

**POLK COUNTY
WRAPAROUND PROJECT
FOR
AFRICAN AMERICAN YOUTH**

Phase I Process Evaluation

Brad Richardson, Ph.D.

Nancy Graf, B.A.

*National Resource Center for Family Centered Practice
The University of Iowa School of Social Work
100 Oakdale Campus, W206 OH
Iowa City, IA 52242*

September 2003

This research was funded by Grant # 1 KD1 TI137-8-01, Center for Mental Health Services (CMHS), Substance Abuse and Mental Health Services Administration (SAMHSA), Department of Health and Human Services (DHHS). The findings presented in this report represent the views of the authors, not of the funding agency.

Table of Contents

Section	Page
Table of Contents.....	2
List of Tables.....	3
List of Figures.....	3
 INTRODUCTION and OVERVIEW.....	 4
 METHODOLOGY.....	 6
Population, Sample, and Sampling Frames.....	6
Quantitative Measures.....	7
 RESULTS.....	 8
Qualitative Analysis	8
Analysis of Meeting Minutes	8
Historical Timeline of Major Grant Activities	10
Quantitative Analysis	12
Brief Review of Network Measures.....	12
Procedure.....	13
Results of Social Network Analysis	14
Results of Survey of Consensus	28
Comparison of Baseline and Follow up Responses.....	28
 FORMATIVE EVALUATION AND WRAPAROUND NEEDS ASSESSMENT..	 33
Introduction	33
Needs Assessment Methodology.....	33
Analysis of Provider and Community Stakeholder Data	33
 REVIEW OF RELEVANT LITERATURE	 44
References and Literature Cited	49
 Appendix A: Network Survey Instrument.....	 52
Appendix B: Survey of Consensus Indicators	54
Appendix C: Consumer Needs Assessment Instrument	56
Appendix D: Agency Needs Assessment Instrument	59
Appendix E: Meeting Minutes	62

List of Tables

Name of Table	Page
Table SNA-1. Consensus Measured as a Function of Network Change	14
Table SNA-2. Consensus Measured as a Function of Joint Case Planning.....	17
Table SNA-3. Consensus Measured as a Function of Joint Staff Training	20
Table SNA-4. Consensus Measured as a Function of Participation in Joint Funding	22
Table SNA-5. Consensus Measured as a Function of Collection of Common Outcomes Data	24
Table SNA-6. Consensus Measured as a Function of Providing Services to African Amer. Youth	26
Table SOC-1. Agency Information Provided by Respondents at Baseline	28
Table SOC-2a. Comparison of Responses from Baseline to Follow-up (Items 1-10)	29
Table SOC-2b. Comparison of Responses from Baseline to Follow-up (Items 11-20)	30
Table NA-1. Needs Assessment Survey Results: Levels of Importance and Achievement	34-35

List of Figures

Name of Figure	Page
Fig SNA-1. Consensus Measured as a Function of Network Change	16
Fig SNA-2. Consensus Measured as a Function of Joint Case Planning	19
Fig SNA-3. Consensus Measured as a Function of Joint Staff Training	21
Fig SNA-4. Consensus Measured as a Function of Participation in Joint Funding	23
Fig SNA-5. Consensus Measured as a Function of Collection of Common Outcomes Data	25
Fig SNA-6. Consensus Measured as a Function of Providing Services to African Amer. Youth	27
Fig. SOC-1a. Responses with Means > 2.50 at Follow-up with Baseline Mean Response	31
Fig. SOC-1b. Responses with Means < 2.50 at Follow-up with Baseline Mean Response	32
Fig. NA-1. Levels of Importance and Achievement for Prevention Activities	36
Fig. NA-2. Levels of Importance and Achievement for Outreach and Access	37
Fig. NA-3. Levels of Importance and Achievement for Assessment and Intake	38
Fig NA-4. Levels of Importance and Achievement for Goal Setting and Intervention Planning	39
Fig. NA-5. Levels of Importance and Achievement for Informal and Formal Resources	40
Fig. NA-6. Levels of Importance and Achievement for Counseling and Therapy	41
Fig. NA-7. Levels of Importance and Achievement for Monitoring Service Provision	42
Fig. NA-8. Levels of Importance and Achievement for Interagency Coordination	43

INTRODUCTION AND OVERVIEW

Employee and Family Resources, Inc. (EFR) in collaboration with numerous university, local, state, and national agencies applied to the Department of Health and Human Services (DHHS), Substance Abuse Mental Health Services Administration (SAMHSA), Center for Mental Health Services (CMHS), to become a Phase I Community Action Grant program site. The Phase I Community Action Grant engaged the community in a consensus building and planning process to evaluate the feasibility of implementing an exemplary, culturally-appropriate Wraparound practice for African American adolescents with co-occurring mental disorders and substance abuse disorders. The consensus building process in Phase I brought together in a “collaborative pursuit process,” facilitated by EFR, a group of community members and stakeholders from across the entire community. As a result of the process, the community is in consensus that Wraparound as an exemplary practice will benefit and sustain service to African American families in the area.

Wraparound was initially identified as an evidence-based and exemplary practice that was demonstrated to be effective for similar target populations. (See Review of Relevant Literature, p. 44) EFR wanted to adopt the Wraparound model because it was recognized that this evidenced-based exemplary practice addressed issues salient to African American youth, and families with co-occurring mental illness and substance abuse. The purpose of the Phase I grant was to build, demonstrate and document consensus for the Wraparound approach in the target area, and build capacity to sustain the adoption of Wraparound for the African American population of Polk County.

During the fall of 2002, EFR identified and recruited Polk County residents to participate in activities that provided an introduction to and discussion of the Wraparound model as well as discussions about implementation, funding, and barriers. Consumers and providers together attended a conference on Disproportionate Minority Confinement including a seminar on the Wraparound model of service. Ten to 18 community members regularly participated during six meetings of the Concerned Citizens committee. Community service providers, local politicians, substance abuse and mental health experts became involved through meetings of the Providers Committee and the Public Systems Committee. These two groups met 2-3 times separately as well as once jointly. EFR engaged members who had experience navigating through the child-welfare and/or criminal justice systems, had personally dealt with and/or have observed friends or relatives battling with substance abuse and mental health issues within their families, and were willing to participate in the efforts to improve service delivery to African American youth and families in Polk County. All the community members were representative of the area’s African American population and received stipends helping to create reciprocity with the agency representatives. Community members’ equal participation through the collaborative pursuit process provided the social validity of the adapted exemplary practice model.

The following agencies formed the core group of agencies serving Polk County that provide services to African American youth and participated in meetings from October 2002 through April 2003.

- Polk County Juvenile Court
- Polk County Attorney's Office
- Youth Law Center/Juvenile Defenders Office
- Longfellow Elementary School
- Iowa Department of Public Health
- State OJJP Office
- Evelyn Davis Early Learning Academy
- MECCA
- Polk County Decat
- Orchard Place
- Division of Adult, Children and Family Services
- PACE
- Des Moines Child and Adolescent Guidance Center
- Urban Dreams
- Children and Families of Iowa

The community member participation in the joint meetings and their personal efforts in recruiting others to participate were fundamental to the successful development of a culturally-appropriate and community-based Wraparound continuum model. Polk County agency stakeholders and community member assessment focused on African American youth and families' mental illness and co-existing substance abuse issues, as there are no existing systems or mechanisms for measuring such conditions and needs. Traditional services have failed to be successful with African American youth and their families because of their limited and inflexible practices. To work with these families, it is important to be family-focused, respecting the privacy of this sensitive issue, identifying resources which families bring to their own treatment and not alienating participants with jargon and theory which do not take their background and culture into account. A Wraparound continuum model would provide families an opportunity to participate in a variety of services focused on supporting the strengths and decisions of the family. Specific to Polk County, the Wraparound continuum needs to appropriately address these issues in light of cultural and community dynamics.

METHODOLOGY

Wraparound was identified in Phase I as a nationally recognized program that had earned recognition as an exemplary practice as evidenced by research that demonstrated the program's effectiveness. The focus of the process evaluation is on the development of consensus building among relevant community members and how decisions were made to select and/or adapt program models. Five principle methods were used for the Phase I process evaluation: 1) evaluator participation in meetings to observe decision-making and the consensus building processes; 2) analysis of meeting documents and minutes; 3) surveys to collect provider network data and data on community collaboration toward consensus building, 4) committee, community and key stakeholder feedback on the process and outcomes, 5) community needs assessment survey data. The evaluator's observations and content analysis of how decisions were made are validated through use of the recorded minutes of committee meetings and, further, with participants' self-reported assessments of the decision making process.

Participant observation and analysis of meeting documents and minutes provided a source of information about the dynamics of the group process: who the key participants were; which participants had the greatest voice in the decision making process; how, over time, the group arrived at consensus on the choice of a program model; the role of consumers in making decisions; the discussion of pros and cons of various elements of Wraparound and Wraparound models; and selecting and/or adapting the final model. The evaluator observed these processes directly by participating in meetings, and these direct observations were cross-validated with the analysis of meeting minutes and documents, and the results of the survey and network data.

The social network analysis was the most sophisticated and appropriate scientific approach for analyzing community consensus building and measuring key relational patterns and contents of the pattern of the stakeholder network. Our analysis of a variety of data sources in combination with the network analysis allows us to identify the relative importance of members from data determined by those members participating in the network. This provides both emic (internal structure or inside) and etic (objective or outside) accounts of the consensus-building process (Headlund et al., 1990).

Feedback from committee and community members and key stakeholder reports on the process and outcomes were gathered through participant observation, documents and minutes. Finally, a community needs assessment survey was conducted gathering data from community members and provider agencies to assess and compare priorities and to measure and compare levels of achievement for the priority areas.

Population, Sample and Sampling Frames

Data were collected throughout the consensus building process from all participants in the consensus building project while some measures were collected from key agency and provider

stakeholders at the beginning of the planning phase as well as at the end of Phase I. The data collection procedure allowed for measures of change from the beginning of the project to the end of the project, as well as rich qualitative data throughout the process evaluation.

In previous work we collected exhaustive network data from community members, front line workers, case managers and outreach workers, their direct supervisors, and agency directors, along with members of committees. For this study of the service provider network we specifically focused on community stakeholders and stakeholders who were agency directors to provide data about the consensus building process and its effect on the linkages among the services network. Data collection involved surveys completed by the targeted stakeholders.

Quantitative Measures

The benefits of a multi-method approach are well-known (Cook and Campbell, 1979; Cronbach, 1982; House, 1994; Connell et al, 1995; Fulbright-Anderson et al, 1998). In addition to the qualitative data, quantitative assessment of the consensus building process for adopting Wraparound was measured at three primary levels of social organization. Agency data were gathered to provide information about the service network including characteristics of the agencies (e.g., number of employees, and perceptions of the planning process and decision-making from an agency perspective) and the relationship of the agencies' goals, priorities and their achievement to the needs of the community. Individual level data were gathered with respect to perceptions about self and other involvement in the planning process. Network data document changes in the linkages within the community tied to the results of the planning and consensus-building process. Measures specific to the network analysis are discussed further in the results section.

Meeting minutes document evidence that there was consensus for the "decision to adopt" the Wraparound exemplary practice. Evaluator participation, observation and interaction through the formative component of the evaluation proved to be substantial sources of information indicating the nature of the decision to adopt. Survey instruments were used to collect individual, agency, network and community needs assessment data. The meeting minutes and survey instruments are reproduced in the appendices.

RESULTS

Qualitative Analysis

The qualitative data collected were in the form of meeting minutes and evaluator observations. These data provide evidence of the decision to adopt and the consensus that Polk County achieved around the decision to adopt the Wraparound exemplary practice.

Analysis of Meeting Minutes

As part of grant activities, three groups held meetings: Concerned Citizens Committee, Providers Committee, and Public Systems Committee.

The Philosophy of Wraparound was presented to consumers, providers, and public systems group members at a Wraparound Seminar held at the Disproportionate Minority Confinement (DMC) Conference in November 2002. This session provided a common base of information for all those initially involved in the Polk County Wraparound Project as well as a plan for future activities. Issues identified by seminar attendees included:

- Flexible dollars must be made available to provide wraparound services in unique and creative ways.
- Wraparound services should be used to impact individuals, families, and the whole community.
- Policy-makers must be involved so talk can become action.
- Programs must be well-planned so they are lasting and have long-term impact. The demise of past programs has hurt relationships between providers and members of the African American community.
- Programs must address the needs identified by the community. Members of the African-American community are frustrated that often interventions which are suggested and/or implemented, do not truly meet the needs of the community.

