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Technical Report:

Structural Assessment of a Community Service Network

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1. Background

In 2009, University of New Mexico's (UNM) Office of Community Affairs introduced the Pathways Model in Bernalillo County, New Mexico to:

- Connect underserved county residents with health care and other support systems and assist them in navigating those systems.
- Coordinate services for the underserved to achieve positive individual-level health outcomes.
- Assure collaborative planning and improvements in our community/county systems.

The Pathways Model, developed by Drs. Mark and Sarah Redding from their experience working with a community based outreach program in Alaska ("Pathways: Building a Community Outcome Production Model," 2009), has a core concept of using a collaborative structured approach to identify at-risk individuals in disadvantaged populations and intervene to help individuals develop self-management skills. Interventions include several action steps for individuals to complete in gaining knowledge and skills to address a problem area, and the completion of those steps is the "pathway." Distinct pathways cover health and social issues and focus on numerous areas such as finding and establishing a medical care home, chronic disease care, employment, food security, and housing.

Community health and social service systems are complex networks of usually public and not-for-profit organizations that support key processes of public health, and serve to impact general socioeconomic, cultural, and environmental conditions. Three key supported processes are 1) mobilizing community partnerships to identify and solve health problems; 2) linking people with needed personal health and support services; and 3) helping to inform, educate and empower people about not only health issues, but life-skills (Handler, Issel, & Turnock, 2001). Causal linkages can be inferred not only with processes and outcomes of care, but also with structural attributes of the organizations and the environment in which processes take place (Donabedian, 1978, 1988).

While specific guidance exists to assist communities in establishing Pathways Model structures, less understood are the system attributes, specifically those that are organization specific (e.g., staffing, funding, location) and network specific (e.g., connectedness of organizations). The scope of this project was to investigate structural attributes of a network of diverse community service organizations providing health and social services.

2. Objectives

The aim of this study is to use network analysis techniques to assess the Pathways Project, Pathways to a Healthy Bernalillo County, network system in Bernalillo County. The network analysis involved gathering data on attributes of organization connections in order to establish a framework for evaluating performance in implementing processes and achieving

outcomes. The effort was comprised of qualitative assessments of network collaboration and organization.

3. Methods

3.1 Design

This study is a cross-sectional qualitative assessment analysis that serves to establish a baseline assessment of the Pathways network. Study data was collected via online surveys of organization representatives. Key attributes of organizations assessed through survey responses are perceived power/influence, level of network involvement, level of resource contribution to network, reliability, degree of support of the Pathways mission, and time in the network. Two surveys were conducted; one of administrators from participating Pathways organizations and organizations similarly involved with assisting disadvantaged individuals, and one of navigators from participating Pathways organizations. All organizations participating in the Pathways program were surveyed.

The administrator survey was conducted using the Program to Analyze, Record and Track Networks to Enhance Relationships (PARTNER) survey and PARTNER website (www.partnertool.net). The Navigator Survey, constructed using almost identical questions to the PARTNER survey, was administered using SurveyMonkey (www.surveymonkey.com), since the PARTNER survey only allows one person from each organization to be surveyed and several Pathways participating organizations have multiple navigators.

3.2 Survey Population

The study population consists of administrators and navigators within Pathways-funded organizations as well as organizations that work with Pathways-funded organizations in assisting the same disadvantaged populations. There were no exclusionary criteria for either the administrator or navigator populations. All organizations (and navigators) participating in the Pathways program will be surveyed.

Administrators. The agency directors and supervisors are adults between the ages of 30 to 55. All supervisors are completely fluent in English and are varied in their ethnicity in terms of Hispanic and/or Anglo and gender (approximately 60% female/40% male). Individuals have at least a high school (or equivalent) education. Many also have a bachelor's degree or higher.

Navigators. Over the first 2 years of Pathways implementation there have been approximately thirty-plus community health navigators working on the project, including a higher rate of turnover within several of the Pathways-funded organizations. Attempts were made to identify the former navigators as well as the current group of approximately twenty navigators. The navigators in general are adults between the ages of 25 to 50, primarily women, and mostly of Hispanic/Latina origin. Several of the navigators have limited English proficiency. For individuals with limited English proficiency a translated survey was offered.

All respondents involved in this research study were in relatively good health. Most of the navigators have at least a high school (or equivalent) education, a few also have bachelor's degrees. A couple of individuals have less than a high school education, but have equivalent education of at least a 10th grade education.

3.3 Surveys

The two surveys, the administrator survey and the navigator survey, were administered in the same manner. Individuals received an email alerting them that an invitation for the survey would be forthcoming, and then a few days later, an email inviting them to take the survey was sent, and was followed up by two reminder emails. A decision to end collection of survey responses and begin analysis was made jointly by the research team.

Neither respondent email addresses nor computer IP addresses were stored with survey response data. No information on the respondent was collected and stored other than organization name, job name and number of months at the organization.

3.3.1 The PARTNER survey instrument and analysis tool

The PARTNER survey was developed by Dr. Danielle Varda through her research into effective collaboratives (Varda 2008, 2011). Fundamental to her research is that there are unique challenges and concepts for organizations working collectively on a project as opposed to when those organizations work internally on a project or only with one or two other organizations. Knowledge about how organizations view a collaborative effort and about how organizations are communicating and working with each other may help to improve the effectiveness of the collaborative. The PARTNER tool developed by Dr. Varda encompasses both visual representations of the network and as well as quantitative assessments of the network.

Frequently in network analyses, each organization in the network and connections between organizations are visually represented by labels for organizations and lines denoting the connections between them. Those connections can be one-way or two-way, and they can be weak or strong connections (depending on frequency) and the connections can be described by the type of interaction that organizations have in terms of the organization's overall perceived value to and trust within the collaborative. Because of the abundant number of connections between organizations in the Pathways network, relationships in this analysis are reported in matrix format, with color coding signifying variability.

