

Social Network Analysis to Assess Coalition Effectiveness of the

Health Improvement Partnership of Maricopa County (HIPMC)

October 2014





Much appreciation to Bianca Salas, MPH, for leading the team and to all the partners in the Health Improvement Partnership of Maricopa
County (HIPMC) network who took the time to thoughtfully participate in this social network analysis. Through our collaborative efforts, we believe that we can improve health outcomes in Maricopa County and that the work of the HIPMC can help improve the lives of the people of Maricopa County.
Copyright @ 2014 Maricopa County Department of Public Health. Contact the Office of Performance Improvement for information about the content of this report: <a href="https://open.com</td></tr><tr><td>PARTNER can only be used for non-commercial purposes. For commercial applications or additional software development, please</td></tr><tr><td>contact us at partnertool@ucdenver.edu . Copyright © 2012 University of Colorado Denver

Table of Contents

Project Background	3
What is PARTNER?	4
How a Social Network Analysis Can Benefit Communities	4
How Community Partners Participated	5
Summary of PARTNER Survey	5
Partnership Types	5
Time with the Network	5
Perceptions of Success	6
Member Contributions to the Coalition	7
Organizational Contribution to the Coalition	8
Members Most Important Contribution to the Coalition	9
Outcomes	10
Most Important Outcomes	10
Overall Value and Trust Measures	11
Value Measures	12
Trust Measures	12
Network Maps- Relationship Activities	13
Network Maps- Frequency	15
Extra Question- Role of MCDPH	16
Additional Comments (open-ended on survey)	16
Next Steps	17

	Appendix A	18
	Network Scores- All Members	18
3	Appendix B	23
4	HIPMC PARTNER Survey	23
4	Appendix C	28
5	CHIP Infographic	28

Project Background

A community health assessment (CHA) was initiated in 2011 to determine public health priorities for Maricopa County. This 18-month process included more than 1,000 residents, health professionals, and community partners working through the Mobilizing for Action through Planning and Partnership (MAPP) framework. Through this systematic research and data collection process, five health priorities emerged. They are:

- Obesity
- Diabetes
- Lung Cancer
- Cardiovascular Disease
- Access to Health Care

The Health Improvement Partnership of Maricopa County (HIPMC)² is a collaborative effort between the Maricopa County Department of Public Health (MCDPH) and more than 75 public and private organizations addressing these five priority health issues through the 2012-2017 Community Health Improvement Plan (CHIP).³ See Appaendix C. Many participants are from organizations that have been involved since the CHA process, while others continue to join as the CHIP takes shape.

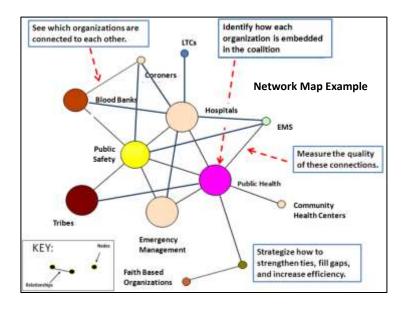
See http://assets.thehcn.net/content/sites/arizona/MC_CHA2012.pdf

http://www.arizonahealthmatters.org/index.php?module=htmlpages&func=display&pid=5005

http://assets.thehcn.net/content/sites/arizona/Maricopa_County_CHIP_2 012 2017 7 7 14.pdf

The HIPMC has created a health improvement framework with a workplan of specific goals and strategies to impact these health priorities. Currently, task forces composed of health professionals, governmental, and community partners have formed to coordinate implementation of the CHIP. The overarching goal of this collaborative effort is to foster successful partnerships among diverse segments of our community in order to improve the health of Maricopa County residents.

This study was conducted as part of the comprehensive evaluation of the CHIP initiative. Since the improvement of health outcomes is based on the collective work of the partners in a public health system, it is important to assess the strength of the collaborative network, the resources it leverages, and identify gaps and areas for improvement. The results of this assessment serve as a baseline during the five-year CHIP process with repeated surveys to be conducted for comparison. Findings from this assessment were presented to the membership of HIPMC in October, 2014.



² See

³ See

What is PARTNER?

PARTNER (Program to Analyze, Record, and Track Networks to Enhance Relationships) utilizes Social Network Analysis (SNA), a quantitative methodology that focuses on relationships between and among organizations, measuring and mapping relationships and flows between organizations. The map on the prior page is an example of a PARTNER network map. PARTNER was used in *this* project to collect data and inform a quality improvement process.

The PARTNER Tool was created by Dr. Danielle Varda at the University of Colorado at Denver, and was funded by the Robert Wood Johnson Foundation, to help assess collective impact and collaborative work like the HIPMC throughout public health systems. Dr. Varda and her team have created this tool to allow non-academics to collect data from their partners, analyze it, and create maps.

How a Social Network Analysis Can Benefit

Communities

This tool allows a coalition, like the HIPMC, to view how its partners work collaboratively and helps to identify gaps and opportunities to better achieve goals and objectives. This includes looking at the resources all the partners bring to the network, as well as the closeness of fit of our individual organizational missions to the HIPMC vision. This assessment will be repeated periodically to track the group's progress.

A Social Network Analysis can evaluate how well the collaborative is working in terms of:

- Identifying essential partners
- Gauging their level of involvement
- Succeeding in leveraging resources
- Strategizing to identify gaps and improve the work of the collaborative

This work can also demonstrate to partners, stakeholders, evaluators, and funders how this collaboration is progressing over time and why working together is making tangible change.



Note: Throughout the document, this symbol will appear at the end of an analysis section. This symbol is followed by a set of questions for the network's leadership to consider, as a way to use the data for Quality Improvement (QI). The data presented in this report should be used to create action steps for improving the effectiveness of the network. These questions are meant to guide the user through the process of creating these action steps.

How Community Partners Participated

In Fall 2014, an online survey based upon the work of network analysis was distributed via email to 56 HIPMC partners. Prior to survey distribution, the partners were notified of the assessment in person at the July 2014 quarterly HIPMC meeting and through email one week prior to survey distribution from the Strategic Initiatives Coordinator at MCDPH.