The Concerned Citizen group first became involved through attendance at the Wraparound seminar and the DMC Conference. They met again in February when consultants provided more information on Wraparound to an expanded group of consumers. At this meeting, consumers decided to adopt the Wraparound model, began to identify barriers in the community, and planned how to approach others in the community to increase involvement. Some specific questions discussed included:

- What must be done early in a child's life to keep him/her out of the system?
- What community supports are already available to meet the needs of children and families?
- How can existing services be linked to better meet the needs of this target population?
- What do community members need to say/do to help change the system in Polk County?
- Who else needs to be invited to join this project for it to be successful?

The next meeting of the Concerned Citizen group was held in April where topics and discussion focused on:

- barriers other communities have experienced
- identification of community strengths and needs in 12 life-domain areas
- development of a vision statement.

A highlight of this meeting was the attendance of the governor's chief legal council during the second half of the meeting. He encouraged active involvement in addressing DMC through the Wraparound model of service and presenting a united voice through concrete proposals.

At the May meeting of the Concerned Citizen Committee, members completed their vision statement ("Strengthening families to build a stronger community"), prioritized goals, determined next steps, and completed a needs assessment form. Through further discussion, three top needs in the community were identified:

1. Develop alternatives to detention/confinement of juveniles.
2. Teach men to be good, loving fathers.
3. Help senior citizens to keep their homes livable.

In addition, members agreed to gather data on the impact of DMC and develop a list of community resources, looking at individuals as well as organizations.

In June, consumers met again to share information on some community resources, planned to attend upcoming DMC committee meetings, provided data on DMC in Iowa and Polk County, and drafted a letter to the Governor.

In July, consumers came together again to prepare for their meeting with the Governor or his representative, and discuss ways to increase community awareness and involvement. They continued to develop a detailed list of community resources with contact information and scope of service. Information was shared with attendees on SAMHSA Systems of Care grant opportunities. Members decided on key points to present to the Governor:

- Our community has a problem with disproportionate minority confinement for youth. We propose a solution: the Wraparound model of service.
- State support for the SAMHSA Systems of Care grant and matching funds are needed.
- Cost-benefit aspects of the Wraparound model.

The Providers group and the Public Systems group first became involved through an introductory meeting held by EFR to share project goals, project timeline, and to elicit stakeholder commitment to the project. These two groups also attended the Wraparound Seminar held at the DMC Conference described earlier, and were part of the discussions and identification of issues for Polk County. They also met another time, together with coordinators from several projects that are addressing DMC in Polk County to determine how they might collaborate to create the greatest impact. Project consultants met with the combined group of Providers Committee and Public Systems Committee in February to present information specifically about Wraparound Milwaukee, detailing positive outcomes and sharing steps required to implement a Wraparound model. The groups discussed barriers and challenges to implementation and proposed possible action steps. The Public Systems Committee met again

in April to discuss possible funding sources and resources in Polk County, and the possibility of setting up a pilot project. Specific questions included:

- How is Wraparound Milwaukee funded?
- Could Polk County fund wraparound services in a similar manner?
- What resources does Polk County have that might be similar to those used in Milwaukee?
- Would we want to start with a pilot project?
- What policies, laws or proposals would be necessary in order to implement a pilot project?

Following is an historical timeline of key grant activities:

September 2002: Recruitment for the Public Systems, Providers and Concerned Citizens committees

October 2002: Introductory meetings for the Public Systems Committee, Providers Committee and Concerned Citizens Committees

November 2002 : Stakeholders attended the Disproportionate Minority Confinement Conference sponsored by the State of Iowa Department of Human Rights; Division of Criminal and Juvenile Justice Planning; Juvenile Justice Advisory Council; Disproportionate Minority Confinement Committee; and the National Resource Center for Family Centered Practice. The expert consultant met with members of the Public Systems, Providers and Concerned Citizens Committees to share information about Wraparound services and to identify issues that must be addressed as a Wraparound model is considered for Polk County.

December 2002: Coordinators from several projects that are addressing disproportionate minority confinement in Polk County met to determine how these projects might collaborate to create the greatest impact. The DMC Technical Assistant met with project staff members to offer suggestions about how this project might interface with other DMC-related efforts in Polk County. She discussed the importance of including key members of the African-American community in these preliminary discussions and suggested several methods for recruitment of individuals to serve on the Concerned Citizens Committee.

First Quarter Activities:

- A preliminary community-needs assessment was conducted.
- Possible financing strategies for Wraparound implementation were identified.
- Efforts were made to successfully interface with other projects currently attempting to address disproportionate minority confinement in Polk County.
- Collaboration Survey - An initial survey of collaborative activities among selected organizations and agencies in Polk County was completed during the first quarter. The results were reviewed in the first quarterly report.

January 2003: DMC Grant Coordinators' Meeting - Discussion focused on how to encourage community involvement and investment in each of the represented DMC projects.

February 2003: Project staff members met with the Polk County representative for the Annie E. Casey Foundation to review this project and to discuss recruitment of concerned citizens. At the February meeting of the DMC Grant Coordinators, two expert consultants lead a discussion about Wraparound services and shared how Wraparound has been used to address disproportionate minority confinement in other communities. At the February meeting of the Concerned Citizens Committee, the consultants shared key elements of Wraparound and outlined how they have assisted other communities to develop effective service models using Wraparound to address disproportionate minority confinement. During the combined Providers and Public Systems Committee Meeting in February, the consultants presented information about Wraparound Milwaukee and detailed the positive outcomes that Milwaukee County has realized as a result of developing this system of care. They also shared steps to implementation of a Wraparound system, such as Wraparound Milwaukee.

Second Quarter Activities:

- Familiarity Assessment - Baseline familiarity with the Wraparound model was assessed and generally familiarity was rated at “somewhat familiar” to “very familiar”.

April 2003: At the Public Systems Committee Meeting, the expert consultants discussed the funding sources used in Wraparound Milwaukee, and committee members outlined possible resources in Polk County. At the Concerned Citizens Committee Meeting, the consultants provided information about barriers other communities have experienced and key elements to addressing disproportionate minority confinement with Wraparound. Project staff members met with the Des Moines area contact person for the Annie Casey Foundation to discuss leadership training for Concerned Citizens Committee members.

May 2003: At the Concerned Citizens Committee meeting, the consultant assisted committee members in developing a vision statement and completing needs and resources assessments.

June 2003: Concerned Citizens Committee members wrote a letter to the governor, sharing their agenda for strengthening families to build a stronger community through implementation of Wraparound.

Third Quarter Activities

- Collaboration Survey - Agencies that comprise the service network for the project have been surveyed regarding collaborative activities.
- Social Network Analysis - A social network analysis was conducted to assess the effects of consensus building activities on the linkages among provider stakeholders.
- Community Needs Assessment - Seven of the nine agencies that comprise the service network for the project completed a needs assessment survey during June 2003.

Quantitative Analysis

The focus of the survey of providers was to measure change produced in the stakeholder network in the community resulting from the consensus building activities, and to unobtrusively measure the level of consensus achieved to adopt the exemplary practice proposed. Measures were also collected to assess change in proxy measures of consensus gathered from within the community.

Brief Review of Social Network Analysis Measures

Network measures include: 1) walks and reachability; 2) geodesics and distance; 3) nodal degrees; and 4) network density. Network analysis nearly always includes some basic network properties. Nodes are the actors in a network and paths are the connections among those actors. A *walk* is a sequence of nodes (agencies) and paths (lines indicating a tie or connection between two agencies). The walk begins and ends with a node and each node in the path is connected by the lines following and preceding it in the sequence. For example, Agency A collaborates with Agency B would be represented by a line between these two nodal points. Assume also that Agency B collaborates with Agency C and that Agency A and Agency C do not collaborate. The span between Agency A and Agency C would be considered a *walk*. The *length* of a walk is the number of lines (in our example, two). *Reachability* is the measure of how many paths there are leading to a particular node. For example, since Agency A collaborates with Agency B, then both agencies are said to be reachable. Since Agency B also collaborates with Agency C and Agency A does not, Agency B is said to be more reachable than Agency A or Agency C. A *geodesic* (distance) is the shortest path between a given pair of nodes (the geodesic for Agency A and Agency C is two). A *nodal degree* is the number of lines connected with the node in a graph. Using the example above, it is the number of agencies indicating they work with a particular agency (for Agency B the nodal degree would be 2, and for Agency A and Agency C the nodal degree would be 1). *Density* is a measure of connectedness of the agencies in the network (percentage of all possible nodal degrees that the network exhibits). *Distance-based cohesion* is another measure of connectedness, based on geodesic distance.

When examining consensus building and interagency collaboration, one use of social network analysis is to identify the “*most important*” members in the network because those members have relatively more influence this information may be important for the formative evaluation. Measures of importance in a network include: 1) degree; 2) closeness; 3) betweenness; and 4) prestige. *Degree*, the degree of centralization, quantifies the range or variability of the individual member indices. The index or measure ranges from 0 (no variability) to 1 (extreme variability for one member). For example, if each agency in a network is connected with the others equally then there is no variability for members because they are equally and exhaustively connected, then the degree of network centrality is 0. If one agency works with all other agencies and all other agencies work only with this agency, then the degree of network centrality is 1 (also known as a star network). *Closeness* measures how closely a member of the network is to all the other members of the network. This concept addresses the extent to which a member can directly access other members of the network. The closeness index also ranges from 0 to 1, where 0 represents the lengths of geodesics as equal among network

members, and 1 represents extreme variability with respect to one member. *Betweenness* is a measure of interactions between nonadjacent members of a network where one must access another member in the network in order to reach another. The *betweenness* index ranges from 0 (all members are equal in betweenness) to 1 (extreme variability with respect to one member). *Prestige* is similar to what is commonly referred to as popularity, how many choose a particular node or member. The members of the network who are most prestigious are those most frequently chosen by others. The index for prestige reaches its maximum value of 1 when a member is chosen by all other members of the network. As the node measures closer to 1 for prestige, the percentage of network members choosing that actor approaches 100 percent, thus, the more prestigious the network member. (Wasserman and Faust, 1994; Wasserman and Galaskiewicz, 1994; Scott, 1991; and Knoke & Kuklinski, 1982)

Procedure

The baseline survey data were collected in October 2002 and follow-up was conducted in May 2003. Ten agencies were identified as constituting the local service network, and nine agencies responded at both baseline and follow-up (response rate=90 percent). Two of the nine respondents at follow-up indicated no changes had occurred, therefore their baseline responses were carried forward to follow-up. Six relations were examined including:

- Work with;
- Joint case planning;
- Joint staff trainings;
- Joint funding;
- Collection of common outcomes data;
- Interactions involve providing services to African American youth.

To explore the changes in the services network resulting from the consensus building process the relationships among the agencies were examined over time. The analysis first examines increased communication and connectedness as an indicator of general agreement, and then a deeper relational structure indicative of achieving consensus on issues among this stakeholder group. The analyses were based on asymmetric connections where only one of the agencies in a given pair is required to respond in the affirmative to indicate the existence of a relationship in the services network. However, the connections or ties were “directed,” meaning that ties were measured in terms of the direction of the relation (“in,” selected or chosen by others, or “out,” choice made or selection of another).

Results of Social Network Analysis

CONSENSUS MEASURED AS A FUNCTION OF NETWORK CHANGE

Table SNA-1, below, presents the choices made at baseline and follow-up by each of the nodes (Provider Stakeholders or agencies) for the relational content concerned with the general concept of network change or ability of stakeholders to work together (interagency collaboration). The measures presented include: *outdegree* (ties “sent to” other agencies; a measure that demonstrates how prominent actors are involved in relationships with other actors and how those relationships change during the consensus building; *indegree* (ties “received from” other agencies; a measure of prestige; network members who are more prestigious receive more nominations or choices); *average number of degrees* or ties to other agencies; *maximum number of nodal degrees* or ties possible; *average geodesic distance* (average of the shortest paths between each pair of nodes); *average density* of the network (a measure of group cohesion and proxy for consensus as the number nears saturation (1) based on the number of ties that exist in the network); and *distance-based cohesion* (another measure of network cohesion similar to density based on geodesic distances, ranging from 0 to 1, with larger values indicating greater cohesiveness and consensus as a function of reduced average geodesics).

