communities. A small number do not directly serve AA and NHPIs.

- AANHPI Ethnic-Specific: 32%
- AANHPI Multi-Ethnic: 15%
- Multi-Racial: 3%
- Non-AANHPI Race-Specific: 50%
over 21 distinct AA and NHPI populations, including Chinese, Vietnamese, Cambodian, Samoan, Bangladeshi, and Tongan ethnic communities. Although non-profit partners report working across multiple fields, this group includes large percentages of health and social justice-focused organizations.

**WITHIN THE NETWORK WE ALSO SEE A CONSIDERABLE NUMBER OF GOVERNMENT AGENCIES (10%) IDENTIFIED AS PARTNERS IN ADVANCING AA AND NHPI HEALTH AND WELL-BEING,** with most of these agencies being public health departments at the city, county, and state levels. Universities throughout the country – namely public health programs and projects, research hospitals, and social science departments – play a role (9%) in the network, as well.

In understanding the network, it is also helpful to note the types of organizations not identified as partners through the network mapping process. For instance, while a few foundations are named as part of this network, they comprise only 2% of all organizations. Similarly, though many state and local government agencies are engaged in addressing health issues in their respective AA and NHPI communities, there are few federal agencies involved in similar efforts. Partners that exclusively serve other racial groups are also represented in the network in a limited way, as are for-profit organizations. Only a few examples of Asian-owned businesses such as grocery stores were identified by those surveyed and were not formally included in our respondent sample.

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**Where are AA and NHPI Health Equity partners located?**

**THE NATIONAL AA AND NHPI HEALTH EQUITY NETWORK IS EXPANSIVE, SPANNING 34 STATES AND SIX PACIFIC TERRITORIES.** The majority of partners are located in the Western region, particularly in the states of California (22%) and Hawaii (15%). Many are also concentrated in New York (6%), District of Columbia (6%) and Ohio (6%). The network mapping process also revealed over 100 partners based in the U.S. Affiliated Pacific Islands (8% in total), which include American Samoa, Commonwealth of Northern Mariana Islands, Federated States of Micronesia, Guam, Marshall Islands, and the Republic of Palau.

It is helpful to compare the geographic locations of network partners with the distribution of AA and NHPI populations across the United States. Exhibit 2 (on the next page) presents a national map that overlays the number of identified network partners found in each state with the respective density of AA and NHPI populations, as reported by the 2010 Census. In this map, we see that the geographic distribution of network partners largely
reflects population trends across the country, with a few exceptions. Notably, we see unexpectedly more partners in areas with small AA and NHPI populations, such as Georgia, Utah, Ohio, and New Mexico, and fewer organizations in states with significant AA and NHPI populations, such as Texas, Illinois, New Jersey, and Washington.

In what ways are AA and NHPI Health Equity partners connected?

Organizations in the AA and NHPI Health Equity Network engage in a range of different partnerships in order to advance the health and well-being of their respective communities. Using social network analysis, we are able to explore how organizations in a network tend to be connected based on where they are located, the type the work they do, the populations they serve, and any other organizational characteristics. In conducting this type of analysis with this network, four distinct trends emerged.

**Network partners are connected both regionally and cross-regionally.** Given the health field's focus on place-based collaboration as a strategy for advancing the health of vulnerable communities, it is not surprising that many partners are directly connected to others within their own geographic
region. Within the AA and NHPI Health Equity Network, however, we also observe sizable numbers of organizations that work closely with others outside of their own region. The tendency towards intra- and cross-regional collaboration exemplified in the AA and NHPI Health Equity Network resonates with research that suggests that AA and NHPI organizations – particularly those located in parts of the country with smaller or emerging populations of AA and NHPIs – benefit from connecting with AA and NHPI counterparts across the country to share and replicate culturally based strategies.18

The networking map in Exhibit 3 shows this trend of cross-regional connection. In this map, each of the nodes are color-coded according to the region where that partner is located. While we see clustering by region, we also see a number of partners from U.S. Pacific Territories collaborating with partners based in the West, and many Midwest partners connected to partners in the South and West.

**NETWORK PARTNERS ARE CONNECTED ACROSS A WIDE RANGE OF ORGANIZATIONAL CAPACITY.** One notable trend is a pattern of partners tending to be connected with organizations that vary in terms of their organizational development and budget size. For instance, we see organizations that have been established for less than 10 years not only connected to other emerging organizations, but also organizations that have been established for over 70 years. Likewise, organizations with budgets of less than $100,000 work closely with similarly sized organizations, as well as with organizations with budgets of over $3 million. These patterns suggest a strategic opportunity to invest in peer mentorship to accelerate learning among newer and smaller organizations to strengthen the network as a whole.
Another trend appears to be connections between community-based organizations and research institutions. Although the majority of the network is comprised of non-profit organizations connected to each other, non-profits are also showing connections to research institutions. Unlike government agencies and funders—who tend to sit at the periphery of the AA and NHPI Health Equity Network—research institutions appear to be engaged throughout the network. Researchers have been documented as pivotal to helping AA and NHPIs to identify and illuminate health disparities, so the prevalence of this connection suggests an asset that the AA and NHPI Health Equity Network might be able to collectively leverage in efforts to advance meaningful systems change focused on equitable health outcomes for vulnerable AAs and NHPIs.