Summary of PARTNER Survey

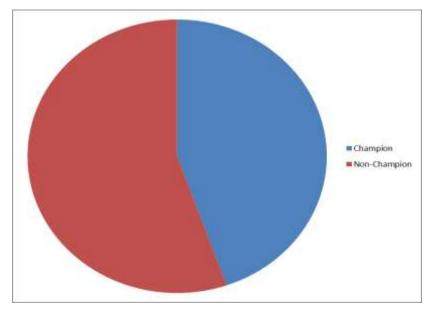
In September 2014, Maricopa County Department of Public Health Office of Performance Improvement launched the PARTNER survey to 56 organizations participating in the Health Improvement Partnership of Maricopa County (HIPMC) coalition. Forty-one partners responded for a 73.21% response rate.

Partnership Types

There are two types of partners in the HIPMC collaborative demonstrated by the pie chart to the right. Some HIPMC partners have signed agreements indicating that they are willing to provide "SMART" objectives or aligned goals that relate to the CHIP. These partners are called *Champions*. HIPMC Champion organizations have work documented in the 2012-2017 CHIP Workplan and receive recognition from the MCDPH for their contributions. In this survey, 44.64% of respondents were identified as *Champion*. For the purposes of this survey, all other partners were given the designation of *Non-Champion*.

Time with the Network

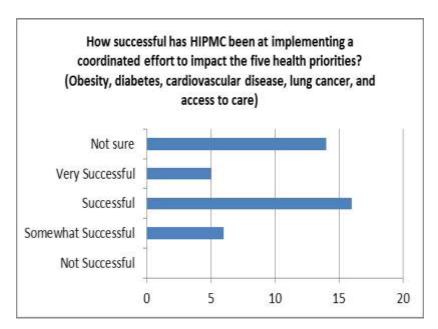
Survey respondents were asked for the length of time that someone from the organization has been participating HIPMC. On average, organizations indicated an average of 12.54 months with a range of 0 to 36 months. About one-third of the HIPMC members is new (29% of the organizations have been attending HIPMC meetings for 0-6 months) while 39% have been attending between 6 months and one year. More than one-third of the partnering organizations (32%) reported participating more than one year. While CHIP work started in December 2012, the HIPMC and the current format kicked off in 2013. The current membership is a group that has older and newer members.



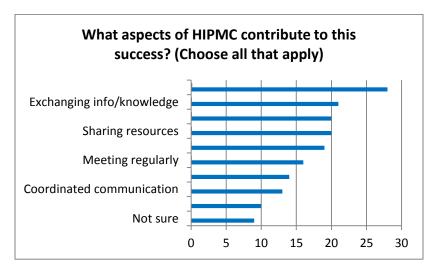
HIPMC Partner Types

Perceptions of Success

Respondents were asked about the success of HIPMC as a network to impact the five public health priorities. The majority responded that HIPMC has been at least somewhat successful (66%). The *not sure*" result (34%) may mean that successes and evaluation progress need to be shared with the partners in a more effective way. In discussing the success of the HIPM, it will be important to understand what success means and what aspects of collaboration contribute to it, in order to *be* successful.



The partners were asked to identify all the aspects listed below as factors that contribute to the success of the HIPMC. They were allowed to check "all that apply" in their response. The most selected response was *Bringing Together Diverse Stakeholders* (68%) followed by *Exchanging Information and Knowledge* (51%), *Having a Shared Vision and Goals* (49%), *Sharing Resources* (49%), and Forming Informal Relationships (46%).



Look at the level of agreement on the above two questions. It is not uncommon for a group to have varying perspectives on what it means for the group to be "successful" and "what contributes to that success". However, if the group cannot agree on what success means and what aspects of collaboration contribute to it, it is very difficult to *be* successful. What are the indicators of success and how can you know that your group is successful?

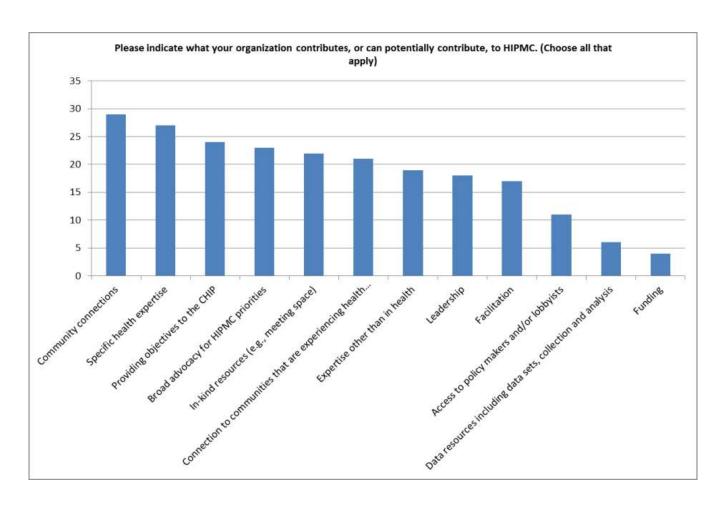
Member Contributions to the Coalition

Each respondent was asked to identify the resources their organization contributes to the network. The following table indicates the organizations that responded as well as the contributions they selected as a contribution to the coalition. A number "1" in the column confirms the contribution while a "0" shows they do not bring this resource at this time.