Table SNA-1. Consensus Measured as a Function of Network Change

Agency #	At Baseline				At Follow-Up			
	Outdegree		Indegree		Outdegree		Indegree	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	7	87.5	8	100.0	7	87.5	7	87.5
2	7	87.5	6	75.0	4	50.0	7	87.5
3	8	100.0	6	75.0	8	100.0	5	62.5
4	6	75.0	6	75.0	8	100.0	6	75.0
6	6	75.0	6	75.0	8	100.0	6	75.0
7	5	62.5	7	87.5	5	62.5	7	87.5
8	5	62.5	7	87.5	5	62.5	6	75.0
9	7	87.5	5	62.5	8	100.0	6	75.0
10	7	87.5	7	87.5	8	100.0	7	87.5
Average Degree (std dev)	6.4 (0.956)		6.4 (0.831)		6.4 (1.571)		6.4 (0.685)	
Max Nodal Degrees	8		8		8		8	
Avg Geodesic Distance	1.194				1.194			
Distance-based Cohesion	0.90				0.90			
Average Density (std dev)	80.6% (0.3958)				80.6% (0.3958)			

As the network analysis demonstrates, there was little change from baseline to follow-up in the basic activities of working together with the other agencies in this network. All providers in the PCWPAAA network were reachable both at baseline and follow-up for this relation, i.e. each agency was connected to the other agencies by at least one path. Average degree remained the same at 6.4 (out of a maximum of 8), although there was more variability in outdegree than

indegree at both time points. Individual increases in outdegree and indegree were offset by corresponding decreases, while in some cases, incoming and outgoing connections remained unchanged. Thus, on average, agencies remained unchanged in their levels of prestige and influence within the network for this relation. Density remained fairly strong at 80.6% at baseline and follow-up, and average geodesic distance and cohesion showed no change over time. These measures are evidence that consensus building activities fostered maintenance of connectivity and cohesion for the “work with” relation.

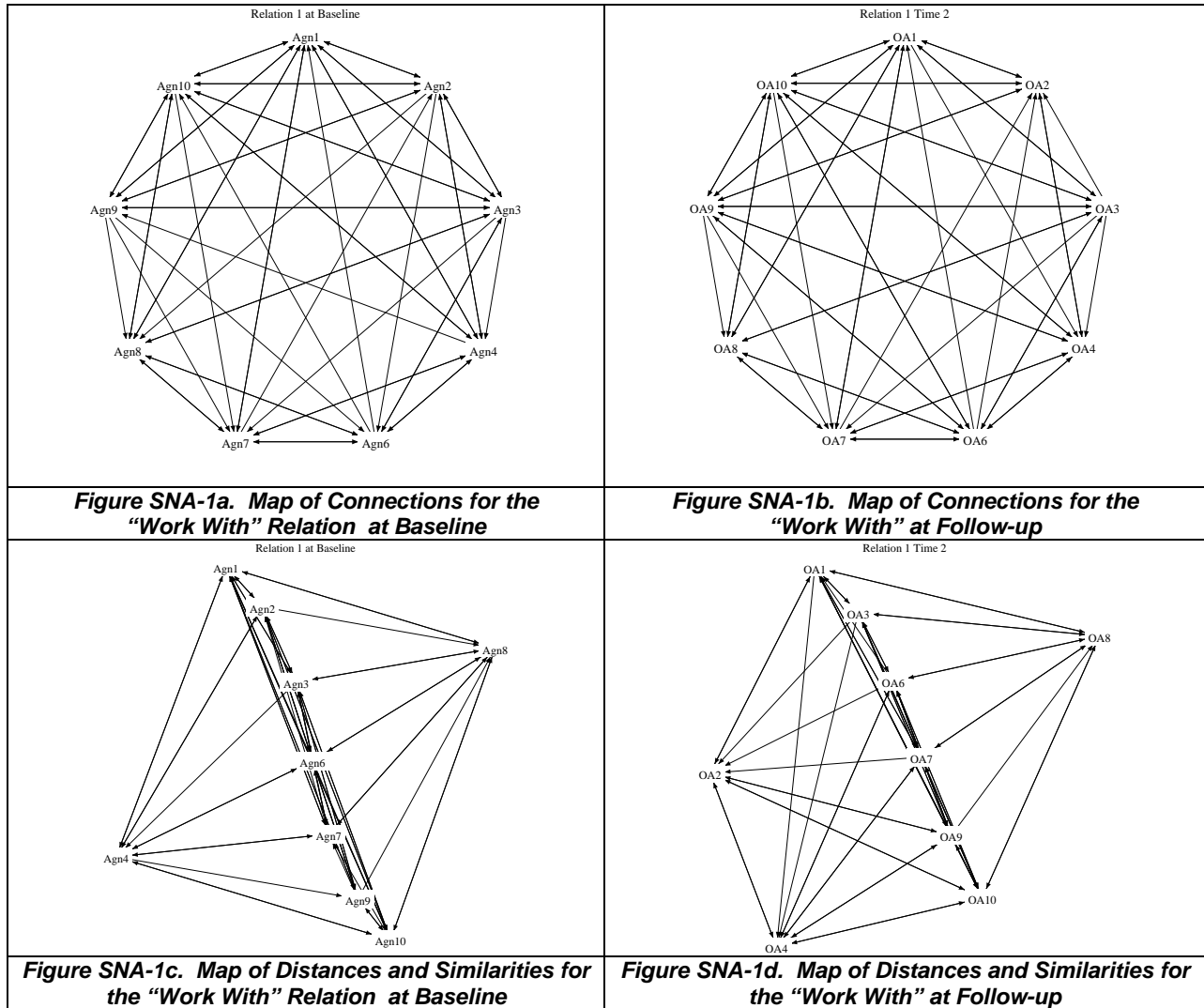
Centralization measures also showed little or no change. On a scale of 0 to 1, lower numbers are indicative of more variability and less centralization within the network, setting the stage for cohesion and collaboration. Closeness centrality was very low both at baseline (5.95%) and follow-up (11.31%), that is, few if any nodes (agencies) were in a position to control indirect interactions. Betweenness centrality was also very low at both time points (.13% at baseline and .45% at follow-up) which means that no node (agency) had the capacity to control interactions between other agencies. In addition, overall network centralization was very low at baseline (3.57%) and remained low at follow-up (7.14%). These measures indicate that there was no one agency that influenced the activities of the network for this relation, which allowed for collaboration across the network.

ILLUSTRATIONS

The sociograms presented as Figure SNA-1a and SNA-1b on the following page employ circle illustrations to map connections for the PCWPAAA network. The density of lines to and from nodes indicates the frequency of choices, either in or out, among those in the stakeholder network. Directionality is indicated by the arrowheads which match the information presented in tabular form, Table SNA-1 above, on indegree and outdegree. The number of connections for this relation appears to be the same in each map of connections and provides visual illustration of the maintaining impact of the consensus building activities for this relation.

In Figures SNA-1c and SNA-1d, the sociograms are reconfigured using the same data but employing the multi-dimensional scaling (MDS) technique to produce the diagram. The MDS technique uses the data to locate the nodes, placing agencies that are more central nearer the center of the diagram (the algorithm locates nodes based on their geodesic distances or shortest path between each pair of nodes). In comparing the MDS diagram at follow-up (Figure SNA-1d) to baseline (Figure SNA-1c), there appears to be some change in distances and similarities, but no major change overall.

Figure SNA-1. Consensus Measured as a Function of Network Change



CONSENSUS MEASURED AS A FUNCTION OF JOINT CASE PLANNING

Table SNA-2, below, presents the choices made at baseline and follow-up by each of the nodes for the relational content concerned with change during the consensus building as a function of the efforts to improve joint case planning among the agencies. The measures presented include: *outdegree* (ties “sent out to” other agencies; a measure that demonstrates how prominent actors are most extensively involved in relationships with other actors and are therefore instrumental in consensus building; *indegree* (ties “received from” other agencies; a measure of prestige; network members who are prestigious receive more nominations or choices); *average number of degrees* or ties to other agencies; *maximum number of nodal degrees* or ties possible; *average geodesic distance* (based on shortest path between each pair of nodes); *average density* of the network (a measure of group cohesion based on the number of ties that exist in the network for a particular relation); and *distance-based cohesion* (another measure of network cohesion based on geodesic distance, ranging from 0 to 1, with larger values indicating greater cohesiveness).

Table SNA-2. Consensus Measured as a Function of Joint Case Planning

Agency #	At Baseline				At Follow-Up			
	Outdegree		Indegree		Outdegree		Indegree	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	1	12.5	4	50.0	1	12.5	3	37.5
2	3	37.5	3	37.5	1	12.5	4	50.0
3	5	62.5	4	50.0	5	62.5	3	37.5
4	6	75.0	2	25.0	5	62.5	4	50.0
6	6	75.0	2	25.0	7	87.5	2	25.0
7	0	0.0	4	50.0	0	0.0	3	37.5
8	1	12.5	3	37.5	0	0.0	3	37.5
9	5	62.5	2	25.0	7	87.5	2	25.0
10	2	25.0	5	62.5	1	12.5	3	37.5
Avg Degree (std dev)	3.2 (2.200)		3.2 (1.030)		3.0 (2.789)		3.0 (0.667)	
Max Nodal Degrees	8		8		8		8	
Avg Geodesic Distance	1.672				1.679			
Distance-based Cohesion	0.63				0.56			
Average Density (std dev)	40.3% (0.4905)				37.5% (0.4841)			

Network member activity on joint case planning was at a somewhat low level at baseline and decreased slightly at follow-up. Not all providers in the PCWPAAA network were reachable either at baseline or follow-up for this relation, as evidenced by some zeroes in the number of indegrees and outdegrees. At baseline, the average degree was low (3.2 out of a maximum of 8) and decreased slightly to 3.0 at follow-up, with more variability in outdegree than indegree at both time points. Thus, on average, agencies reported connections that indicated low levels of prestige and influence within the network at baseline, and these levels were slightly lower at follow-up. Density was moderately low at baseline (40.3% of all possible connections were

evident) and decreased to 37.5% at follow-up. Average geodesic distance increased (nodes were further apart), and cohesion decreased over time, which is in line with the drop in density. These measures are evidence that consensus building activities did not have a positive effect on activities related to increasing joint case planning in this network of providers.

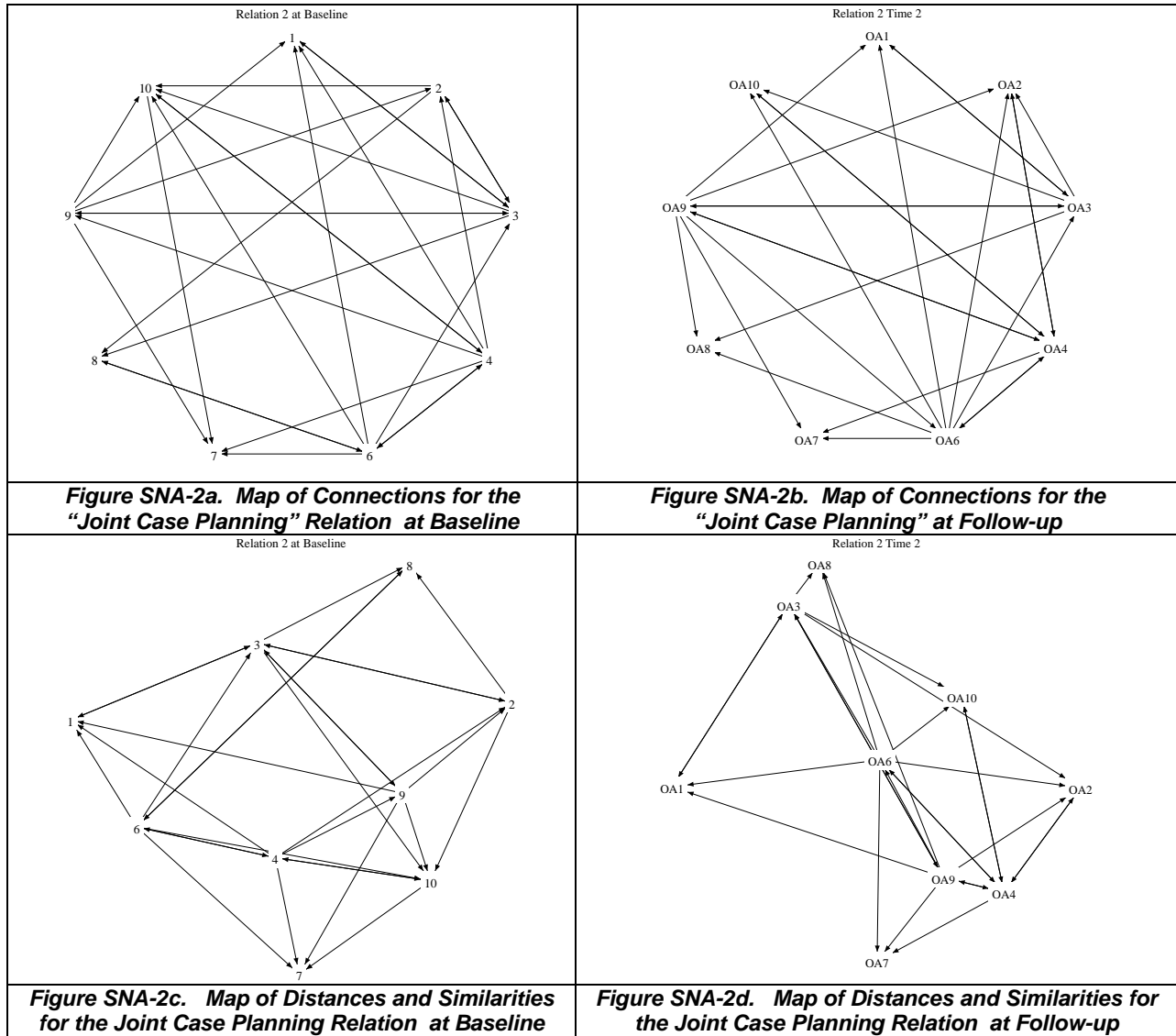
Centralization measures showed some change over time for the “joint case planning” relation. Closeness was very low at baseline (14.04%) but increased to 65.78 at follow-up. This indicates that few if any nodes (agencies) were in a position to control indirect interactions at baseline, though at follow-up a few agencies had moved into a position of controlling these interactions, making collaboration on joint case planning across the network more difficult. Betweenness was low at both time points (8.06% at baseline and increasing to 18.42% at follow-up) which means that no node (agency) demonstrated the capacity to control interactions between other agencies. Overall network centralization was low at baseline (14.29%) and increased to 53.57% at follow-up indicating that some agencies were exerting more influence over the network at follow-up. These measures indicate that, as a result of consensus building activities, some agencies grew in their influence on the joint case planning activities of the network which had a negative effect on collaboration and cohesion across the network.