In specific, this analysis describes for the Pathways organizations:

1. Network connections between Pathways organizations and other Pathways organizations and Partner organizations.
2. Characteristics/quality of relationships:
   a. Resources organizations contribute to the collaborative: e.g., funding, manpower, information.

    b. Perceived overall value of organization by others in the collaborative: e.g., power/influence, level of commitment, overall resource contribution.

    c. Overall trust within the network. Trust is assessed on 3 dimensions: 1) reliability and following through, 2) sharing a common mission with the group, and 3) willingness to engage in open, frank discussion. If all organizations had the highest regard for each other, trust would be a score of 100%, moderate trust would be about 50%.

3. Connectivity of organizations (degree of centralization) – Are organizations essentially on par with each other or is there one organizations or a few that "lead" the other organizations? The scores on overall value and overall trust are combined with a third measure, degree of centrality (measures the number of connections an organization has to other organizations in the network), to estimate an overall score of relative connectivity. High scores thus indicate many connections with organizations that are perceived to have high levels of trust and value. The score is a relative one. That is, one organization will serve as the benchmark with a score of '100%'; connectivity for the other organizations is then assessed based on component scores relative to the benchmark organization.

3.3.2 Survey Instruments

The survey questions are listed in Appendix A: Survey Questions.

Administrator Survey. We utilized the PARTNER survey and network analysis tool to assess the structure and connectedness of the Pathways network. PARTNER is a social network analysis tool that allows measurement of collaboration between organizations (PARTNER, 2010). Development of PARTNER was funded by a grant from the Robert Wood Johnson Foundation, and is freely available for non-commercial purposes. It is maintained by Dr. Danielle Varda, Assistant Professor at the School of Public Affairs, University of Colorado Denver, and her research team. The PARTNER survey contains a core set of standardized questions, allowing responses across multiple studies using the PARTNER survey to be combined for more general studies of network analyses conducted by Dr. Varda. However, for study responses to be combined with other study responses, study managers who use the PARTNER must consent to their data being included in Dr. Varda's larger study. Consent was provided for the use by Dr. Varda of study data from this project. Data included in Dr. Varda's study is de-identified; for example, organizations and job roles are restated to generic descriptions.

Navigator Survey. Since the PARTNER survey could not be used for the navigators, SurveyMonkey was chosen as the venue for administering the navigator survey. SurveyMonkey is a global website for administering surveys, with offices in Palo Alto, CA (USA), Portland, OR (USA) and Funchal, Portugal. The survey administered was an adaptation of the administrator survey. Some of the navigators were not fluent in English and so the survey was also offered in Mexican-American Spanish.

Survey response data storage, management and retention.   Survey responses were first stored on the respective websites from which the two surveys were administered. For the administrator survey, data from the PARTNER survey data is stored on two password-protected, encrypted computers, both managed by the University of Colorado Denver IT services team (in use by Dr. Varda). SurveyMonkey data was similarly protected on secure, encrypted servers. Once all responses were gathered, survey response data were downloaded and are now stored on password-protected, encrypted computers managed by LCF Research. Survey response data will be maintained on servers at LCF Research until no longer needed for assessment studies related to the Pathways network.

3.4 Analysis

Analysis of the survey data was predominantly accomplished using the PARTNER network analysis tool. Response data from the Navigator Survey was structured to accommodate the PARTNER tool, which allows only one response per organization. Where more than one navigator from an organization responded, responses were aggregated for use in the PARTNER tool in the following manner:

1. The responses for the individual who had been working at the organization the longest were used.
2. If that individual did not respond to a question, but the next most senior individual from the same organization did, then the response for that individual was used.
3. If all respondents for an organization were employed there for an equal amount of time, then one individual was chosen randomly and that individual's responses used (as in Section 3.4.1 above). Should that individual not respond to a question, then responses provided by another individual in the organization would be used.

Responses about interaction with other organizations were analyzed in 3 ways:

1. *Navigator Level*: Navigator responses alone (17 Pathways organizations provided information)
2. *Administrator Level*: Administrator responses alone (19 organizations provided information: 13 Pathways and 6 Partner organizations)
3. *Full Network*: Administrator responses supplemented by navigator responses for organizations that did not respond to the administrator survey, but did respond to the navigator survey (6 Pathways organizations).

In addition to the network analysis, simple descriptive statistics (e.g., frequencies, means) were assessed using standard statistical software (SAS, SPSS). Descriptive statistics summarize responses to individual questions for each of the two surveys (administrator and navigator) and also summarize congruence at the organization level between navigator and administrator responses. Correlations were assessed using Pearson correlation coefficients.

4. Results

4.1.1 Overall

Table 1 shows the organizations that were invited to participate in the surveys. In all 27 organizations were invited to take the administrator survey, and 20, the navigator survey.

Table 1 Organizations invited to participate in surveys

Name of Organization	Type Organization	Nature of Organization	Administrator Survey	Navigator Survey
A New Awakening	Pathways	Behavioral Health	√	√
ABQ Health Care for the Homeless	Partner	Healthcare/Behav Health/Housing	√	
Addus HealthCare *	Pathways	Healthcare	√	√
Adelante Development Center *	Pathways	Employment / Education		√
Bernalillo County Housing Dept.	Partner	Housing	√	
Casa de Salud Family Clinic	Pathways	Healthcare	√	√
Catholic Charities Refugee Resettlement	Pathways	Employment / Education	√	√
Catholic Charities (Housing)	Partner	Housing	√	
Centro Sávila	Pathways	Behavioral Health	√	√
Consulado de México	Partner	Legal	√	
Cuidando Los Niños *	Pathways	Housing		√
East Central Ministries	Pathways	Healthcare	√	√
Encuentro	Pathways	Employment / Education	√	√
Enlace Comunitario	Pathways	Legal	√	√
First Choice Community Health	Partner	Healthcare	√	
First Nations Community Healthsource	Pathways	Healthcare	√	√
Hogares, Inc. *	Pathways	Behavioral Health	√	√
La Plazita Institute	Pathways	Employment / Education	√	√
MyCommunityNM (online site)	Partner	Community Svcs	√	
NM AIDS Services *	Pathways	Social Svcs	√	√
NM Immigrant Law Center	Pathways	Legal	√	√
PB&J Family Services	Pathways	Social Svcs	√	√
Rio Grande Community Dev. Corp.	Pathways	Community Svcs	√	
Samaritan Counseling Center	Pathways	Behavioral Health	√	√
South Valley Economic Dev. Ctr. (SVEDC)	Pathways	Employment / Education	√	√
The Storehouse *	Pathways	Community Svcs		√
UNM Cancer Center	Partner	Healthcare	√	
UNM Hospital Care One Program	Partner/Pathways	Healthcare	√	√
UNM HSC College of Nursing	Partner	Healthcare	√	
UNM HSC Project ECHO	Partner	Healthcare	√	