Finally, looking at connections across partners by communities served, we see multi-ethnic AA and NHPI organizations playing a key role in connecting ethnic-specific counterparts to the broader network. Most organizations in the network report serving multiple AA and NHPI ethnic communities. There are, however, a considerable proportion of ethnic-specific organizations, many of whom occupy peripheral locations in the network. Interestingly, it is more often the case that these ethnic-specific organizations are closely tied to multi-ethnic organizations, rather than to other ethnic-specific organizations. In particular, many of these ethnic-specific organizations tend to be directly connected to more centrally located, multi-ethnic AA and NHPI organizations who also share their target population. For example, a somewhat isolated Filipino professional association is directly connected to a more centrally located pan-Asian advocacy and service organization that serves Filipinos, along with Chinese, Koreans, and Vietnamese. Similarly, a relatively isolated Vietnamese-based church is directly connected to a more centrally located pan-Asian direct services organization that serves Vietnamese, along with Chinese, Filipinos, and Japanese populations.

What characterizes key actors within the AA and NHPI Health Equity Network?

In addition to providing information on the collective AA and NHPI Health Equity Network, social network analysis provides useful insights into the roles of individual organizations within the network. This is accomplished through the analysis of several different quantitative measures that assess different aspects of an organization’s connectivity (i.e., how many partners do they have, how often do they connect other partners to each other), as well as the analysis of networking maps that can illuminate the centrality of an organization within a network.

Within the AA and NHPI Health Equity Network, we analyzed the organizational characteristics of the 25 partners with the greatest number of connections to gain insight into how the network might strategically foster potential network leaders and/or network weavers as it develops. Looking at this subgroup, we find:

- The majority of partners serve multiple AA and NHPI ethnic communities (78%). Over 21 different AA and NHPI ethnic communities are served by these partners, and no one ethnic community is disproportionately overrepresented.
- This set of partners tends to be locally focused (41%), though there are a considerable number who work primarily at the national level (31%).
- Partners tend to be relatively small with annual budgets of less than $500,000 (50%), though 19% of organizations within this group with budgets of over $3 million.
- The majority of top partners (69%) have been established for 25 years or less.

It is also important to emphasize that when looking for key actors in a network, the types of connections that an actor possesses is just as important as the total number of connections. In the AA and NHPI Health Network in particular, there are a number of partners who
are not necessarily the most well connected but bring value to the network by “bridging” groups who would otherwise be disconnected. This is critical to consider within the AA and NHPI context, given the myriad of ethnic groups that make up this population – many of whom represent new immigrants who may not yet affiliate with a broader “AA and NHPI” label.

In the networking map shown below in Exhibit 4, partners’ nodes are sized according to their propensity for connecting organizations or clusters of organizations that may otherwise not be connected. We see that partners represented by larger-sized nodes are not necessarily all located in the core of the network. In fact, there are several partners beyond the core of the network who have direct connections to many isolates (organizations that connected to just one organization) located in the outermost periphery. One of these partners, for instance, has a moderate number of connections but accounts for nearly all of the network’s connections to Guam. Another partner also has a moderate number of connections, but without them, the network would not be connected to efforts in the Commonwealth of the Northern Mariana Islands. These partners, along with other “bridging” organizations in the network, underscore that the organizations key to the cohesion and diversity of a network may not have the most connections nor occupy the most central positions.

Exhibit 4. “Bridger” Partners in the AA and NHPI Health Equity Network
In considering key actors in the AA and NHPI Health Equity Network, one line of analysis we pursued focused on understanding how national AA and NHPI health advocacy intermediaries and their partners were connected. Towards this end, we sought to examine the individual networks of the eight members that comprise the National Council of Asian Pacific Americans’ (NCAPA) Health Policy Committee – a group of AA and NHPI advocacy organizations that provide national leadership on health issues and policies affecting AA and NHPI communities. By looking at the individual networks of these NCAPA members, we hoped to gain insight into what the infrastructure of AA and NHPI health equity organizations looks like at the national level.

When we analyzed these NCAPA members’ networking patterns, we found that members had relatively distinct networks, suggesting that the national infrastructure of organizations working to advance health equity for AA and NHPI communities is coordinated by multiple organizations. Indeed, when we mapped each member and their respective network within the broader AA and NHPI Health Equity Network, it was evident that members have connections in different parts of the network and that it was not possible to reach all parts of the network with just one member. It is only in aggregating their respective networks (see below) that we see the potential for critical mass within the network to collectively advance change.