ILLUSTRATIONS

The sociograms presented as Figure SNA-2a and SNA-2b on the following page employ circle illustrations to map connections for the PCWPAAA network of providers. The density of lines to and from nodes indicates the frequency of choices, either in or out, among those in the network. Directionality is indicated by the arrowheads which match the information presented in tabular form, Table SNA-1 above, on indegree and outdegree. The number of connections for the “joint case planning” relation appears to be fewer in Figure SNA-2a as compared to SNA-2b. This provides visual illustration that the consensus building activities were not able to effect a positive change in case planning activities in this network.

In Figures SNA-1c and SNA-1d, the sociograms are reconfigured using the same data but employing the multi-dimensional scaling (MDS) technique to produce the diagram. The MDS technique uses the data to locate the nodes, placing agencies that are more central nearer the center of the diagram (the algorithm locates nodes based on their geodesic distances or shortest path between each pair of nodes). In comparing the MDS diagram at follow-up (Figure SNA-1d) to baseline (Figure SNA-1c), there appear to be more agencies at the center of the diagram at follow-up demonstrating the increased network centralization and challenge for collaboration on case planning across the network.

Figure SNA2. Consensus Measured as a Function of Joint Case Planning



CONSENSUS MEASURED AS A FUNCTION OF JOINT STAFF TRAINING

Table SNA-3, below, presents the choices made by each of the provider stakeholders for the relational content concerned with the development of consensus around joint staff trainings. The measures presented include: outdegree, indegree, average number of degrees, maximum number of nodal degrees, average geodesic distance, average density of the network and distance-based cohesion.

Table SNA-3. Consensus Measured as a Function of Joint Staff Training

Agency #	At Baseline				At Follow-Up			
	Outdegree		Indegree		Outdegree		Indegree	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	25.0	4	50.0	2	25.0	2	25.0
2	5	62.5	2	25.0	1	12.5	2	25.0
3	1	12.5	4	50.0	1	12.5	2	25.0
4	6	75.0	1	12.5	4	50.0	3	37.5
6	4	50.0	1	12.5	1	12.5	1	12.5
7	0	0.0	3	37.5	0	0.0	2	25.0
8	0	0.0	2	25.0	0	0.0	1	12.5
9	5	62.5	2	25.0	7	87.5	3	37.5
10	0	0.0	4	50.0	1	12.5	1	12.5
Average Degree (std dev)	2.6 (2.315)		2.6 (1.165)		1.9 (2.131)		1.9 (0.737)	
Max Nodal Degrees	8		8		8		8	
Avg Geodesic Distance	1.958				2.000			
Distance-based Cohesion	0.455				0.469			
Average Density (std dev)	31.9% (0.4663)				23.6% (0.4247)			

Measurement of consensus about joint staff trainings indicates low network connectedness and cohesion at baseline which decreased further at follow-up. Not all provider stakeholders were reachable at baseline and follow-up. The average geodesic distance was fairly high at 1.958 at baseline and increased to 2.000 at follow-up. At baseline, the average number of connections was very low at 2.6 and decreased further to 1.9 at follow-up. Low density at baseline (31.9%) decreased further to 23.6% at follow-up. These low measures of distance, connectedness and cohesion indicate that consensus building activities were not able to provide a positive effect for network collaboration on staff training.

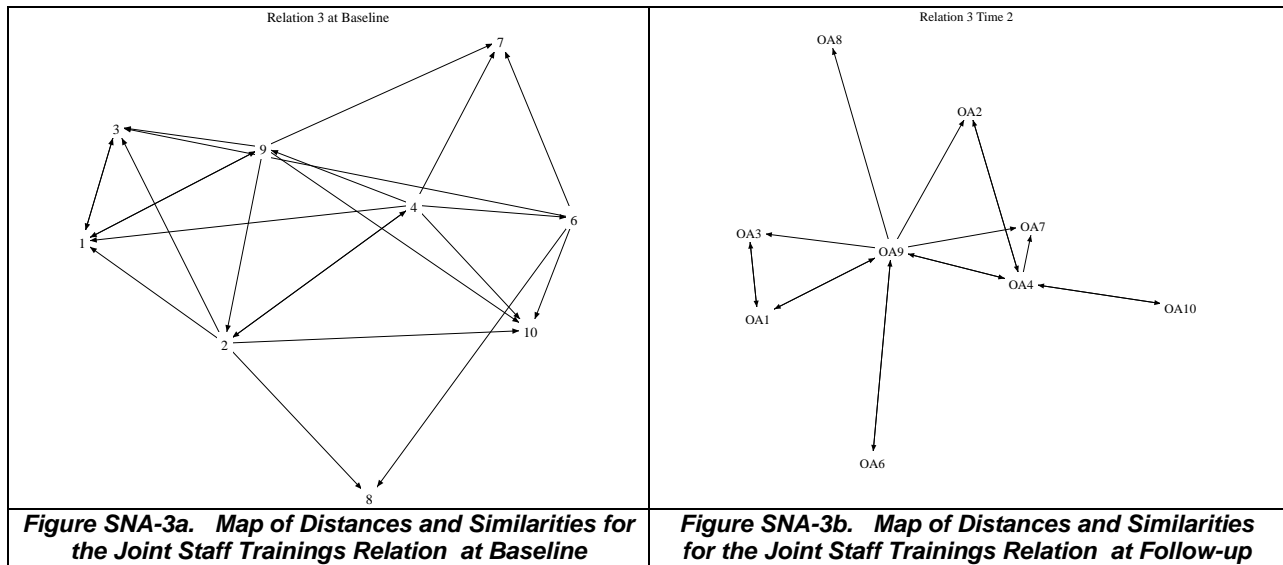
Centralization measures showed change over time for “joint staff training” activities in the network. Closeness was low at baseline (23.73%) but increased to 75.37% at follow-up. This indicates that at baseline, more agencies could interact directly with each other, while at follow-up some agencies had acquired more power in controlling indirect interactions, making collaboration on joint staff training across the network more difficult. Betweenness was low at baseline (10.60%) and increased to 73.44% at follow-up. This again indicates for some agencies, an increased capacity to control interactions between other agencies at follow-up.

Overall network centralization was low at baseline (25.00%) and increased to 73.21% at follow-up indicating that some agencies were exerting more influence over the network at follow-up. These measures indicate that, as a result of consensus building activities, some agencies grew in their influence on the joint staff training activities of the network, providing a challenge for collaboration and cohesion.

ILLUSTRATIONS

Figures SNA-3a and SNA-3b below illustrate the network data from Table SNA-3 using multi-dimensional scaling to produce the sociogram, mapping geodesic distances and similarities among nodes. At follow-up (Figure SNA-3b), although there were fewer connections, one node (OA9) clearly obtained measures that drew it closer to the very center of the sociogram. These observations confirm the increased network centralization on activities related to joint staff training. The lack of evidence for increased connectedness and cohesion indicate little consensus on staff training in this provider network.

Figure SNA-3. Consensus Measured as a Function of Joint Staff Training



CONSENSUS MEASURED AS A FUNCTION OF PARTICIPATION IN JOINT FUNDING

Table SNA-4 below, presents the choices made at baseline and follow-up by each of the provider stakeholders for activities related to braided, blended or joint funding among members of the services network. The measures presented include: outdegree, indegree, average number of degrees, the maximum number of nodal degrees, average geodesic distance, distance-based cohesion, and average density of the network.

Table SNA-4. Consensus Measured as a Function of Participation in Joint Funding

Agency #	At Baseline				At Follow-Up			
	Outdegree		Indegree		Outdegree		Indegree	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	1	12.5	2	25.0	1	12.5	2	25.0
2	0	0.0	0	0.0	0	0.0	0	0.0
3	1	12.5	1	12.5	1	12.5	1	12.5
4	0	0.0	0	0.0	0	0.0	0	0.0
6	0	0.0	0	0.0	0	0.0	0	0.0
7	0	0.0	0	0.0	0	0.0	0	0.0
8	0	0.0	0	0.0	0	0.0	0	0.0
9	1	12.5	0	0.0	1	12.5	1	12.5
10	0	0.0	0	0.0	1	12.5	0	0.0
Average Degree (std dev)	0.3 (0.471)		0.3 (0.667)		0.4 (0.497)		0.4 (0.685)	
Max Nodal Degrees	8		8		8		8	
Avg Geodesic Distance	1.250				1.571			
Distance-based Cohesion	0.05				0.07			
Average Density (std dev)	4.2% (0.1998)				5.6% (0.2291)			

For network activities related to joint funding, node or agency activity, connectedness and cohesion were very low. Not all nodes were reachable at baseline or follow-up; five agencies had no indegrees or outdegrees. Density and cohesion were very low both at both time points which are indications of low levels of connectedness leading to low consensus on joint funding. The average geodesic distance was moderate at baseline (1.250) and increased by 25% to 1.571 at follow-up, indicating a growth in reluctance to braid funding despite consensus building efforts. The very low average degree at both baseline and follow-up suggests that no stakeholder was viewed as prestigious or central to the network, and consensus around shared funding was not achieved to the extent desired or expected from the consensus building activities.

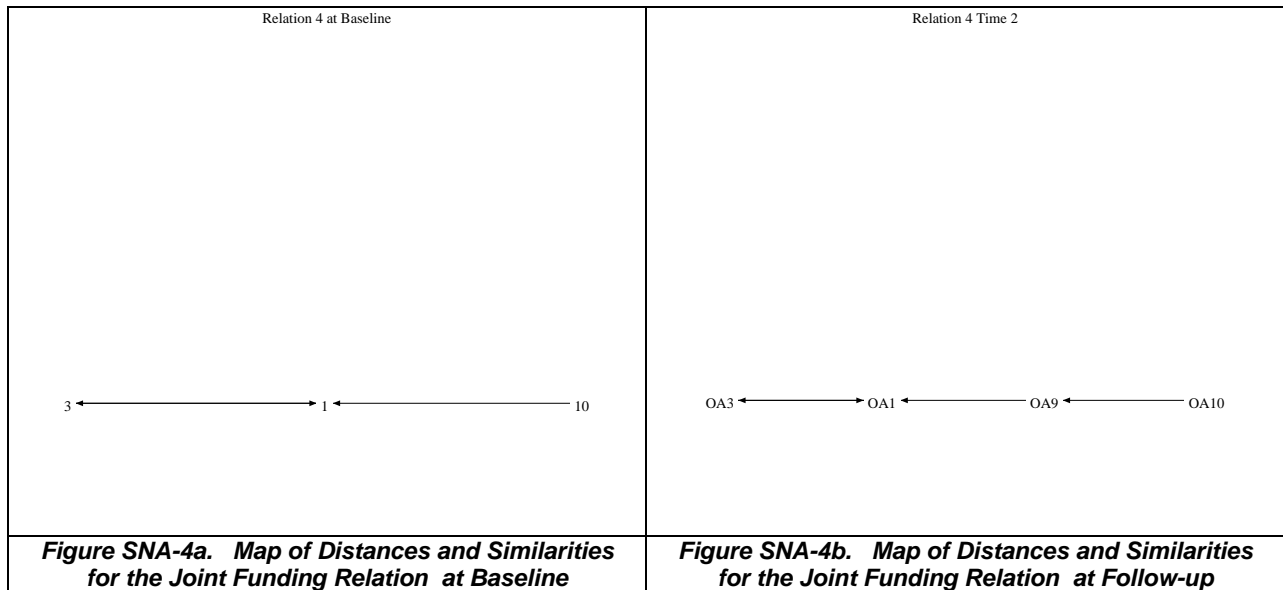
Centralization measures also showed little or no change for activities related to joint funding. On a scale of 0 to 1, lower centralization indices are indicative of more variability and less centralization within the network, setting the stage for cohesion and collaboration. Closeness centrality could not be measured because of the large percentage of nodes (agencies) that were not connected. Betweenness centrality was very low at both time points (3.5% at baseline and

6.25% at follow-up) which means that no agency had the capacity to control interactions between other agencies. In addition, overall network centralization was low at baseline (25.00%) decreasing to 21.43% low at follow-up. These measures indicate that there was no one agency that influenced the activities of the network related to joint funding.