* Organization that was not a Pathways Organization at time of survey, but previously participated in the program.

Figure 1 shows the geographical location of the organizations within Albuquerque. Shown on the map are organizations that are participating in the Pathways program, as well as those that partner and interact with those organizations.

Figure 1 Map of Pathways Organizations and Partner Organizations *
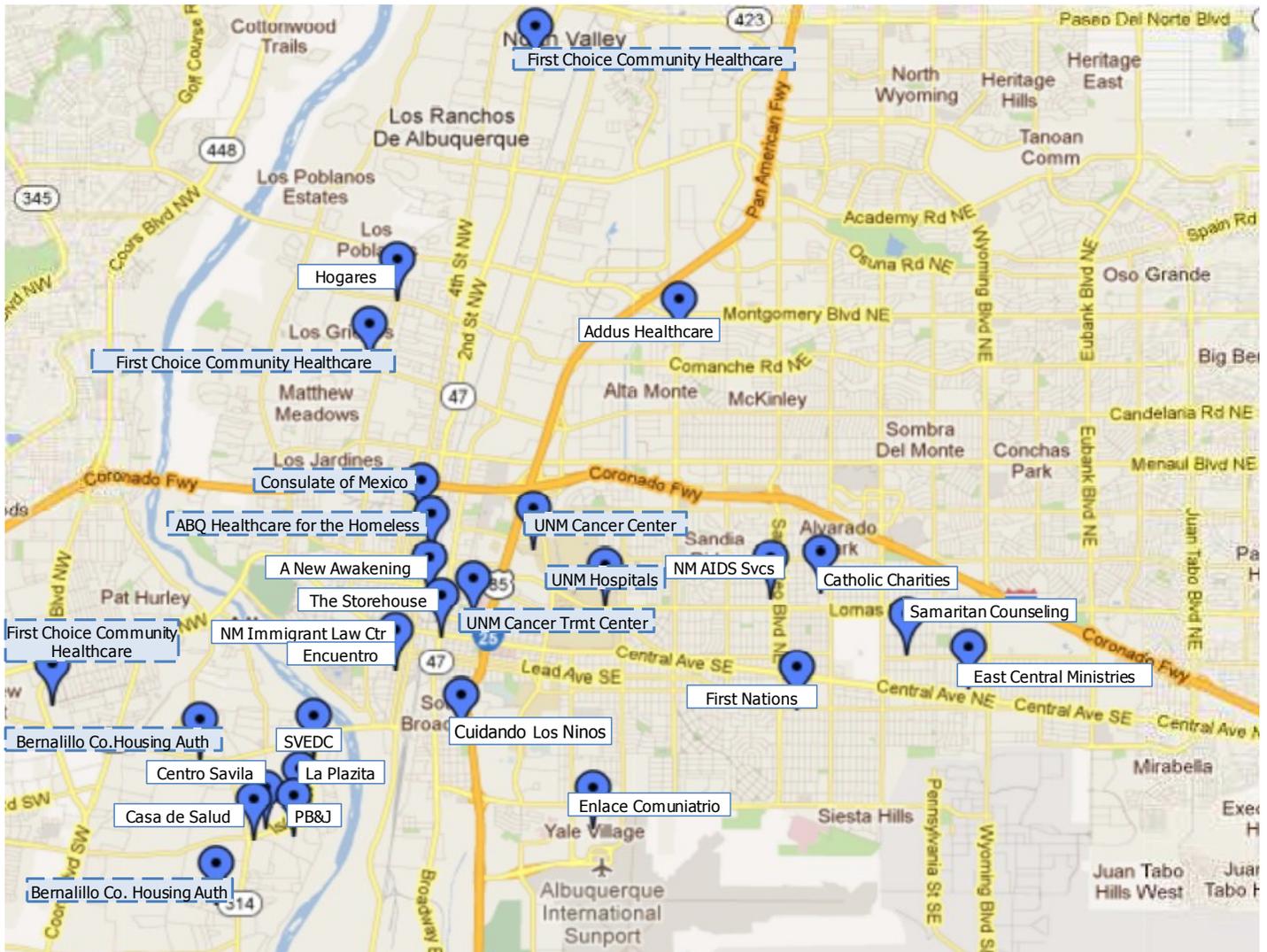
* Partner organizations are indicated by light blue labels, outlined by broken lines; not shown are: Adelante Development Center, Rio Grande Development Center and My Community New Mexico (which is an online site).

Shown in Table 2 are summaries of respondent characteristics. The overall response rate for the administrator survey was 70.4% (19/27); for the Partner organizations the rate was 60% (6/10), and for the Pathways organizations the rate was 76.5% (13/17). The response rate for the navigator survey was 90% (18/20). For the navigator survey there were 5 organizations for which multiple individuals responded; each with 2 navigators providing responses.