	Community	Specific health	Providing objectives	Broad advocacy for HIPMC	In-kind resources (e.g., meeting	communiti es that are	Expertise other than			and/or	Data resources including data sets,	
Full Name	connections	expertise	to the CHIP	priorities	space)	experienci	in health	Leadership	Facilitation	lobbyists	collection and	Funding
Arizona Department of Health Services	1	1	1	1	1		1			1	1	1
Maricopa County Department of Public Health	- 1	1	.1.	1	1	-3	3.		- 1	1	- 1	1
Scottadale Healthcare	(4	1	. 1.	1	1	- 3	1	0	0	0	75	0
Esperanca	- 11	1	1	0	0	1.74	0	0	0	0	-1	0
Maricopa Association of Governments	- 1	0	0	1	1	0	0	0	0	0	1	0
Maricopa County Education Service Agency	- 1	0	0	1	-1	0	1	1	1	1	0	0
Arizona Alliance for Livable Communities	1	0	0	1	0	.0	1	1	1	1	0	0
Dignity Health St. Josephs	1	1	1	1	1	- 1	0	100	1	1	0	1
American Academy of Pediatrics - AZ Chapter	- 1	- 1	0	1	1	4	0	1	- 1	1	0	0
City of Phx- FitPHX	- 4	0	1	1	1	- 4	1	1	0	1	0	0
The Arizona Partnership for Immunization	- 24	- 4	- 1	1	4	- 14	4	0	0	4	0	0
Roosevelt Elementary School District	- 4	0	0	4	-1	- 2	4	ō	0	4	Ö	0
American Heart Association	- 84	4	ő	4	4	0	0	ő.	Ö		Ď.	Ö
City of Phx- HOPE VI	- 4		1	4	4	4	4		0.9	0	ő	ő
	- 34		- 1	-	4	8	- 4			ő	ŏ	ő
University of Arizona College of Medicine - Phoenix		o	0	0	0	3	0	100	12	ő	0	0
Cultivate South Phoenix	- 32	0	0	0	0	-			- 63	-		
Pinnacle Prevention	- 2	12	3	3		0	0	1	1 15	0	0	0
SCAN Health Plan Arizona	(3	- 1	0	1	1	.0	3	0		0	0	0
Arizona Spinal Cord Injury Association	- 3	0	0	0	133	0	1	0	12	0	0	0
Arizona Living Weit Institute	- 1		0	1	0	- 1	0	0	1	0	0	0
Valley Permaculture Alliance	- 53	0	0	0	10	0	. 1	- 1	0	0	0	0
Anthony Bates Foundation	- 11	- 1	1:	1.	0	0	1	1	0	0	0	0
Maricopa Integrated Health System	34	- 4	15	1	4	- 3	0	1	0	0	0	0
Concilio Latino de Salud	1	- 4	1.	0	0	1.3	0	1	0	0	0	0
University of Arizona Cooperative Extension	. 1	0	0	0	0	18	1	0	0	0	0	0
Native Health	1	- 1	0	0	110	0	1	0	0	0	0	0
Family Involvement Center	- 4	- 4	1	0	1	- 4	0	0	0	0	0	0
Mission of Mercy	- 4	0	1	0	0	4	0	ñ	0	o o	Ď.	0
People of Color Network	4	4	0	0	0	- 4	0	0	0	ŏ	Ď.	0
First Things First	0	- 1	1	Ö	Ď.	0	- 1	Ö	Ö	Ö	4	0
Sanner Health	ő		4	1	4	ő	o	Ö	- 4	-	ó	- 1
Unlimited Potential	ŏ	o	0	0	o	-		-		0	o o	0
	ŏ	1				0	ò			ő	ő	0
Maricopa Community College District	ő	32	1	1		0	0	100	32	ő	0	0
Maricopa County Wellness Works		1	1	1	0	0			1	0		-
Boys & Girls Clubs of Metro Phoenix	0	0	0	0	0	0		0	0		0	0
National Kidney Foundation	0		- 1	3	0		0	0	0	0	0	0
Arizona State University	0	(1)	- 3	0	0	0	0	0	0	0	0	0
Midwestern University - AZCOM	0	- 1	- 1	0	0	0	0	0	0	0	0	0
Blue Cross Blue Shield	0	0	- 3	0	0	0	0	0	0	0	0	0
Crisis Preparation and Recovery	0	0	- 1	0	0	0	0	0	0	0	0	0
Wesley Health Center	0	1	0	0	0	0	0	0	0	0	0	0
Aetna	0	0	0	0	0	0	0	0	0	0	0	0
American Lung Association - AZ Chapter	0	0	0	0	0	0	0	0	0	0	0	0
Arizona Department of Education	0	0	Ö	0	0	0	0	0	0	O.	0	0
Arizona Public Health Association	0	0	0	0	0	0	0	0	0	Ö	0	0
AZCA/Golden Gate	0	0	0	0	0	0	o o	ů.	Ö	o o	0	0
Cigna	ő	0	o	Ö	0	ő	0	ő	ő	ő	0	0
Desert Mission	ő	0	ő	0	0	ő	0	0	ő	0	0	Ö
	ő	ő	Ö	0	0	0	n n	0	ő	o o	n n	ő
Greater Valley Area Health Education Center	ő		0	ő		0	0	Ö	0	0	ő	0
Hope Lives - Vive la Esperanza		0			0							
Maricopa County Medical Society Alliance	0	0	0	0	0	0	0	0	0	0	0	0
Mercy Care Plan	0	0	0	0	0	0	0	0	0	0	0	0
Phoenix Children's Hospital	0	0	0	0	0	0	0	0	0	0	0	0
Phoenix Revitalization Corporation	0	0	0	0	0	.0	0	0	0	0	0	0
St. Luke's Health Initiatives	0	0	0	0	0	.0	0	0	0	0	0	0
Tanner Community Development Corporation	0	0	0	.0	0	0	. 0	0	0	0	0	0
(1.0) 11 12 (1.0) 11 (1.0) 11 (1.0) 12 (1.0) (1.0) 12 (1.	29	27	24	23	22	21	19	18	17	11	6	4

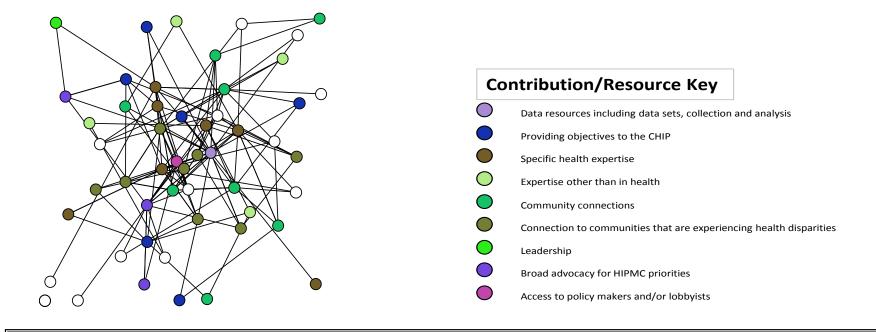
Organizational Contribution to the Coalition

When aggregated, partners' responses to the question of what their organization has or can contribute to the HIPMC, revealed *Community Connections* (71%) and *Specific Health Expertise* (66%) as the most common responses. *Providing In-Kind Resources* (54%), *Connenctions to Communities with Health Disparities* (51%), *Expertise Other than Health* (46%), *Leadership* (44%) and *Facilitation* (41%) demonstrated that partners provide skills as well as access to the HIPMC.