ILLUSTRATIONS

Figures SNA-4a and SNA-4b below illustrate the data from Table SNA-4 using multi-dimensional scaling to produce sociograms, mapping geodesic distances and similarities among agencies. These sociograms spatially locate nodes based on the network measures. In the case of activities related to joint funding, these diagrams are visual evidence of the low number of connections, little collaboration and cohesion, leading to a finding that consensus around joint funding is not supported.

Figure SNA-4. Consensus Measured as a Function of Participation in Joint Funding



CONSENSUS MEASURED AS A FUNCTION OF COLLECTING COMMON OUTCOMES DATA

Table SNA-5, below, presents choices made at baseline and follow-up by each of the provider stakeholders on consensus around the collection of common outcome data or measures. The measures presented include: outdegree, indegree, average number of degrees, the maximum number of nodal degrees, average geodesic distance, distance-based cohesion, and average density of the network.

Table SNA-5. Consensus Measured as a Function of Collecting Common Outcomes Data

Agency #	At Baseline				At Follow-Up			
	Outdegree		Indegree		Outdegree		Indegree	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	1	12.5	3	37.5	1	12.5	3	37.5
2	0	0.0	1	12.5	2	25.0	1	12.5
3	2	25.0	1	12.5	1	12.5	2	25.0
4	4	50.0	0	0.0	4	50.0	2	25.0
6	1	12.5	0	0.0	4	50.0	1	12.5
7	0	0.0	1	12.5	0	0.0	0	0.0
8	0	0.0	0	0.0	0	0.0	1	12.5
9	1	12.5	2	25.0	2	25.0	1	12.5
10	0	0.0	1	12.5	0	0.0	3	37.5
Average Degree (std dev)	1.0 (1.247)		1.0 (0.943)		1.6 (1.499)		1.6 (0.956)	
Max Nodal Degrees	8		8		8		8	
Avg Geodesic Distance	1.250				1.500			
Distance-based Cohesion	0.146				0.275			
Average Density (std dev)	12.5% (0.3307)				19.4% (0.3958)			

For network activities related to collecting common outcomes data, agency activity, connectedness and cohesion were very low. Not all nodes were reachable at baseline or follow-up. Density was low at baseline (12.5%) and increased slightly to 19.4% at follow-up. Cohesion demonstrated a similar low level and change over time. The average geodesic distance was moderate at baseline (1.250) and increased by 25% to 1.500 at follow-up, indicating a growth in reluctance to collect common outcomes data despite consensus building efforts. The very low average degree at both baseline (1.0) and follow-up (1.6) suggests that no stakeholder was viewed as prestigious or central to the network, and consensus around collecting common outcomes data was not achieved to the extent desired or expected from the consensus building activities.

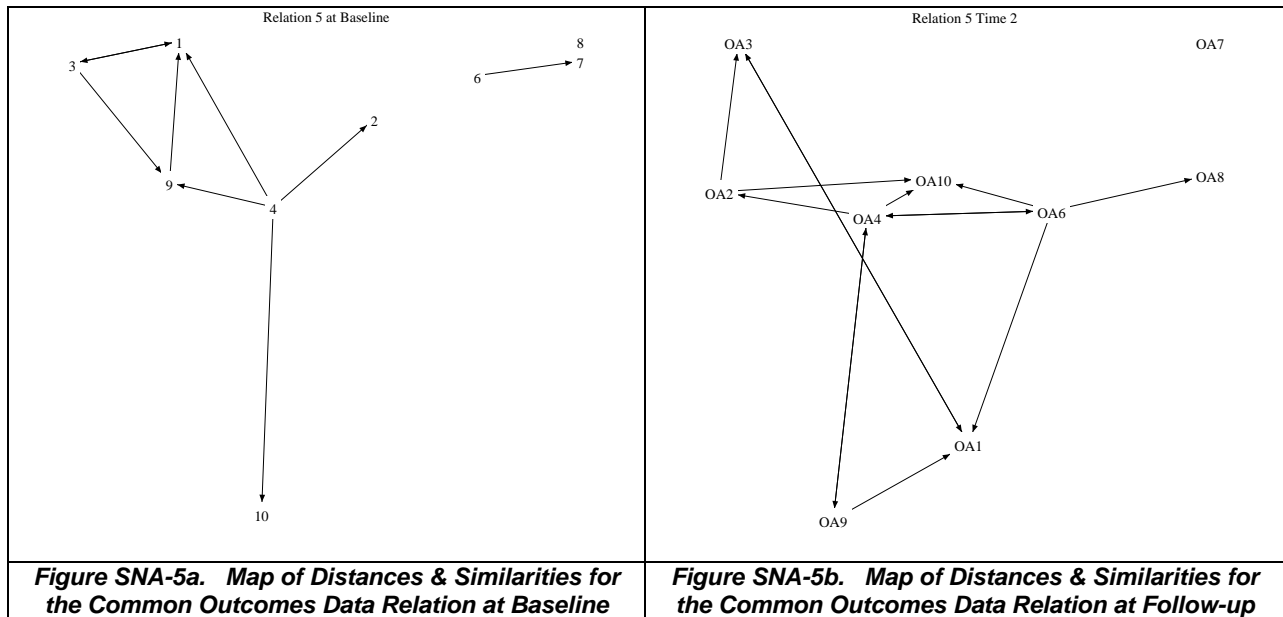
Centralization measures were also low for activities related to collecting common outcomes data. Closeness centrality for this relation could not be measured because of the large percentage of nodes (agencies) that were not connected. Betweenness centrality was very low at both time points (23.66% at baseline decreasing to 21.21% at follow-up) which meant that no

agency had the capacity to control interactions between other agencies. In addition, overall network centralization was moderately low at baseline (35.71%) decreasing (by 43%) to 25.00% at follow-up. The decrease in network centralization confirmed that no one agency had influenced the activities of the network in relation to collecting common outcomes.

ILLUSTRATIONS

Figures SNA-5a and SNA-5b below illustrate the data from Table SNA-5 using multi-dimensional scaling to produce the sociograms, mapping geodesic distances and similarities among provider stakeholders in the network. At follow-up (Figure SNA-5b), some expansion of the core of the network is apparent, but there is little evidence of consensus around the collection of common outcomes.

Figure SNA-5. Consensus Measured as a Function of Collecting Common Outcomes Data



CONSENSUS MEASURED AS A FUNCTION OF PROVIDING SERVICES TO AFRICAN AMERICAN YOUTH

Table SNA-6 below, presents the choices made at baseline and follow-up by each of the provider stakeholders for the collaborative activities related to consensus building in providing services to African American adolescents with other stakeholders in the Polk County area. The measures presented include: outdegree, indegree, average number of degrees, the maximum number of nodal degrees, average geodesic distance, distance-based cohesion, and average density of the network.

Table SNA-6. Consensus Measured as a Function of Providing Services to African American Youth

Agency #	At Baseline				At Follow-Up			
	Outdegree		Indegree		Outdegree		Indegree	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	4	50.0	7	87.5	4	50.0	6	75.0
2	2	25.0	6	75.0	3	37.5	6	75.0
3	3	37.5	3	37.5	5	62.5	4	50.0
4	6	75.0	3	37.5	5	62.5	4	50.0
6	6	75.0	3	37.5	2	25.0	4	50.0
7	5	62.5	3	37.5	5	62.5	3	37.5
8	0	0.0	4	50.0	5	62.5	4	50.0
9	7	87.5	2	25.0	8	100.0	4	50.0
10	2	25.0	4	25.0	5	62.5	7	87.5
Average Degree (std dev)	3.9 (2.183)		3.9 (1.523)		4.7 (1.563)		4.7 (1.247)	
Max Nodal Degrees	8		8		8		8	
Avg Geodesic Distance	1.547				1.431			
Distance-based Cohesion	0.674				0.789			
Average Density (std dev)	48.6% (0.4998)				58.3% (0.4930)			

Network measures for this relation demonstrated an increase in connectedness, cohesion from baseline to follow-up leading to consensus on providing services to African American youth. The average degree increased from 3.9 at baseline to 4.7 at follow-up indicating an increase in connections. The average geodesic distance decreased from 1.547 at baseline to 1.431 at follow-up, a decrease of 8%. This shorter distance leads to increased cohesion, from 0.674 at baseline to 0.789 at follow-up, a 17% increase. Density also increased from a moderate 48.6% to a bit stronger at 58.3% at follow-up. Providers in the network obtained measures indicative of consensus around providing services to African American youth.

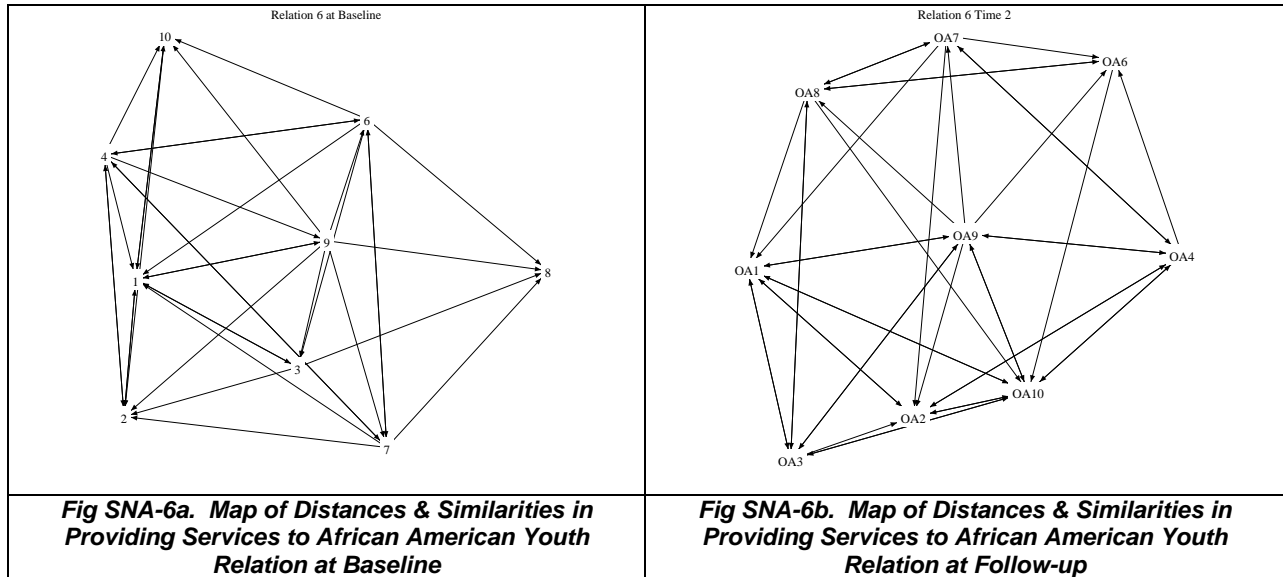
Centralization measures were low to moderate and changed over time in some cases. Closeness centrality was moderate at 45.56% at baseline increasing to 46.32% at follow-up. At baseline, betweenness measured at 5.96% decreasing slightly to 5.16% at follow-up. Overall network centralization measured the same (32.14%) at baseline and follow-up. These

measures indicate that, as a result of consensus building activities, it was likely that some agencies grew in their capacity to influence activities of the network in providing services to African American youth, which affected collaboration and cohesion across the network.