<div align="center">Table 2 Respondent Characteristics</div>

	Administrator Survey			Navigator Survey
	Total Administrator	Partner Organizations	Pathways Organizations	
No. organizations invited to participate	27	10	17	20
No. of organizations responding	19	6	13	18
Organization Response Rate	70.4%	60.0%	76.5%	90.0%
No. individuals invited to participate	27	10	17	36
No. of individuals responding	19	6	13	23
Individual Response Rate	70.4%	60.0%	76.5%	63.9%
Mean No. of months responding individual with organization (SD) [Min, Max]	38.6 (32.0) [1,120]	53.4 (41.3) [14,120]	29.9 (22.9) [1,71]	15.0 (9.7) [3,26]

Individuals with the longest tenure in their positions were those in the organizations that partner with Pathways organizations, the least were those individuals who are Pathways navigators (see Table 2).

There was a high level of correlation (>0.72) between the administrators of Pathways organizations/Partner organizations and the navigators who interact with Pathways clients about the following questions (See Appendix A: Survey Questions for question details and Appendix B: Survey Responses):

Q6. Outcomes of this community network's efforts include (or could potentially include): (choose all that apply) (correlation = 0.72)
Choices with highest # of responses (within each survey group, each had equal number of responses):

Reduction of Health Disparities	Administrators
Increased Knowledge Sharing	Administrators and navigators
Improved Services	Administrators and navigators
Improved Health Outcomes	navigators
Community Support	navigators

Q7. Which is this community network' most important outcome? (correlation = 0.81)

Choices with highest # of responses:

Improved Health Outcomes	highest # responses for both
Reduction of Health Disparities	second highest # responses for both

Q8. How successful has this community network been at reaching its goals? (correlation = 0.83)

Fairly evenly split between Successful and Very Successful

With respect to Question #9, "What aspects of networking contribute to this success? (Choose all that apply)," in the navigator survey an error was made in the survey construction and respondents could only choose one response instead of multiple responses. Thus, the calculated correlation was not as strong on this question (correlation = 0.39). However, in both surveys "sharing resources" received the highest number of responses, followed by "exchanging info/knowledge." The next highest response for the navigators was "collective decision-making" and for administrators "bringing together diverse stakeholders."

Responses to survey questions showed evidence of a decentralized network with members similar to each other in the number of connections. Interaction is high among network members. The PARTNER tool calculates an overall score for degree of centralization. Lower scores indicate that few network members hold highly central positions. The overall degree of centralization score was 24.6% for the Navigator Level responses, 43.8% for the Administrator Level responses, and 32.8% for the Full Network responses.

Trust between network members was moderate to strong. Trust was measured using responses for questions 16, 17, and 18; responses ranged from no trust ("Not at all") to complete trust ("A great deal"). Responses were measured on a scale of 1 ("Not at all") to 4 ("A great deal"). If every organization had complete trust in every other organization for all three questions, the network trust score would be 100%. Trust for the Navigator Level responses was 62.9%, for the Administrator Level, 61.5%, and for the Full Network Level, 55.2%.

4.1.2   Frequency of interactions

There were 6 possible levels of interactions between organizations:

1. Never / interact only on issues unrelated to the network
2. Once a year or less
3. About once a quarter
4. About once a month
5. Every week
6. Every day

Figure 1 shows a grid of the frequency of interactions for organizations. Columns across the top reflect organizations with whom entities reported interacting. The grid reflects 28 of the 30 organizations invited to participate; 2 organizations were not included because no interactions were reported for them. There are essentially 4 quadrants reflected in the grid – the upper left quadrant reflects reported interactions between Pathways organizations, the upper right between Pathways and Partner organizations, the lower left between Partner and Pathways organizations, and the lower right between Partner organizations. The organizations are predominantly healthcare related organizations, but also those organizations serving individuals with high needs (employment/education). Interactions between Pathways organizations are most frequent between behavioral health and healthcare & employment/education organizations, between community service and employment/education organizations, and between legal and healthcare & employment/education organizations.

Figure 2 Interaction Frequency

Note: Each cell represents one organization within each of the organization categories;
28 organizations are represented (Addus Healthcare and Adelante Development Center not included)
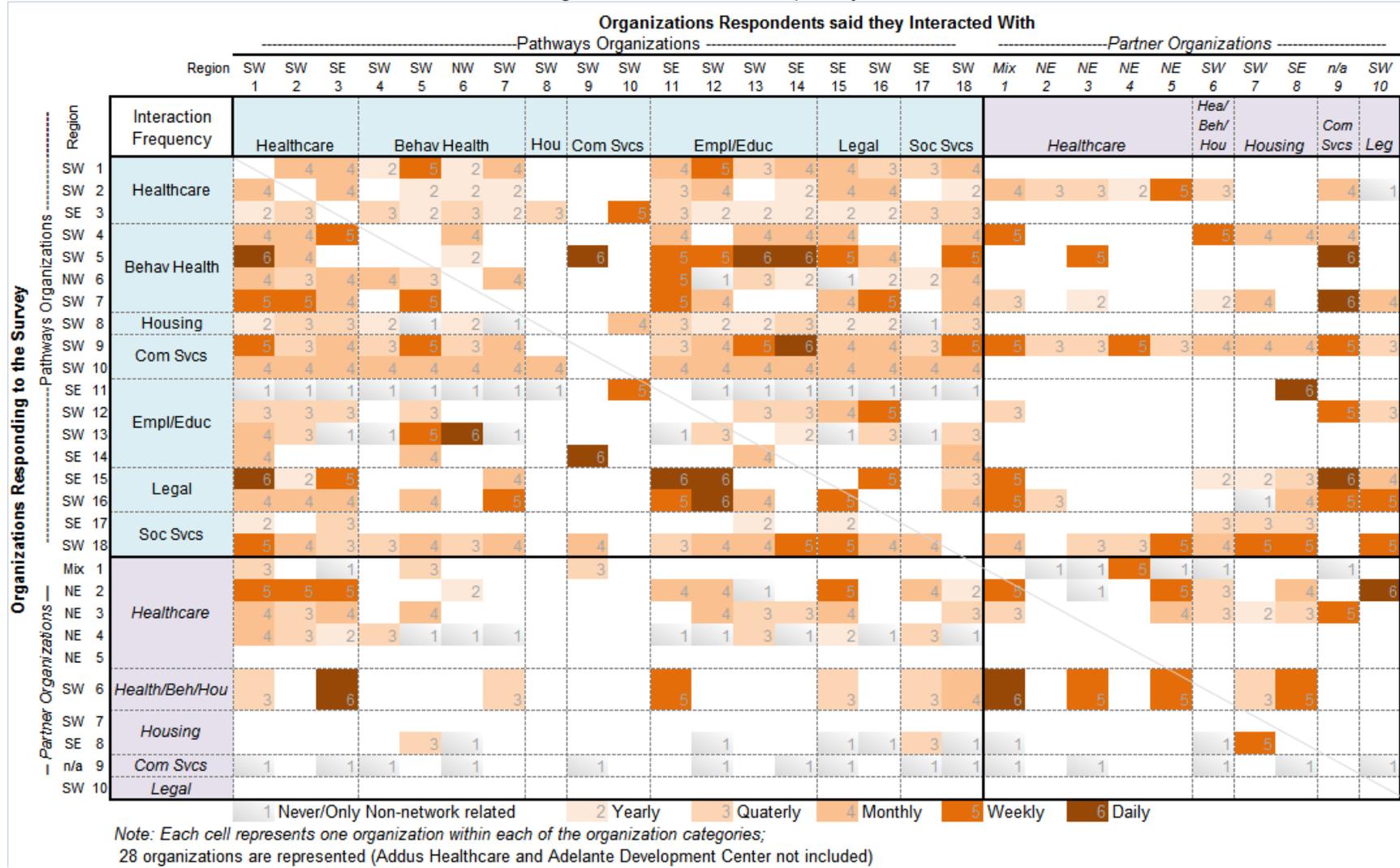
Figure 3 Activity Involvement Between Organizations