Members Most Important Contribution to the Coalition

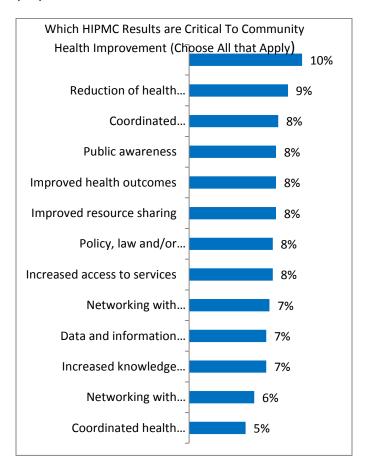
Most organizations stated that *Community Connections, Connections to Communities with Health Disparities, Health Expertise, and Providing CHIP Objectives* are their <u>most</u> important contributions to the HIPMC. The network map below displays the organizations, their connections to other HIPMC organizations, and the key identifies their reported most-important contribution.



Are there any resources that are overrepresented or underrepresented? Why is that the case? What new members could be added that could provide these resources? Are there any resources that were not represented at all? What steps could be taken to acquire these either through a new or an existing member? Is the coalition properly leveraging the most important resource contributions provided by its members?

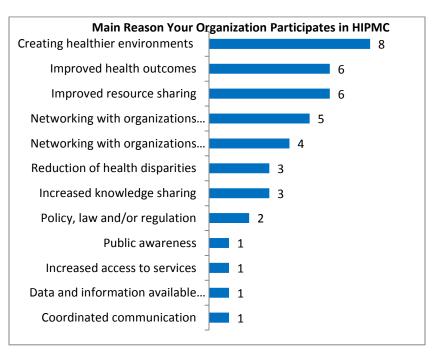
Outcomes

Respondents were asked to identify the HIPMC results that they believe to be critical to community health improvement. *Creating Healthier Environments* (10%) and *Reduction of Health Disparities* (9%) were the most selected answers.



Most Important Outcomes

Respondents' most important outcome included *Creating Healthier Environments, Improved Health Outcomes, Improved Resource Sharing,* and *Networking with Other Organizations*.



What are the top outcomes of this community collaborative? What are the top most important outcomes of this community collaborative? What characteristics of the collaborative may explain that finding?

Overall Value and Trust Measures

The overall value score is an average of the three value measures of power/influence, level of involvement, and resource contributions. Measuring value is important for an effective network to ensure all members' value is leveraged adequately within the coalition. The overall trust score is an average of the three trust measures of reliability, in support of mission, and open to discussion. Trust is important for capacity-building within the coalition. An effective network, including having strong members who work well together, establishes clear and open communication, develops mutual respect and trust, and works toward a shared mission and goals.

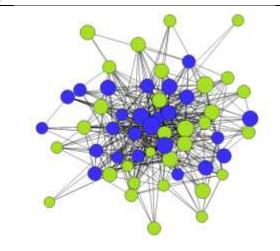
The network maps below show the relative value and trust of coalition members. The larger nodes have more perceived overall value and trust among other coalition members. For more details on perceptions of value and trust, see "Network Scores-All Members" in Appendix A.

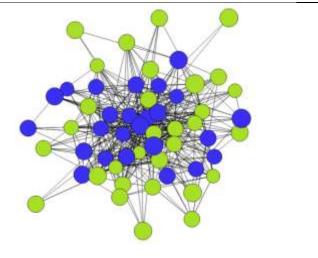
Overall Value

The overall value score is the average score given to the three value questions concerning power/ influence, level of involvement and resource contribution are important to building coalition capacity. The larger the node, the more perceived overall value that an organization has among other members that chose them.

Overall Trust

The overall trust score is the average score given for the three trust questions concerning reliability, in support of the mission, and openness to discussion are also very important to build coalition capacity. The larger the node, the more perceived overall trust that the organization has among other members that chose them.

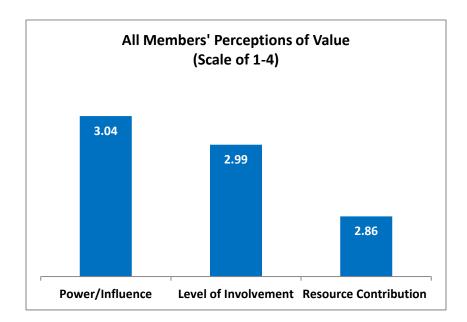




For any organization that reported low trust, what factors may explain that report? Is there any strategy that the coalition can employ to address that issue? If an organization is seen as "high value," are there other ways that the coalition can leverage that value or strength? Look at the scores above for value and trust in the analysis tool. Is there a correlation between the two? For example, are those organizations that are considered valuable also trusted? What action steps can be made to increase member perception of value and trust?

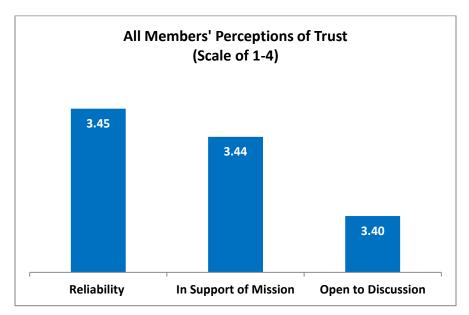
Value Measures

Value measures include power/influence, level of involvement, and resource contributions. Measuring value is important for an effective network to ensure all members' value is leveraged adequately within the coalition. Members do not supply value in the same way; some use their power and influence, some donate their time based on their level of involvement, and some are able to contribute specific resources that the coalition needs to function. The following chart shows the all members' averaged perceptions along the three dimensions of value.