This is a different network formation than is typically seen in networks focused on a particular racial group, which tend to have a hub-and-spoke formation where there is a clear national leader who manages the overall infrastructure and organizes partners across the country on key issues facing that population. The presence of multiple leaders and sub-networks within AA and NHPI Health Equity Network is encouraging given the range of ethnic populations represented in the AA and NHPI population, which vary considerably in terms of needs and priorities. However, this particular formation also speaks to the importance of strategic coordination across the different sub-networks to advance community-driven change initiatives on behalf of the AA and NHPI population. Specifically, an analysis of the NCAPA Health Policy Committee members’ partners reveals that just under half (49%) are partnering with multiple national organizations.
The National AA and NHPI Health Equity Network findings suggest some key implications for how to approach strengthening and leveraging this emerging network of organizations collectively committed to advancing AA and NHPI health and well-being. The following offers some key observations and specific considerations:

**Opportunity may exist to diversify the range and types of partners engaged in advancing AA and NHPI health and well-being.** While the core of the network does consist of AA and NHPI-led service and advocacy organizations, this mapping effort also revealed smaller percentages of non-traditional stakeholders such as university research centers, public health agencies, churches and temples, and AA and NHPI-owned businesses who also bring assets to bear in this work. As potential key actors in a growing movement to address health disparities facing AA and NHPIs, what more can be learned about complementary strengths they bring into this network? How do national and regional advocates engage a more diverse set of voices in systems change efforts, with particular attention to sustaining participation of non-traditional partners? How can partners currently on the periphery of this network (i.e., funders, other racial advocacy groups, for-profit health systems, etc.) be better engaged to strengthen the work underway?

**Simultaneous focus on regional and cross-regional collaboration may prove useful for advancing national AA and NHPI agendas.** The network mapping suggests that – in their efforts to promote AA and NHPI health and well-being – many partners are connected both within place and by an ethnic or racial affiliation that transcends geography. Given this duality, how do funders consider multiple levels of network investments when supporting advancement of AA and NHPI health equity goals? How do place-based health strategies (particularly those focused in areas with smaller AA and NHPI populations where organizations may be working in relative isolation with few local AA and NHPI-specific resources) acknowledge both levels of connection so that resources from outside the community are effectively leveraged and brought in? What type of broader infrastructure is required to continue to foster cross-regional relationships among local AA and NHPI health-focused efforts? How can funders and national intermediaries support use of innovative of technology, for instance, to facilitate cross-regional networking and support?

In the absence of a single national hub, ongoing attention and resources are required for coordination at the national level. The multiple AA and NHPI advocacy organizations found at the national level is an asset for advancing health equity goals across a diversity of AA and NHPI sub-populations and interest groups. At the same time, this network formation presents some considerations, specifically: How do national partners maximize their multiple overlapping networks, versus operating in silos? At the national level, how do funders avoid not just supporting individual “go-to” organizations (which can introduce unintended competition for scarce resources), but also consider shared leadership and resources across multiple national organizations?

A robust AA and NHPI Health Equity Network requires not just top down, but also bottom up leadership and engagement. Finally, the
network mapping underscores the vital importance of bridging organizations in adding to the tapestry of organizations included within the AA and NHPI Health Equity Network. While, typically in network or movement building, hubs or “anchor agencies” are prioritized investments (i.e., those with the most connections in key regions), this finding implies a more nuanced analysis of key players within the AA and NHPI community. In their efforts to foster inclusivity, how can national advocates and movement builders be more strategic in identifying and fostering leadership among partners who bring connections that would otherwise be absent in the network?

The findings presented in this paper draw from a historic dataset of organizations – all interconnected through a shared commitment to equitable health outcomes for the Asian American, Native Hawaiian, and Pacific Islander communities that they represent and serve. While we anticipate delving further into this dataset through additional social network analysis going forward, we hope this initial analysis offers useful insight into the emerging network of AA and NHPI organizational partners across the country that are working to advance health equity, and the many opportunities for this network to serve as a force for AA and NHPI communities and their ensured health and well-being.
Endnotes


2. See for example:
   - Centers for Disease Control and Prevention, Asian American Populations.


4. Ibid.


9. See for example:


13. For this section, we draw from the full dataset of all 1,470 organizations and individuals who were identified through our mapping process as working to advance health equity for Asian American, Native Hawaiian, and Pacific Islander communities. SPR was able to obtain location data for all identified organizations and individuals (at the state and U.S. Pacific territory level) by conducting web-based searches and accessing publicly available databases.


16. This map was generated using “betweenness,” a quantitative measure used in social network analysis. This measure assesses the frequency with which an organization in a network is found between other organizations, therefore providing an estimate of the organization’s capacity to connect organizations or clusters of organizations that may otherwise be disconnected. Betweenness scores were calculated for each of the organizations in the network and then inputted into UCINET, which scaled the size of organizations’ nodes based on their scores.