Note: Each cell represents one organization within each of the organization categories;
28 organizations are represented (Addus Healthcare and Adelante Development Center not included)
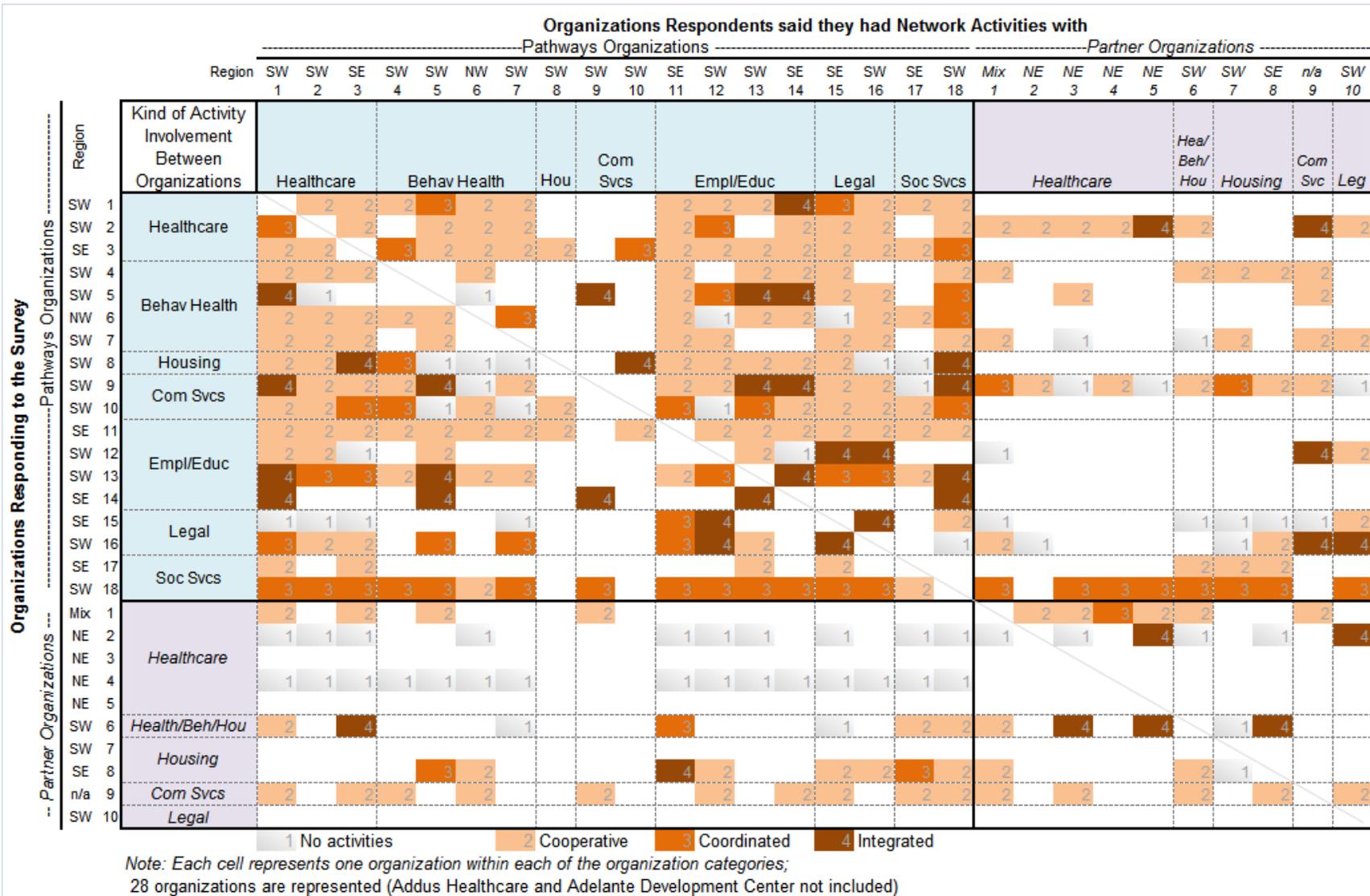
How organizations work together can be further characterized according to the nature of the interactions. That is, are they cooperative, coordinated, or integrated (see question #12, Appendix A: Survey Questions):

1. **Cooperative**: involves exchanging information, attending meetings together, and offering resources to partners
2. **Coordinated**: Include cooperative activities in addition to intentional efforts to enhance each other's capacity for the mutual benefit of programs.
3. **Integrated**: In addition to cooperative and coordinated activities, this is the act of using common areas/interests to create a united ability to support work in related content areas.