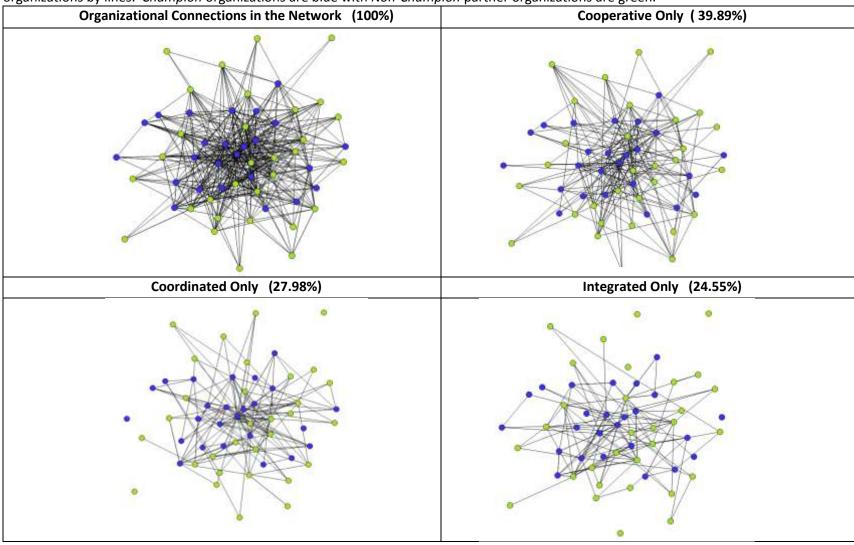
Trust Measures

Trust measures in the network include reliability of partners, support of mission, and being open to discussion. Measuring trust is important for capacity-building within the coalition. An effective network includes having strong members who work well together, establish clear and open communication, develops mutual respect and trust, and works toward a shared mission and goals. The following chart shows the all members' averaged perceptions along the three dimensions of trust.



Network Maps- Relationship Activities

The connections of the 56 organizations are shown on the maps below. Organizations (shown with a circle "node") connect to other organizations by lines. *Champion* organizations are blue with *Non-Champion* partner organizations are green.



Read the network maps from the upper left clockwise. In the first map, each of the 56 responding organizations reported being connected to at least one other organization in the network on issues related to HIPMC. The organizations in the middle ("the cluster") are those that are connected with more organizations. All the organizations are connected with at least two other organizations and the most number of connections was 55.

The survey asked the participants about the kind of activities and the relationship between the organizations. The PARTNER Tool provides analyses related to three kinds of network activities:

- Cooperative: Activities between network organizations that include exchanging information, attending meetings together, or making referrals to each other
- Coordinated activities: Activities between network organizations beyond networking where the activities improve outcomes for both organizations
- Integrated: Activities between network organizations resulting in formal relationships that can include shared funding, shared clients, or interdependent programming

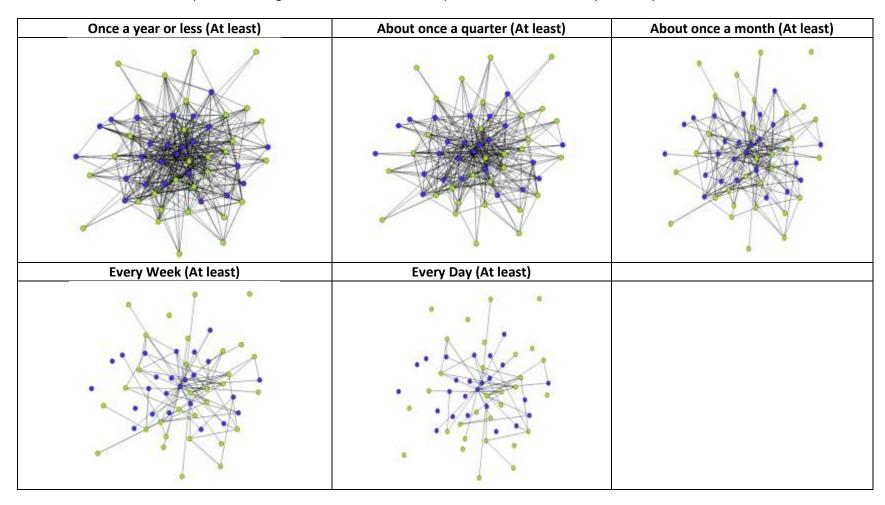
The map in the upper right corner of the table above shows that almost 40% (39.89%) of respondents identified that they only had *Cooperative* type activity connections. The map in the lower left corner (*Coordinated* activities) shows that about 25% (24.55%) indicated have only coordinated activity connections, and about 28% (27.98%) indicated they had *Integrated* activity connections with one another (the lower left corner).

Respondents reported many cooperative activities with many other organizations. There were still quite a few coordinated activities. And most organizations have at least one integrated activity with another HIPMC organization. It is up to the HIPMC network members to decide if these are the necessary relationships for this effort.

Are organizations most connected through awareness only, cooperative only, coordination only and/or integration activities? Are these the appropriate/necessary relationships for this coalition? If not, why not? Are there other organizations that should be brought more into these activities that are not yet well-connected? Remember, a more connected, higher percentage of ties may not be the ideal resource balance for your coalition. Rather, it may only be necessary that members be connected at a cooperative level to have strong enough relationships to accomplish the coalition's goals.

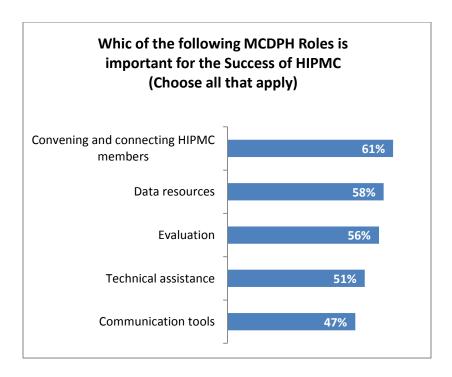
Network Maps- Frequency

HIPMC partners were asked about the frequency with which they work with other organizations in the network related to the HIPMC vision. The following network maps display the connections between network partners *Once a year or less, About one a quarter, About once a month, Every week,* and *Every day. Champion* organizations are blue with *Non-Champion* partner organizations are green. For the past 18-months, HIPMC meetings have occurred quarterly, so it was expected that the first two maps would show many connections, and that *Champions* would be clustered in the center. An important finding is the number of more frequent connections- weekly and daily!