ILLUSTRATIONS

Figures SNA-6a and SNA-6b below, illustrate the data from Table SNA-6 using multi-dimensional scaling to produce the sociograms, mapping geodesic distances and similarities among agencies in the network. At follow-up (Figure SNA-6b), there is a slight increase in the connections from the measures obtained at baseline (Figure SNA-6a). There is more activity with Agencies 2 and 10, although Agency 9 is still at the center, with others on the periphery. Although there is evidence of increased collaboration and cohesion, there was not much change in the centralization of the network.

Figure SNA-6. Consensus Measured as a Function of Providing Services to African American Youth



Results of the Survey of Consensus

The Survey on Consensus was distributed to ten agencies identified as the service network for the Polk County Wraparound Project for African American Adolescents (PCWPAAA). Baseline results were obtained in October 2002, and a follow-up survey was conducted in June 2003. Nine agencies responded at both baseline and follow-up (response rate=90 percent). Two respondents indicated no changes had occurred, therefore baseline responses were carried forward to follow-up.

The initial section of the survey included questions on name of organization and length of employment. Table SOC-1 presents baseline information for those who responded.

Table SOC-1. Agency Information Provided by Respondents at Baseline

<i>Agency Name (n=9)</i>	<i>Number of Years at Agency</i>
Child Guidance Center	17.0
Cornerstone Recovery	5.0
Employee and Family Resources	5.3
Iowa Lutheran Hospital	5.7
Mercy First Step	5.0
MECCA	8.3
PACE	13.0
Polk County Decategorization	10.0
Urban Dreams	2.5
Average	8.0

Results of the analysis indicate that a little over half of those responding at baseline (55.6%) have worked at their agency for a period of less than 6 years. The length of time worked ranged from 2.5 years to 17.0 years, and, on average, respondents in this service network had worked 8.0 years for their agency at the time of the baseline survey.

Perceptions of Collaboration: Comparison of Baseline and Follow-up Responses

Tables SOC-2a and SOC-2b on the following pages present results of responses to the survey statements about collaborative activities. The frequency of responses from strongly disagree to strongly agree, the mean response, and standard deviation are presented for baseline and follow-up surveys. Calculation of the mean and standard deviation was based on response codes ranging from 5 for strongly agree to 1 for strongly disagree. Higher scores indicate a more positive response.

**Table SOC-2a. Survey on Consensus:
 Comparison of Responses from Baseline to Follow-Up (Items 1 through 10)**

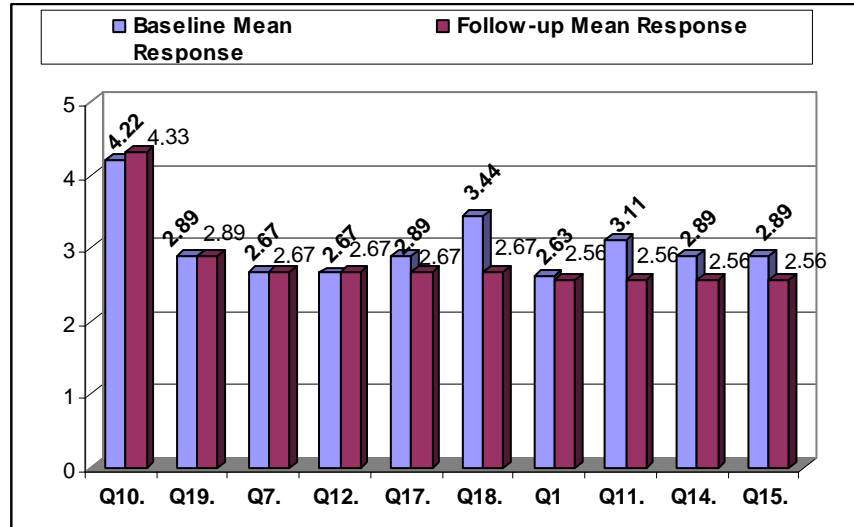
1. People in this community of service providers demonstrate trust for one another							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		50.0%	37.5%	12.5%		2.63	.744
<i>Follow-up</i>	11.1%	44.4%	22.2%	22.2%		2.56	1.014
2. There is a clear, shared vision for what the community of service providers is trying to achieve for African American adolescents.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		88.9%	11.1%			2.11	.333
<i>Follow-up</i>	22.2%	77.8%				1.78	.441
3. We do a good job at documenting our progress.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		37.5%	37.5%	25.0%		2.88	.835
<i>Follow-up</i>	22.2%	44.4%	22.2%	11.1%		2.22	.972
4. We have identified specific, measurable results that we want to achieve for African American adolescents.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		62.5%		37.5%		2.75	1.035
<i>Follow-up</i>	22.2%	55.6%	11.1%	11.1%		2.11	.928
5. Tasks are appropriately distributed among members of the community on projects for African American adolescents.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>	12.5%	75.0%	12.5%			2.00	.535
<i>Follow-up</i>	22.2%	66.7%	11.1%			1.89	.601
6. Agency members are representative of the populations they work with							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>	11.1%	55.6%	11.1%	22.2%		2.44	1.014
<i>Follow-up</i>	11.1%	55.6%	22.2%	11.1%		2.33	.866
7. We have effective rules for handling conflict in this community							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		55.6%	22.2%	22.2%		2.67	.866
<i>Follow-up</i>	11.1%	33.3%	33.3%	22.2%		2.67	1.000
8. The community has an effective process for making decisions about services for African American adolescents.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		77.8%	22.2%			2.22	.441
<i>Follow-up</i>	11.1%	77.8%	11.1%			2.00	.500
9. The community has a clear action plan for African American adolescents.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		66.7%		33.3%		2.67	1.000
<i>Follow-up</i>	22.2%	66.7%		11.1%		2.00	.866
10. Some members of agencies seem to have more power in making decisions than others							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>			11.1%	55.6%	33.3%	4.22	.667
<i>Follow-up</i>			11.1%	44.4%	44.4%	4.33	.707

**Table SOC-2b. Survey on Consensus:
Comparison of Responses from Baseline to Follow-Up (Items 11 through 19)**

11. Our community seeks to bring in new members to participate in planning on an on-going basis							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>	11.1%	11.1%	33.3%	44.4%		3.11	1.054
<i>Follow-up</i>	22.2%	33.3%	11.1%	33.3%		2.56	1.236
12. The amount of time spent in meetings is appropriate							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		44.4%	44.4%	11.1%		2.67	.707
<i>Follow-up</i>		33.3%	66.7%			2.67	.500
13. The service community keeps the larger community well-informed about our work							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		88.9%	11.1%			2.11	.333
<i>Follow-up</i>	11.1%	77.8%	11.1%			2.00	.500
14. We have a plan for evaluating results and using results to improve services for African American youth.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		55.6%		44.4%		2.89	1.054
<i>Follow-up</i>	22.2%	33.3%	11.1%	33.3%		2.56	1.236
15. I feel that the community of service providers is making progress towards improving services for African American youth.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>		55.6%		44.4%		2.89	1.054
<i>Follow-up</i>	11.1%	33.3%	44.4%	11.1%		2.56	.882
16. Consumers are involved in planning and decision-making for African American youth.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>	11.1%	66.7%	11.1%	11.1%		2.22	.833
<i>Follow-up</i>	22.2%	55.6%	22.2%			2.00	.707
17. We plan for sustaining initiatives after initial grant funds run out.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>	22.2%	11.1%	33.3%	22.2%	11.1%	2.89	1.364
<i>Follow-up</i>	33.3%	11.1%	22.2%	22.2%	11.1%	2.67	1.500
18. I have an equal voice within this community.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>	11.1%		33.3%	44.4%	11.1%	3.44	1.130
<i>Follow-up</i>	33.3%	22.2%		33.3%	11.1%	2.67	1.581
19. Members of the community openly discuss self-interests.							
	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Agree/Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Mean Response</i>	<i>Standard Deviation</i>
<i>Baseline</i>	11.1%	11.1%	55.6%	22.2%		2.89	.928
<i>Follow-up</i>	11.1%	33.3%	22.2%	22.2%	11.1%	2.89	1.269

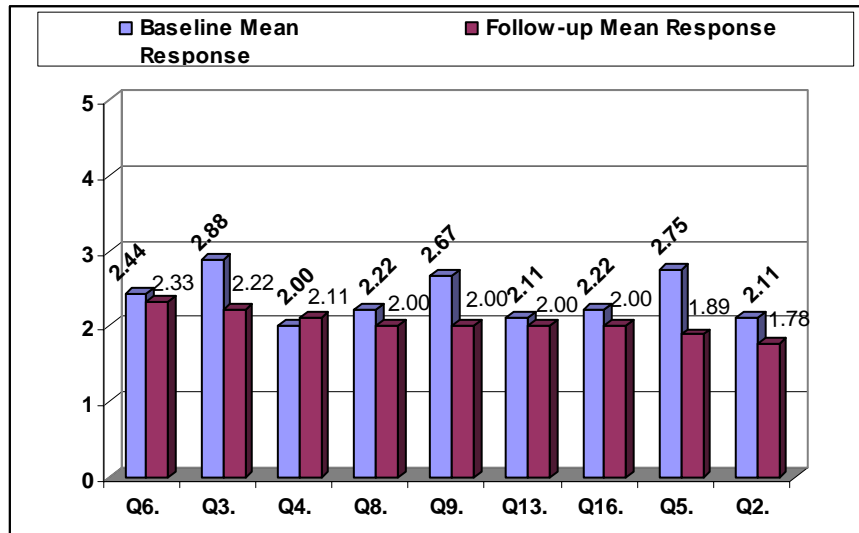
Figures SOC-1a below and SOC-1b on the following page illustrate the mean responses for each item at follow-up in descending order, along with the average baseline responses. The items from the survey are listed below each figure.

Figure S-1a. Responses with Means > 2.50 at Follow-up with Baseline Mean Response



- Q10. Some members of agencies seem to have more power in making decisions than others.
- Q19. Members of the community openly discuss self-interests.
- Q7. We do not have effective rules for handling conflict in the community.
- Q12. The amount of time spent in meetings is appropriate.
- Q17. We plan for sustaining initiatives after initial grant funds run out.
- Q18. I have an equal voice within this community.
- Q1. People in this community demonstrate trust for one another.
- Q11. Our community seeks to bring in new members to participate in planning on an ongoing basis.
- Q14. We do not have a plan for evaluating results and using results to improve services for African American youth.
- Q15. I feel that the community is making progress toward improving services for African American youth.

Figure SOC-1b. Responses with Means < 2.50 at Follow-up with Baseline Mean Response



- Q6. Agency members are representative of the populations they work with.
- Q3. We do a good job at documenting our progress.
- Q4. We have identified specific, measurable results that we want to achieve for African American adolescents.
- Q8. The community has an effective process for making decisions about services for African American adolescents.
- Q9. The community does not have a clear action plan for African American adolescents.
- Q13. The service community keeps the larger community well-informed about our work.
- Q16. Consumers are involved in planning and decision-making for African American youth.
- Q5. Tasks are appropriately distributed among members of the community on projects for African American adolescents.
- Q2. There is a clear, shared vision for what the community is trying to achieve for African American adolescents.

Mean responses were relatively low both at baseline and follow-up. The average of baseline mean scores was 2.57, while at follow-up it was 2.31. For a large majority of the items (14 of 19, 73.7%), there was a decrease in the mean response over time, that is, respondents were less positive about their perception of collaboration in this network at follow-up as compared to baseline. For three items (questions 7, 12, and 19), there was no change over time, and two items (questions 4 and 10) showed a slight increase in mean score at follow-up.

At follow-up, respondents most strongly disagreed that:

- There is a clear, shared vision for what the community is trying to achieve for African American adolescents (1.78 at follow-up compared to 2.11 at baseline).
- Tasks are appropriately distributed among members of the community on projects for African American adolescents. (1.89 at follow-up compared to 2.75 at baseline.)

At follow-up, respondents most strongly agreed that: Some members of agencies seem to have more power in making decision than others. (4.33 at follow-up compared to 4.22 at baseline).

Formative Evaluation Process and Wraparound Needs Assessment

Introduction

The formative evaluation component was an ongoing part of the process evaluation. The evaluation PI engaged in ongoing discussions and provided feedback to the project director. Attendance at meetings and providing evaluation data and feedback was also a key element so that the evaluation was seen as contributing to the project rather than as simply documentation for documentation's sake. Finally, a needs assessment survey was conducted to identify priorities and differences between provider and community stakeholders.