Most of the interactions are at least cooperative (Figure 3). However it is useful to note where organizations are communicating with other organizations at a level that is coordinated or integrated. The strongest level of activity between Pathways organizations is with the one social services entity in the Southwest, but there are also many organizations with integrated activity levels with employment/education organizations.

4.1.3 Navigator Level Survey Responses

Navigators from 17 participating Pathways organizations responded to questions about interactions with other participating Pathways organizations. Almost all organizations had at least a score of '2' with regard to perceived overall value and overall trust, thus the combined view of all organizations was that all Pathways organizations contributed at least some small amount of power/influence, involvement, and resources and in at least some small amount were felt to be reliable, to support the overall mission of the collaborative, and to be open to discussion. Average scores for overall value and trust were closer to scores of '3', indicating a level of 'a fair amount' (See Table 3).

Table 3 Navigator Level Responses

	Relative Connectivity	Overall Value	Total Trust
Mean Score (SD)	81.2% (12.2%)	2.75 (0.38)	2.89 (0.38)
[Min, Max]	[54%,100%]	[2.12,3.38]	[2.19,3.48]

The lowest score for relative connectivity was 54%, with 13 of the 17 organizations having a relative connectivity score of $\geq$75%. Interestingly, there were 10 organizations with a score of $\geq$80%. As of November 1, 2011, all but one of these organizations had enrolled approximately 200 or more clients, averaging over 10 clients/pathway. The two highest ranking organizations had enlisted over 450, each averaging over 20 clients/pathway, indicating that these organizations are probably larger organizations or at least they are heavily involved with Pathways. For the 7 organizations with relative connectivity scores <80%, all but one organization had enrolled <125 clients, averaging <8 clients/pathway (one had enrolled approximately 220 clients), indicating smaller organizations or reduced involvement with Pathways.

4.1.1   Administrator/Partner Level Survey Responses

There were 19 individuals who were either program managers or administrators of Pathways organizations or administrators of organizations partnering with Pathways organizations; 18 responded to questions about interactions with other organizations. Minimum and maximum overall value and overall trust scores were lower than for the Navigator Level survey responses, but this is not surprising given that this group included organizations not participating in the Pathways program.

Table 4 shows the average scores and indicators of the heterogeneity of responses.

Table 4 Administrator Level Responses

	Relative Connectivity	Overall Value	Total Trust
Mean Score (SD)	60.5% (23.2%)	2.52 (0.42)	2.84 (0.38)
[Min, Max]	[25%,100%]	[1.58,3.08]	[2.29,3.19]

The organizations with the highest relative connectivity scores were those again with substantial numbers of enrolled clients, although compared to the Navigator Level survey, the numbers of clients/pathway was reduced, averaging between 11-14 for the two organizations with the highest relative connectivity scores.

Scores of relative connectivity for the Administrator Level survey however were impacted when an organization did not participate in the survey, but other participating organizations responded about their interactions with that organization. Although there were exceptions, for example, My Community New Mexico. This organization responded to the first part of the survey, but lacking interaction with most of the other organizations, did not have responses to questions 13-18. Still My Community New Mexico was fairly highly rated among the organizations, having a relative connectivity score of 83%, and overall value score of 2.8 and an overall trust score of 3.4.

4.1.1   Full Network Level Survey Responses

When combined, there were 28 representative responses for Pathways organizations or administrators of organizations partnering with Pathways organizations. Minimum and maximum overall value and overall trust scores were fairly similar to the Administrator Level survey responses.

Table 5 shows the average scores and indicators of the heterogeneity of responses.

Table 5 Full Network Responses

	Relative Connectivity	Overall Value	Total Trust
Mean Score (SD)	62.4% (20.7%)	2.42 (0.34)	2.62 (0.32)
[Min, Max]	[21%,100%]	[1.67,3.07]	[1.67,3.40]

The organizations with the highest relative connectivity scores were similar to the Administrator Level survey, averaging between 10-24 clients/pathway for the five

organizations with the relative connectivity scores >85%. The top five organizations – 3 healthcare, 1 legal, and 1 social service agency – were also those for whom many interactions with other organizations were at least "Coordinated." These organizations also had high scores for overall value and trust (see Table 6).

Table 6 Organization Characteristics

Region		Type of Organization	Relative Connectivity (%)	Overall Value	Total Trust	# Clients†	Clients / Pathway†
SW	1	Healthcare	93	2.8	2.9	198	10.4
SW	2	Healthcare	91	2.7	3.0	508	24.2
SE	3	Healthcare	87	2.6	2.8	342	15.5
SW	4	Behav Health	61	2.2	2.5	200	13.3
SW	5	Behav Health	75	2.3	2.7	63	3.3
NW	6	Behav Health	59	1.8	2.1	218	10.9
SW	7	Behav Health	68	2.5	2.7	33	0
SW	8	Housing	42	1.7	1.7	119	7.9
SW	9	Com Svcs	73	3.0	2.9	0	0
SW	10	Com Svcs	44	2.3	2.3	481	21.9
SE	11	Empl/Educ	56	2.5	2.5	22	2.4
SW	12	Empl/Educ	82	2.5	2.7	67	3.7
SW	13	Empl/Educ	74	2.7	2.8	267	12.7
SE	14	Empl/Educ	60	2.4	2.5	364	16.5
SE	15	Legal	92	2.5	2.7	263	13.8
SW	16	Legal	74	2.4	2.8	19	1.9
SE	17	Soc Svcs	53	2.2	2.4	109	6.8
SW	18	Soc Svcs	100	2.9	2.9	253	11.5
Mix	1	Healthcare	63	2.6	2.8		
NE	2	Healthcare	48	2.5	2.6		
NE	3	Healthcare	56	2.3	2.7		
NE	4	Healthcare	46	2.8	2.7		
NE	5	Healthcare	21	2.3	2.3		
SW	6	Health/Beh/Hou	61	2.6	2.9		
SW	7	Housing	29	2.5	2.4		
SE	8	Housing	40	2.6	2.3		
n/a	9	Com Svcs	70	2.7	3.4		
SW	10	Legal	29	2.7	2.5		