Extra Question- Role of MCDPH

Since Maricopa County Department of Public Health (MCDPH) has provided staff to coordinate, facilitate, and evaluate HIPMC, it was decided important to determine the value of these MCDPH roles by the HIPMC members. Members reported the roles of *Convening and Connecting Everyone in the HIPMC* as most important (61%) followed by providing *Data Resources* (58%), *Evaluation* (56%), *Technical Assistance* (51%) and *Communication Tools* (47%) as important in that order.



Additional Comments (open-ended on survey)

- [We] need for better communication and coordination among the multiple groups focused on health issues.
- ❖ I really appreciate all the work that the county has put into this. I think you are all doing a great job and because you have taken initiative to make this happen, we are all learning and taking steps in the right direction to help accomplish our community goals. Keep up the amazing work!
- We MUST increase/diversify the representation in order to reflect the diversity of Maricopa County.
- This survey should have a "not sure" option, and also, the majority of my answers was based off of relationships with PEOPLE within institutions that have made collaboration possible, but that does not speak for the entire institution.
- Thank you.
- No. Love all the resources you have.
- This was a very interesting survey and some of the questions made me uncomfortable.
- We have only been involved with the HIPMC for a short period of time. I am anxious to see results in the coming months related to the CHIP.
- HIPMC does a great job!
- Your organization is outstanding in every way. Appreciate your effort. Thanks
- For those questions that we did not provide answers, the categories are not reflective of our experience with those organizations.

Next Steps

A presentation of this report was presented at the HIPMC Partner meeting in October 2014. Members were offered the opportunity to provide feedback on the findings and assist MCDPH staff with the interpretation of the results. This full report and the accompanying PowerPoint presentation are posted on

www.MaricopaHealthMatters.org

Next steps in reviewing these data include working with an expert in SNA to provide additional analyses and input on the findings and meaning for MCDPH staff and HIPMC partners. Stakeholders are interested in taking a closer look at what can be learned from these data to improve the strength of the network and have a greater impact on the HIPMC goals.

One area to be examined in depth is regarding the resources that organizations bring to the network. The data from this survey reveal many of the resources that are part of the network and those deemed to be most important. The questions to be answered include whether these are the right resources for this effort, to identify needed resources, and to understand the impact that leveraged resources can build upon the capabilities of the coalition, without overtaxing any one organization.

It's also feasible to develop additional network maps to look at the HIPMC collaborative in different ways. For example, since the work of the HIPMC focuses on the sectors of the community where residents *learn*, *live*, *work*, and *seek care*, the participating organizations can be coded based on these sectors and the areas

desired for impact. It's also feasible to recode the organizations by sectors of influence (e.g. Government, non-profit, community planning, behavioral health, etc.) to identify potential gaps in sectors that should be at the table to improve our outcomes.

Does the HIPMC have all the essential partners at the table? If not, which partners are missing and what can be done to recruit them to the council? A question on the survey asked whether their organizations are seen as sharing a common vision with HIPMC. In this survey, nearly all reported yes. However, if the network grows and includes organizations from more sectors (e.g. non-traditional public health partners such as transportation, housing, animal control, air quality, etc.) then it's conceivable that the finding about the congruity of the network could change but this is not necessarily a negative result. The answers to these questions would help to strengthen the collaborative.

This report presents the result of the first implementation of the PARTNER Tool survey using a social network analysis approach to assess the strength and effectiveness of the Health Improvement Partnership of Maricopa County. This report is intended to provide information for program improvement to impact health outcomes and to improve the health of the people of Maricopa County, Arizona.

Appendix A

Network Scores- All Members

Below is a table of all individual network scores, including degree centrality, relative connectivity, value scores and trust scores.

Glossary of key terms:

Centralization: A measure of the extent to which a network is dominated by one or a few very central hubs (i.e., nodes with high degree and betweeness centrality). In a highly centralized network, these central hubs represent single points of failure, which, if removed or damaged, quickly fragments the network into unconnected sub-networks. A less centralized network has fewer points of failure and exhibits greater resilience, since many nodes or links can fail while allowing the remaining nodes to still reach each other over other network paths.

Degree Centralization: The lower the centralization score, the more similar the members are in terms of their number of connections to others (e.g. more decentralized).

Resource Exchange: A mutual sharing and receiving of goods, knowledge, experience, etc.

Trust: Measured here as the amount of reliability, support for the mission, and willingness to engage in frank, open, and civil discussion, considering a variety of viewpoints that an organization is described as having.

Value: The weight placed on an organization in terms of its ability to provide resources, the level of power/influence it has in the community, and the level of involvement it contributes to the group. Each of the three characteristics is considered equally important, however the more any single organization/person has of each improves the way the organization/person is valued overall.

Individual Scores												
	CENTRAI	LITY/CON	NECTIV	ITY/RED	Value(1	Value(1-4)				(1-4)		
	Degree Centrality (max 55)	Non- Redundant Ties	Closeness Centrality	Relative Connectivity	Overall Value (1-4)	Power/Influe nce (1-4)	Level of Involvement (1-4)	Resource Contribution (1-4)	Total Trust (1-4)	Reliability (1-4)	In Support of Mission (1-4)	Open to Discussion (1- 4)
Arizona Department of Health Services	26	20.81	0.65	54%	3.66	3.74	3.65	3.59	3.37	3.42	3.65	3.04
Aetna	8	5.05	0.54	14%	2.81	3.11	2.56	2.78	2.97	3.17	2.57	3.17
American Heart Association	21	15.42	0.62	35%	3.18	3.4	3.21	2.93	3.09	2.92	3.36	3
American Lung Association - AZ Chapter	13	8.91	0.57	25%	3.1	3.31	3.08	2.92	3.41	3.45	3.42	3.36
Anthony Bates Foundation	11	8.21	0.56	18%	2.56	2.17	2.83	2.67	3.46	3.6	3.17	3.6
Arizona Department of Education	15	11.15	0.58	28%	3.31	3.47	3.2	3.27	3.29	3.43	3.21	3.23
Arizona Living Well Institute	18	12.69	0.6	36%	3	2.93	3	3.07	3.62	3.5	3.71	3.64
Arizona Spinal Cord Injury Association	10	7.29	0.55	16%	3	2.5	3.5	3	3.67	4	3.5	3.5
Arizona State University	21	16.32	0.62	40%	3.32	3.48	3.1	3.38	3.36	3.45	3.3	3.33
American Academy of Pediatrics - AZ Chapter	27	20.88	0.66	43%	3.23	3.7	3.2	2.8	3.58	3.63	3.56	3.56
AZCA/Golden Gate	9	6.11	0.54	16%	2.56	2.78	2.44	2.44	3.35	3.29	3.63	3.13
Arizona Public Health Association	11	7.3	0.56	24%	2.79	2.91	2.73	2.73	3.43	3	3.8	3.5
Banner Health	16	12.36	0.59	29%	3.36	3.42	3.33	3.33	3.3	3.45	3.27	3.18