Needs Assessment Methodology

The project used a case management format to organize survey results describing the extent agencies already provide services and their capacity in the content area or standard. A comparison of provider and community stakeholders reveals levels for each standard and a key understanding of the differences and agreements in perspectives. Table NA-1 on the following pages presents the results of the surveys.

Results of the Needs Assessment Survey

Seven of the nine agencies that comprise the service network for the PCWPAAA completed a needs assessment survey during June 2003, along with six consumers. This survey was conducted to identify 1) priorities and differences between service providers and consumers, and 2) gaps in services that Wraparound could address. Each respondent was asked to assess the level of accomplishment and level of importance on items in eight domains of service provision including: prevention activities, outreach and access, assessment and intake, goal setting and intervention planning, informal and formal resources, counseling and therapy, monitoring of service provision, and interagency coordination. Following the presentation of the tabular results in Table NA-1, each of the domains are illustrated and discussed in terms of their importance and level of current achievement in the community. (See Figures NA-1 to NA-8.)

Analysis of Provider and Consumer Data

For most of the items on the needs assessment survey (45 of 48, 93.8%), providers, on average, ranked level of accomplishment higher than did consumers. The average difference between provider and consumer ratings of level of accomplishment was 33.3% with a range from "no difference" to 83.3%. On two items, consumers rated level of accomplishment higher than providers.

In rating level of importance on a scale of 0 to 100, consumers reported an average rating higher than providers on 42 of the 48 items (87.5%). The average difference between consumer and provider ratings of level of importance was 10.2 points with a range of 3 to 25 points. Providers ranked level of importance higher than consumers on six items.

EVALUATION OF THE POLK COUNTY WRAPAROUND PROJECT
FOR AFRICAN AMERICAN ADOLESCENTS
1 KD1 TI137-8-01

Table NA-1. Responses to the Needs Assessment Survey

Item No.	STANDARD	Our agency successfully accomplishes this item.	Agency Responses to Importance for this item (0-100)	This item is adequately accomplished in the community.	Consumer Responses to Importance for this item (0-100)
		% yes (n=7)	Mean (n=7)	% yes (n=6)	Mean (n=6)
PREVENTION ACTIVITIES					
P1	Community and/or school programs for adolescents that build resilience to peer pressure and substance abuse.	83.3	88	40.0	94
P2	Program for teens e.g., sports activities, after-school programs, etc.	50.0	88	40.0	81
P3	Information about available resources in the community.	85.7	84	50.0	94
P4	Program information for children and youth that includes awareness of different cultures.	50.0	84	50.0	87
P5	Education on wellness using a community media campaign.	33.3	65	16.7	85
P6	Cultural celebrations with community-wide participation.	16.7	82	40.0	90
OUTREACH AND ACCESS					
OA1	In-home resources for adolescents and/or families	66.7	77	33.3	95
OA2	Family partners and youth mentors.	50.0	76	16.7	98
OA3	Multicultural activities for adolescents that promote social competence, problem-solving skills, autonomy, and sense of purpose.	16.7	78	20.0	97
OA4	Inform people in rural areas about services.	40.0	75	20.0	91
ASSESSMENT AND INTAKE					
A11	Family support teams work with families.	57.1	90	20.0	97
A12	Focus on involvement of whole family using family-centered principles.	100.0	94	20.0	92
A13	Intake forms include family strengths.	85.7	91	40.0	100
A14	Assessment for child protection along with family strengths.	100.0	91	16.7	98
A15	Cultural competence among human service workers.	85.7	87	33.3	93
A16	Language appropriate forms.	83.3	95	50.0	82
A17	Agency training and staff sensitivity to family -centered approach.	83.3	95	33.3	100
GOAL SETTING AND INTERVENTION PLANNING					
GS1	Involvement of family members in determining strengths and resources for family safety and a family services plan.	100.0	93	50.0	98
GS2	Adequate time for workers to build relationships with families.	71.4	84	33.3	98
GS3	Integrate substance abuse services into family services plan.	71.4	86	33.3	92
GS4	Include paid family partners in services plan.	42.9	71	20.0	97
GS5	Use a common format to share cases across agencies.	42.9	86	20.0	91
GS6	Cross training and case conferences among agencies.	71.4	90	20.0	97
GS7	Use of evidence-based practice for substance abuse.	71.4	86	20.0	98

EVALUATION OF THE POLK COUNTY WRAPAROUND PROJECT
FOR AFRICAN AMERICAN ADOLESCENTS
1 KD1 TI137-8-01

Table NA-1 Continued

Item No.	STANDARD	Our agency successfully accomplishes this item.	Agency Responses to Importance for this item (0-100)	This item is adequately accomplished in the community.	Consumer Responses to Importance for this item (0-100)
		% yes (n=7)	Mean (n=7)	% yes (n=6)	Mean (n=6)
	INFORMAL AND FORMAL RESOURCES				
R1	Information made available about community resources.	100.0	87	40.0	93
R2	Skills are increased to build on family strengths.	85.7	87	40.0	100
R3	Family strength awareness provides motivation to achieve youth goals.	85.7	82	20.0	98
R4	One-stop location to access services.	66.7	83	20.0	78
R5	Peer mentors teach children how to handle peer pressure.	50.0	70	40.0	94
R6	Provide adequate information on family situation to referral agency.	100.0	90	40.0	95
R7	Family involvement maintained throughout the period of service.	100.0	93	60.0	100
R8	Promotion of diversity at events and activities.	66.7	78	40.0	88
	COUNSELING AND THERAPY				
CT1	Time for relationship building to allow family needs to drive the process.	83.3	78	20.0	88
CT2	Individualized services upon demand without wait listing.	50.0	81	25.0	89
CT3	Family participates in domestic violence and substance abuse programs.	66.7	86	60.0	98
CT4	Facilities are safe and allow for sensitivity to client needs and fears and assures confidentiality.	100.0	98	60.0	98
CT5	Treatment providers receive wraparound training.	57.1	73	20.0	98
	MONITORING OF SERVICE PROVISION				
M1	Measurement of family outcomes.	83.3	77	60.0	96
M2	Family is aware of their progress	100.0	95	60.0	100
M3	Follow-up with clients and agencies when referrals are made.	83.3	78	60.0	97
M4	Data tracks family progress.	50.0	73	40.0	91
M5	Family achievements are highlighted.	83.3	90	50.0	100
	INTERAGENCY COORDINATION				
C1	Cross-system agency team that identifies families for wraparound services.	42.9	73	25.0	94
C2	Flexible funding to assist families with non-categorical needs.	42.9	82	25.0	97
C3	Networking practices in place to assure agencies work together for benefit of families.	71.4	82	40.0	100
C4	Common forum to share information to help families.	42.9	81	40.0	93
C5	Web site with links to resources.	66.7	65	40.0	86
C6	Agencies provide community education about substance abuse and mental health.	83.3	91	60.0	88

Figure NA-1.

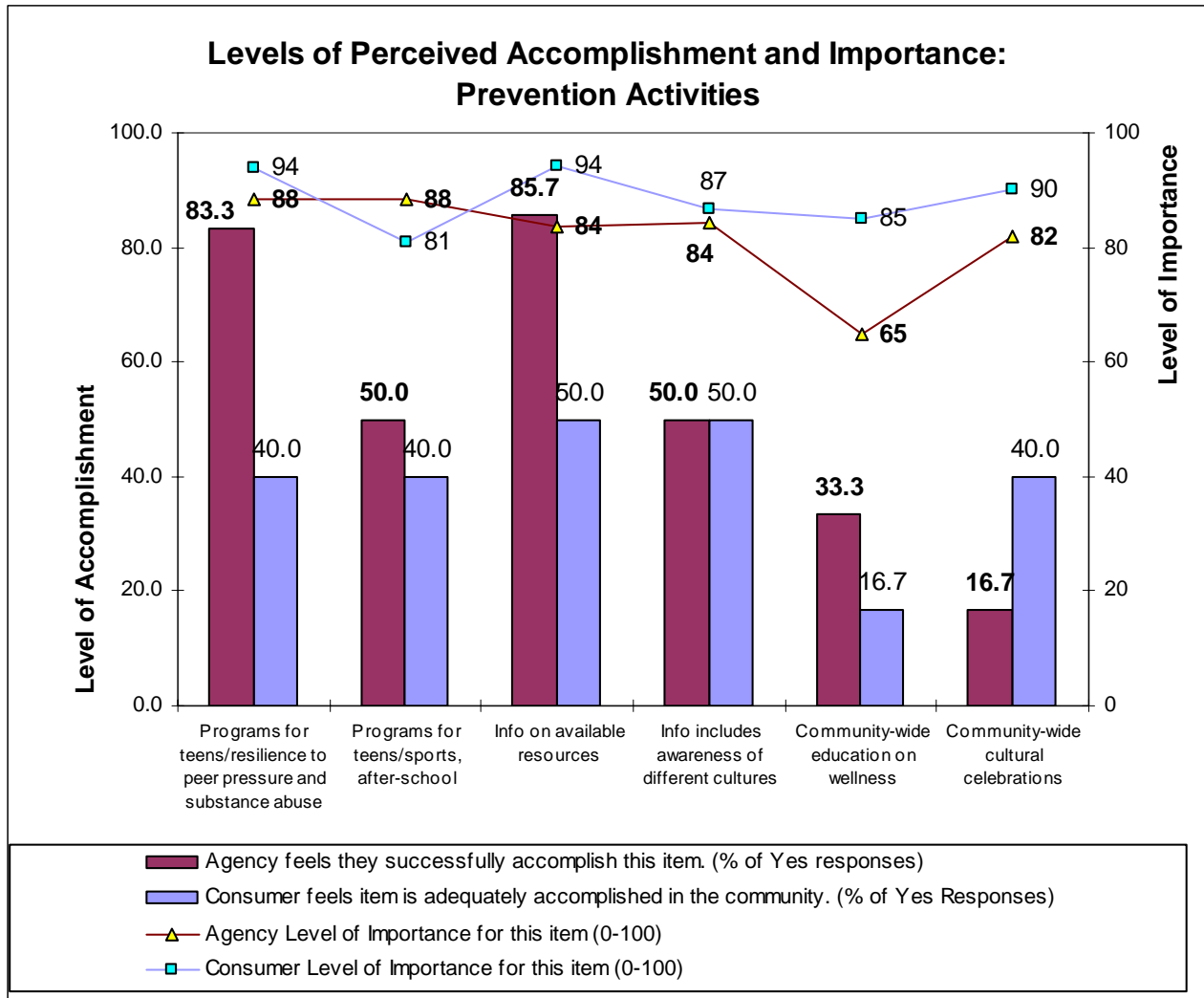


Figure NA-1 above illustrates the level of accomplishment and level of importance for the Prevention Activities items comparing the ratings by providers and consumers. The columns represent the level of accomplishment or the percent who responded yes to each item. The lines represent the average level of importance for each on a scale of 0 to 100.

For five of the six items in the Prevention Activities domain, the consumers rated importance higher than providers. In all cases, the level of accomplishment falls short of the level of importance for consumers. From the providers' perspective, the level of accomplishment falls short of importance on four of the six items: programs for teens including sports activities and after school programs; information that includes awareness of different cultures; community-wide education on wellness, and community-wide cultural celebrations.

The results suggest a gap between the desired and available prevention activities in the community. The consensus for the Wraparound model is consistent with the needs identified by both providers and consumers.

Figure NA-2.