Pathways Organizations / *Partner Organizations*

† Information on Agencies and Pathways as of November 1, 2011

5. Discussion/Conclusion

This was the first attempt to survey both Pathways and Partner organizations about their interactions. Responses were collected for 90% of the invited Pathways organizations on the Navigator survey (64% of Navigators) and 70% of the invited Partner organizations and

Pathways administrator/manager survey. This was a good response rate, but could be better.

The decentralized nature of the network was not a surprising finding. This is not a hierarchical network but rather one where decision making is performed separately by each member of the network. Efforts in helping disadvantaged clients are collaborative. Within the network there is a strong core of organizations for whom interactions are at the high level of integrated activities, where the organizations in addition to working cooperatively and coordinating activities, consciously work together to achieve a common goal.

Some agencies appear to have established strong working relationships with other organizations, interacting frequently and with an integrated level of activity. However, levels of some interactions were lower than one might expect. For example, most interaction with social service agencies occurred monthly or less frequently. Coordinated or integrated activities occur less frequently between Pathways organizations and Partner organizations.

For organizations that responded to both the administrator and the navigator survey, there was a high level of agreement about the desired outcomes of the network. Both felt that improved health outcomes was the main desired outcome of the network's efforts, with reducing health disparities the second most important. Additionally, improved knowledge sharing, improved services and community support were listed as important outcomes. The overwhelming majority of respondents were fairly evenly split between whether the network had been "successful" or "very successful" at reaching its goals, with the others responding that the network had been "completely successful" or only "somewhat successful" (see Appendix Figure 6). This is not surprising given that Pathways has only been ongoing for a short period of time.

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7. Appendix A: Survey Questions

Q#	Question	Administrator Survey	Navigator Survey
1	Please select your organization/program/department from the list:	√	√
2	What is your job title?	√	
3	How long have you been in this position (in months)?	√	
2	How long have you been in your current position in this organization (in months)?		√
3	Which pathways have you been involved with? (choose all that apply): Behavioral Health Child Care Child Support Dental Care Depression Diabetes Domestic Violence Education / GED Employment Food Security Heat & Utilities Health Care Home Homelessness Prevention Housing Income Support Legal Services Medical Debt Pharmacy / Medications Pregnancy Substance Use / Abuse Transportation Vision & Hearing		√

4	Please indicate what your organization/program/department contributes, or can potentially contribute, to this community network (choose as many as apply).	√		√
	Community Connections			
	Advocacy			
	Facilitation / Leadership			
	Specific Health Expertise			
	Expertise Other Than in Health			
	Info/ Feedback			
	Paid Staff			
	Volunteers and Volunteer staff			
	Organizational Management			
	Funding			
	Data Resources including data sets, collection and analysis			
	In-Kind Resources (e.g., meeting space)			
	IT/web resources (e.g. server space, web site development, social media)			
5	What is your organization's most important contribution to this community network? [same choices as Q4]	√		√
6	Outcomes of this community network's work include (or could potentially include): (choose all that apply).	√		√
	Reduction of Health Disparities			
	Increased Knowledge Sharing			
	Improved services			
	Improved Health Outcomes			
	Community Support			
	Policy, law and/or regulation			
	Improved communication			
	Health education services, health literacy, educational resources			
	Public Awareness			
	New Sources of Data			
	Improved Resource Sharing			
7	Which is this community network's most important outcome? [same choices as Q6]	√		√
8	How successful has this community network been at reaching its goals?	√		√
	Not Successful			
	Somewhat Successful			
	Successful			
	Very Successful			
	Completely Successful			

9	What aspects of networking contribute to this success? (Choose all that apply [note however on navigator survey, only one choice could be picked])	√		√
	Bringing together diverse stakeholders			
	Meeting regularly			
	Exchanging info / knowledge			
	Sharing resources			
	Informal relationships created			
	Collective decision-making			
	Having a shared mission, goals			
10	**For each organization the following questions were answered:**			
11	How frequently does your organization/program/department work with this organization/program/department on issues related to this community network's goals?	√		√
	Never/We only interact on issues unrelated to the network			
	Once a year or less			
	About once a quarter			
	About once a month			
12	What kinds of activities does your relationship with this organization/program/department entail [note: the responses increase in level of networking]?	√		√
	None			
	Cooperative: involves exchanging information, attending meetings together, and offering resources to partners			
	Coordinated: Include cooperative activities in addition to intentional efforts to enhance each other's capacity for the mutual benefit of programs.			
	Integrated: In addition to cooperative and coordinated activities, this is the act of using common areas/interests to create a united ability to support work in related content areas.			
13	How valuable is this organization/program/department's power and influence* to achieving the overall mission of this community network? *Example: holds a prominent position in the community; shows strong leadership.	√		√
	Not at all			
	A small amount			
	A fair amount			
	A great deal			