Blue Cross Blue	14	10.21	0.57	23%	2.87	3.08	2.75	2.77	3	3.27	3	2.73
Shield		F 24	0.54	4.50/	2.07	2.2	2	2.4	2.67	2.5	2.75	2.75
Boys & Girls Clubs of	8	5.21	0.54	15%	2.87	3.2	3	2.4	3.67	3.5	3.75	3.75
Metro Phoenix	0	F 22	0.54	1.20/	2.06	2.42	2.74	2.75	2.02	2.2	2.06	2.74
Cigna	8	5.22	0.54	12%	2.86	3.13	2.71	2.75	2.92	3.2	2.86	2.71
City of Phx- FitPHX	21	15.68	0.62	40%	3	3.07	3.14	2.79	3.46	3.31	3.54	3.54
City of Phx- HOPE VI	27	21.61	0.66	42%	2.83	2.86	2.88	2.75	3.52	3.63	3.5	3.43
Concilio Latino de Salud	26	19.25	0.65	35%	2.17	2.38	2.13	2	2.74	2.5	2.86	2.86
Crisis Preparation and Recovery	4	2.46	0.52	8%	2.56	2	3	2.67	3.44	3.67	3	3.67
Cultivate South Phoenix	12	8.02	0.56	19%	2.5	2.75	2.5	2.25	3.42	3	3.75	3.5
Desert Mission	5	2.95	0.52	12%	2.85	3	2.75	2.8	3.73	3.8	3.6	3.8
Dignity Health St. Josephs	39	32.15	0.77	64%	3.53	3.6	3.53	3.47	3.36	3.5	3.43	3.14
Esperanca	19	14.41	0.6	30%	2.57	2.5	2.71	2.5	3.22	3.13	3.25	3.29
Family Involvement Center	9	5.28	0.54	15%	2.61	2.5	2.83	2.5	3.43	3.2	3.5	3.6
First Things First	17	12.01	0.59	31%	3.32	3.33	3.21	3.4	3.27	3.21	3.43	3.15
Greater Valley Area Health Education Center	9	5.8	0.54	22%	3.3	3.22	3.33	3.33	3.83	3.88	3.75	3.88
Hope Lives - Vive la Esperanza	4	2.3	0.52	8%	2.33	2.25	2.5	2.25	3.56	3.67	3.5	3.5
Arizona Alliance for Livable Communities	16	11.07	0.59	25%	3.67	3.67	3.67	3.67	4	4	4	4
Maricopa Association of Governments	14	9.46	0.57	27%	3.15	3.33	2.89	3.22	3.58	3.63	3.63	3.5
Maricopa County Department of Public Health	55	47.36	1	100%	3.87	3.9	3.86	3.83	3.8	3.79	3.97	3.63

Maricopa	17	13.09	0.59	28%	3.22	3.29	3.31	3.08	3.31	3.46	3.14	3.33
Community College	17	13.09	0.39	20/0	3.22	3.29	3.31	3.06	3.31	3.40	3.14	3.33
District												
Maricopa County	13	7.98	0.57	21%	3.22	3.33	3	3.33	3.56	4	3	3.67
Education Service	13	7.90	0.57	2170	3.22	3.33	3	3.33	3.30	4	3	3.07
Agency Maricopa County	2	1.18	0.51	5%	2.5	2.5	2.5	2.5	3.83	4	4	3.5
Medical Society	2	1.10	0.51	5%	2.5	2.5	2.5	2.5	3.03	4	4	5.5
Alliance												
	8	4.82	0.54	14%	3.33	3	4	3	4	4	4	4
Maricopa County Wellness Works	8	4.82	0.54	14%	3.33	3	4	3	4	4	4	4
	2.4	16.72	0.64	400/	2.40	2.6	2.5	2.22	2.50	2.22	2.00	2.44
Maricopa Integrated	24	16.72	0.64	40%	3.48	3.6	3.5	3.33	3.56	3.33	3.89	3.44
Health System	10	6.40	0.55	200/	2.47	2.2	2.22	2	2.40	2.44	2.22	2.22
Mercy Care Plan	10	6.49	0.55	20%	3.17	3.3	3.22	3	3.19	3.11	3.22	3.22
Midwestern	13	9.25	0.57	21%	2.71	2.75	3	2.38	3.25	3.43	3.14	3.17
University												
Mission of Mercy	14	9.71	0.57	29%	2.92	3	2.92	2.83	3.6	3.45	3.67	3.67
National Kidney	12	8.52	0.56	19%	3	3.33	2.67	3	3.11	3.33	3	3
Foundation												
Native Health	29	21.8	0.68	46%	2.9	3	2.93	2.79	3.13	3	3.38	3
People of Color	21	16.06	0.62	32%	2.48	2.78	2.33	2.33	3.04	3	3.11	3
Network												
Phoenix Children's	16	11.35	0.59	33%	3.22	3.33	3.13	3.2	3.48	3.57	3.43	3.43
Hospital												
Phoenix	5	2.91	0.52	12%	2.67	2.8	2.6	2.6	3.53	3.6	3.6	3.4
Revitalization												
Corporation												
Pinnacle Prevention	17	11.46	0.59	31%	2.86	2.71	3	2.86	3.71	3.71	3.71	3.71
Roosevelt	16	12.09	0.59	26%	2.35	2.6	2.45	2	2.88	2.91	2.82	2.91
Elementary School												
District												
SCAN Health Plan	12	9.54	0.56	20%	2.58	2.5	2.75	2.5	3.42	3.75	3.25	3.25
Arizona												
Scottsdale	17	13.97	0.59	29%	3.13	3.38	3	3	3.43	3.43	3.43	3.43

[1	1		I	I	ı	ı	ı	1	1	
Healthcare												
St. Luke's Health	24	18.26	0.64	58%	3.65	3.79	3.54	3.63	3.86	3.74	3.96	3.87
Initiatives												
Tanner Community	14	10.26	0.57	29%	2.79	2.86	2.86	2.64	3.54	3.38	3.54	3.69
Development												
Corporation												
The Arizona	32	24.2	0.71	49%	3.28	3.33	3.33	3.17	3.61	3.67	3.67	3.5
Partnership for												
Immunization												
University of	24	17.38	0.64	39%	2.78	2.92	2.83	2.58	3.27	3.4	3.3	3.1
Arizona College of												
Medicine - Phoenix												
University of	16	11.07	0.59	28%	2.77	2.8	2.7	2.8	3.44	3.33	3.56	3.44
Arizona Cooperative												
Extension												
Unlimited Potential	15	10.48	0.58	22%	2.5	3	2.75	1.75	3.33	3.25	3.25	3.5
Valley Permaculture	23	17.24	0.63	35%	2.71	2.71	3	2.43	3.43	3.57	3.14	3.57
Alliance												
Wesley Health	17	11.58	0.59	27%	3.12	3.18	3	3.18	3.72	3.5	3.78	3.88
Center												

Appendix B

HIPMC PARTNER Survey

1. You	are:Organization name
2. Wh	at is your job title?
	w long (months) has someone from your organization been participating in the Health Improvement Partnership of opa County (HIPMC)?
4. Plea	ase indicate what your organization contributes, or can potentially contribute, to HIPMC. (Choose all that apply)
	Funding
	In-kind resources (e.g., meeting space)
	Data resources, including data sets, collection and analysis
	Providing objectives to the CHIP
	Specific health expertise
	Expertise other than in health
	Community connections
	Connection to communities that are experiencing health disparities
	Facilitation
	Leadership
	Broad advocacy for HIPMC priorities
	Access to policy makers and/or lobbyists
5. Wh	at is your organization's most important contribution to HIPMC? (Choose one)
0	Options are based on your selections in question 4
6. Wh	ich of the following HIPMC results are critical to community health improvement? (Choose all that apply)
	Improved resource sharing
	Increased knowledge sharing
	Coordinated communication

	Networking with organizations that do similar things Networking with organizations that do different things Data and information available through MaricopaHealthMatters.org Coordinated health assessment Increased access to services Improved health outcomes
	Reduction of health disparities Public awareness
	Creating healthier environments (e.g., schools, worksites, community)
	Policy, law and/or regulation
7. Whi	ich of the following is the main reason your organization participates in HIPMC? (Choose one)
0	Options are based on your selections in question 6
	v successful has HIPMC been at implementing a coordinated effort to impact the five health priorities (Obesity, diabetes, vascular disease, lung cancer, and access to care)?
0	Not successful
0	Somewhat successful
0	Successful
0	Very successful
0	Not sure
9. Wh	at aspects of HIPMC contribute to this success? (Choose all that apply)
	Bringing together diverse stakeholders
	Meeting regularly
	Exchanging info/knowledge
	Coordinated communication
	Sharing resources
	Informal relationships created
	Collective decision-making
	Having a shared vision and goals

 □ Collective synergy □ Not sure
10. From the list, select organizations with which you have an established relationship (either formal or informal). In subsequent questions you will be asked about your relationships with these organizations in the context of HIPMC.
☐ List of HIPMC Partners provided in the survey
Please answer questions 11-18 for each partner you selected in question 10:
11. How frequently does your organization work with this organization on issues related to HIPMC's goals?
O Never
Once a year or less
O About once a quarter
O About once a month
O Every week
O Every day
12. What kinds of activities does your relationship with this organization entail? (Note: the responses increase in level of collaboration)
O None
O Cooperative Activities: Involves exchanging information, attending meetings together, and offering resources to partners
O Coordinated Activities: Includes coordinated activities beyond networking that improve outcomes for both organizations
 Integrated Activities: Formal relationship which may include shared funding, clients and/or communities, or resources fo interdependent programming
13. How valuable is this organization's POWER AND INFLUENCE to achieving the overall vision of HIPMC? (Vision: Empowered communities working together to reach optimal health and quality of life for all)

a change agent, and showing leadership.

*Power/Influence: The organization holds a prominent position in the community being powerful, having influence, success as

(O Not at all
(A small amount
(O A fair amount
(O A great deal
14. I	How valuable is this organization's LEVEL OF INVOLVEMENT to achieving the overall vision of HIPMC? (Vision: Empowered
	munities working together to reach optimal health and quality of life for all)
	rel of Involvement: The organization is strongly committed and active in the partnership and gets things done.
(O Not at all
(A small amount
(A fair amount
(O A great deal
15. I	How valuable is this organization's RESOURCE CONTRIBUTION to achieving the overall vision of HIPMC? (Vision:
	owered communities working together to reach optimal health and quality of life for all)
*Co	ntributing Resources: The organization brings resources to the partnership like funding, information, or other resources.
(O Not at all
(A small amount
(A fair amount
(O A great deal
16. I	How RELIABLE is the organization?
*Rel	iable: This organization is reliable in terms of following through on commitments.
(O Not at all
(O A small amount
(O A fair amount
(A great deal
17.	To what extent does the organization SHARE A VISION with HIPMC's vision and goals? (Vision: Empowered communities
	king together to reach optimal health and quality of life for all)
	ion Congruence: This organization shares a common vision of the end goal of what working together should accomplish.
(O Not at all
	A small amount

0	A fair amount
0	A great deal
18 Ho	ow OPEN TO DISCUSSION is the organization?
*Open to Discussion: This organization is willing to engage in frank, open and civil discussion (especially when disagreement	
-). The organization is willing to consider a variety of viewpoints and talk together (rather than at each other). You are
	o communicate with this organization in an open, trusting manner.
0	Not at all
0	A small amount
0	A fair amount
0	A great deal
19. W	hich of the following Maricopa County Department of Public Health roles is important for the success of HIPMC? (Choose
	it apply)
	Convening and connecting everyone in the HIPMC
	Communication tools
	Data resources
	Technical assistance
	Evaluation
20. Do you have any additional comments?	

Appendix C

CHIP Infographic