Appendix A: Survey Questions

14	How valuable is this organization/program/department's level of involvement* to achieving the overall mission of this community network? *Example: strongly committed; active in the partnership; gets things done.	√	√
	Not at all		
	A small amount		
	A fair amount		
	A great deal		
15	How valuable is this organization/program/department/s resource contribution* to achieving the overall mission of this community network? *Example: brings resources to the partnership like funding and information.	√	√
	Not at all		
	A small amount		
	A fair amount		
	A great deal		
16	How reliable* is the organization/program/department? *Example: follows through on commitments.	√	√
	Not at all		
	A small amount		
	A fair amount		
	A great deal		
17	To what extent does the organization/program/department share a mission with this community network's mission and goals? *Example: shares a common objective(s).	√	√
	Not at all		
	A small amount		
	A fair amount		
	A great deal		
18	How open to discussion* is the organization/program/department? *Example: willing to engage in frank, open and civil discussion (even when disagreement exists); willing to consider a variety of views and talk together (rather than at each other); communication with this organization/program/department is in an open, trusting manner.	√	√
	Not at all		
	A small amount		
	A fair amount		
	A great deal		

8. Appendix B: Survey Responses

Figure 4 Administrator and navigator survey responses to Q6: Outcomes of this community network's efforts include (or could potentially include): (choose all that apply)
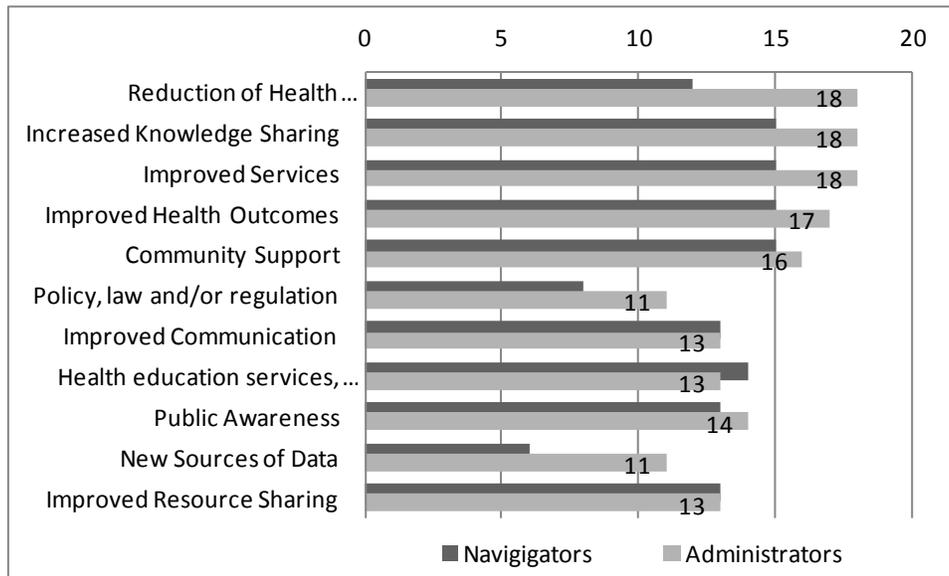

Figure 5 Administrator and navigator survey responses to Q7: Which is this community network' most important outcome?
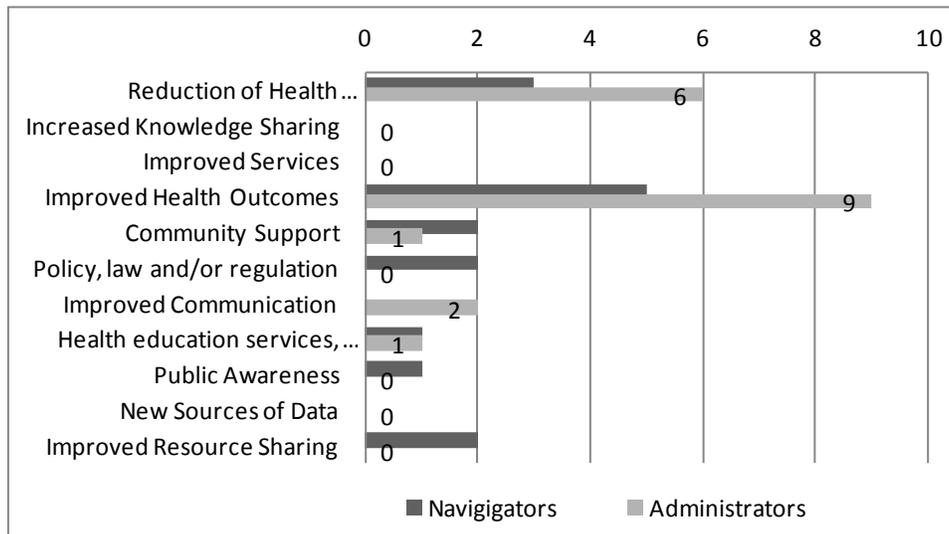
Figure 6 Administrator and navigator survey responses to Q8: How successful has this community network been at reaching its goals?
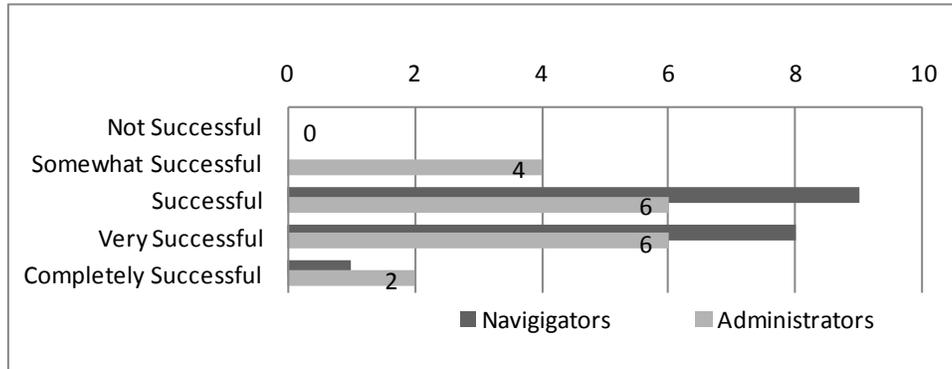

Figure 7 Administrator and navigator survey responses to Q9: What aspects of networking contribute to this success? (Choose all that apply - note navigators could only choose one)