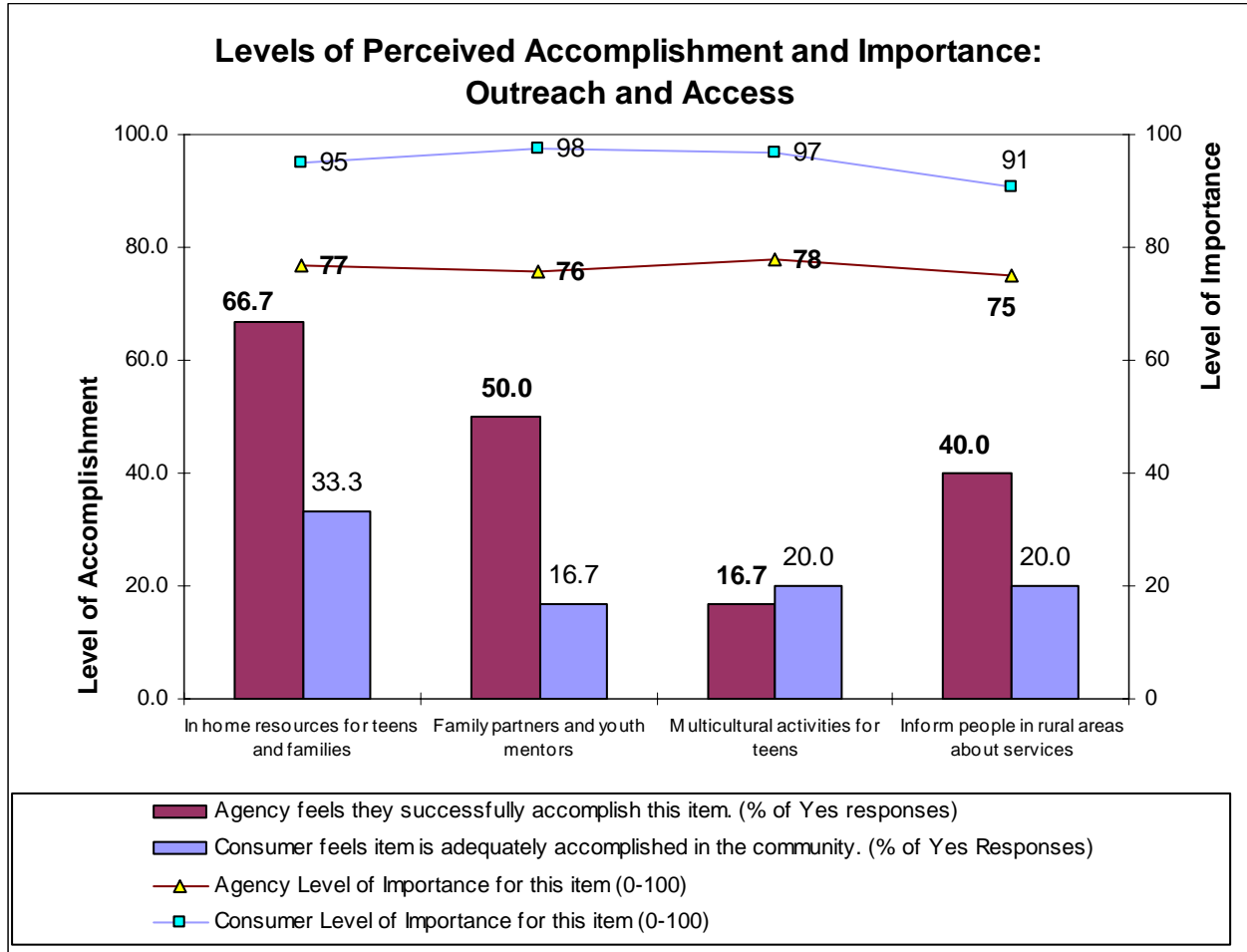


Figure NA-2 above illustrates the level of accomplishment and level of importance for the Outreach and Access items comparing the ratings by providers and consumers. The columns represent the level of accomplishment or the percent who responded yes to each item. The lines represent the average level of importance for each item on a scale of 0 to 100.

The importance of in-home resources, family partners and youth mentors, multicultural activities for teens, and outreach in rural areas was rated higher by the consumer stakeholders than provider stakeholders. The level of achievement for all items in this domain was substantially lower than the level of importance.

The results again indicate a definite gap between the desired and the available. Outreach and access in the community are found to need increased activity, and the consensus for the Wraparound exemplary practice implementation is consistent with the needs identified by the stakeholders as standards for practice in the implementation.

Figure NA-3.

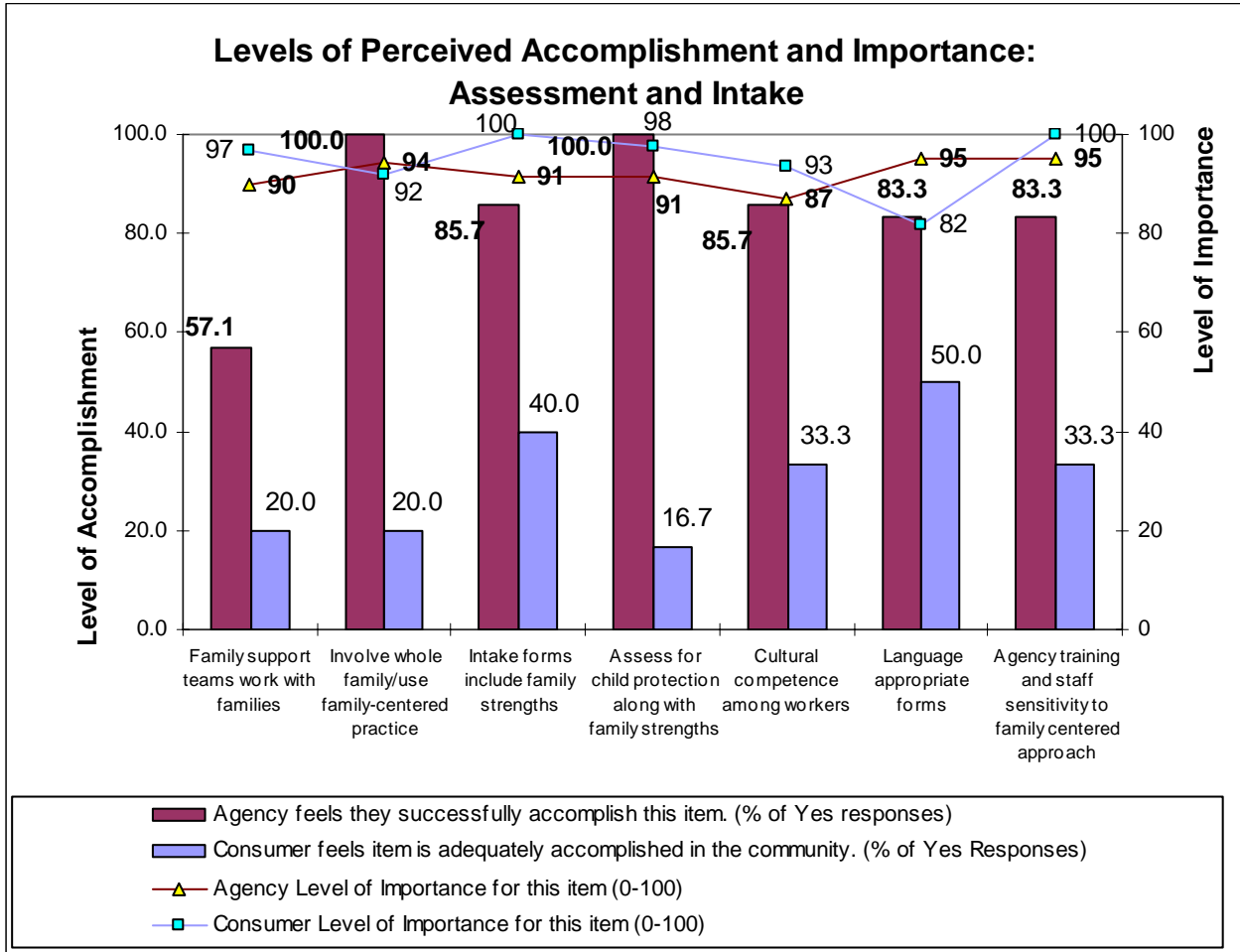


Figure NA-3 above illustrates the level of accomplishment and level of importance for the Assessment and Intake items, comparing the ratings reported by providers and consumers. The columns represent the level of accomplishment or the percent who responded yes to each item. The lines represent the average level of importance for each item on a scale of 0 to 100.

For five of the seven items in the Assessment and Intake domain, the consumers rated importance slightly higher than did the providers, and for two of the seven items the providers rated importance slightly higher than consumers. Consumers indicated a slightly higher level of importance for items concerned with family support, family strengths, cultural competence and staff training, while providers ranked the importance of involving the whole family and language appropriate forms slightly higher. Providers indicated much higher levels of accomplishment on all items as compared to consumers

The results indicate disparity between the desired and the available Assessment and Intake standards in the community, although consumers report more of this disparity than providers. The consensus for the Wraparound exemplary practice implementation is again consistent with the needs identified by the stakeholders for improved family centered and culturally appropriate services that are coordinated within the community.

Figure NA-4.

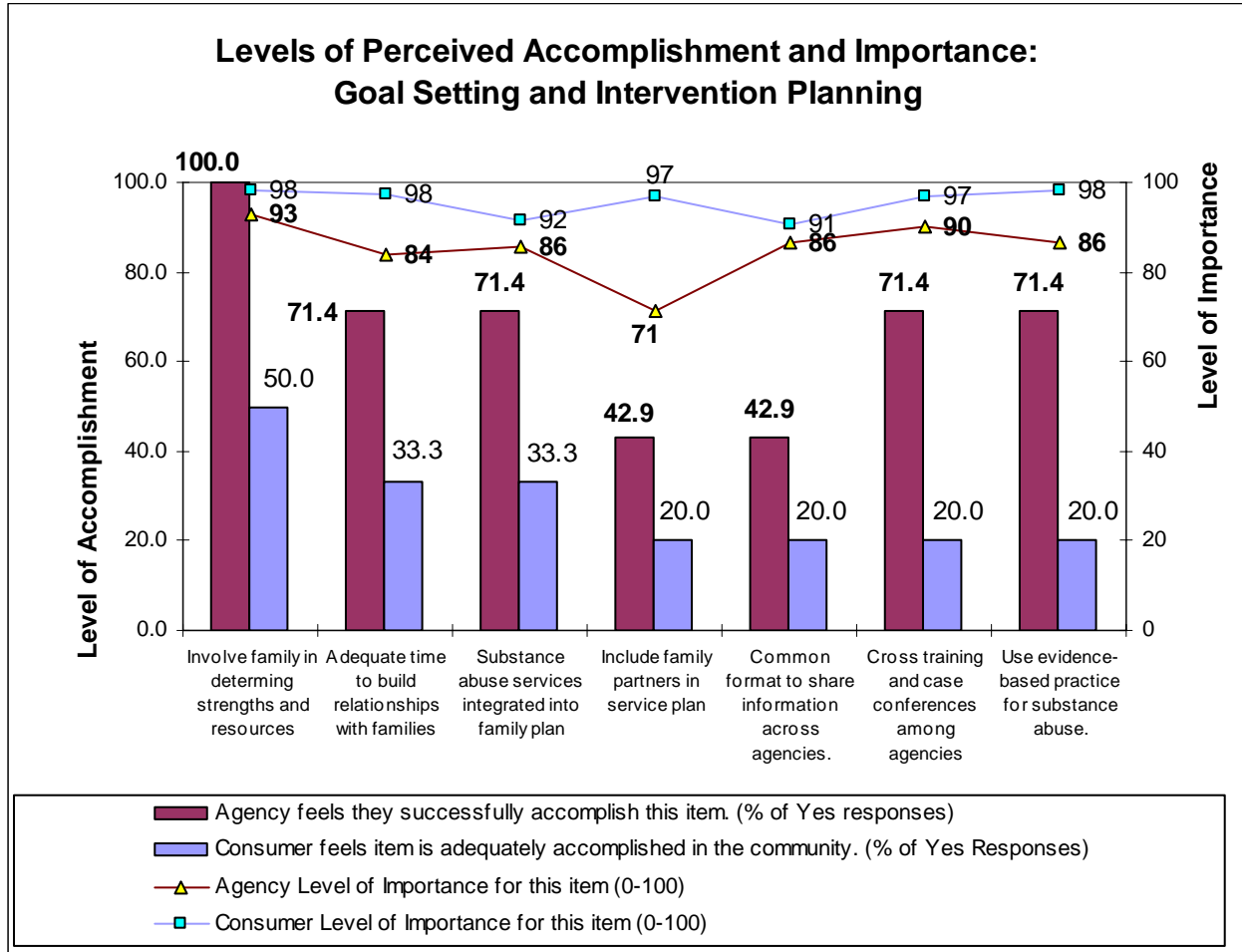


Figure NA-4 above illustrates the level of accomplishment and level of importance for the Goal Setting and Intervention Planning items, comparing the ratings reported by providers and consumers. The columns represent the level of accomplishment or the percent who responded yes to each item. The lines represent the average level of importance for each item on a scale of 0 to 100.

Consumers and providers demonstrate different perceptions of accomplishment and importance for goal setting and intervention planning items. The importance level of all seven items in the this domain were rated by consumers at over 90, while providers indicated lower levels of importance ranging from 70 to just over 90. The average level of achievement as reported by providers ranged from just over 40% up to 100%, with consumers reporting much lower levels of achievement, ranging from 20% to 50%.

The results indicate a sizeable disparity between the desired and the available goal setting standards in the community, although providers felt they did involve families in determining strengths and resources (at a level of accomplishment of 100.0%). The consensus for the Wraparound exemplary practice implementation is consistent with the needs identified by the stakeholders for improved goal setting and intervention planning.

Figure NA-5

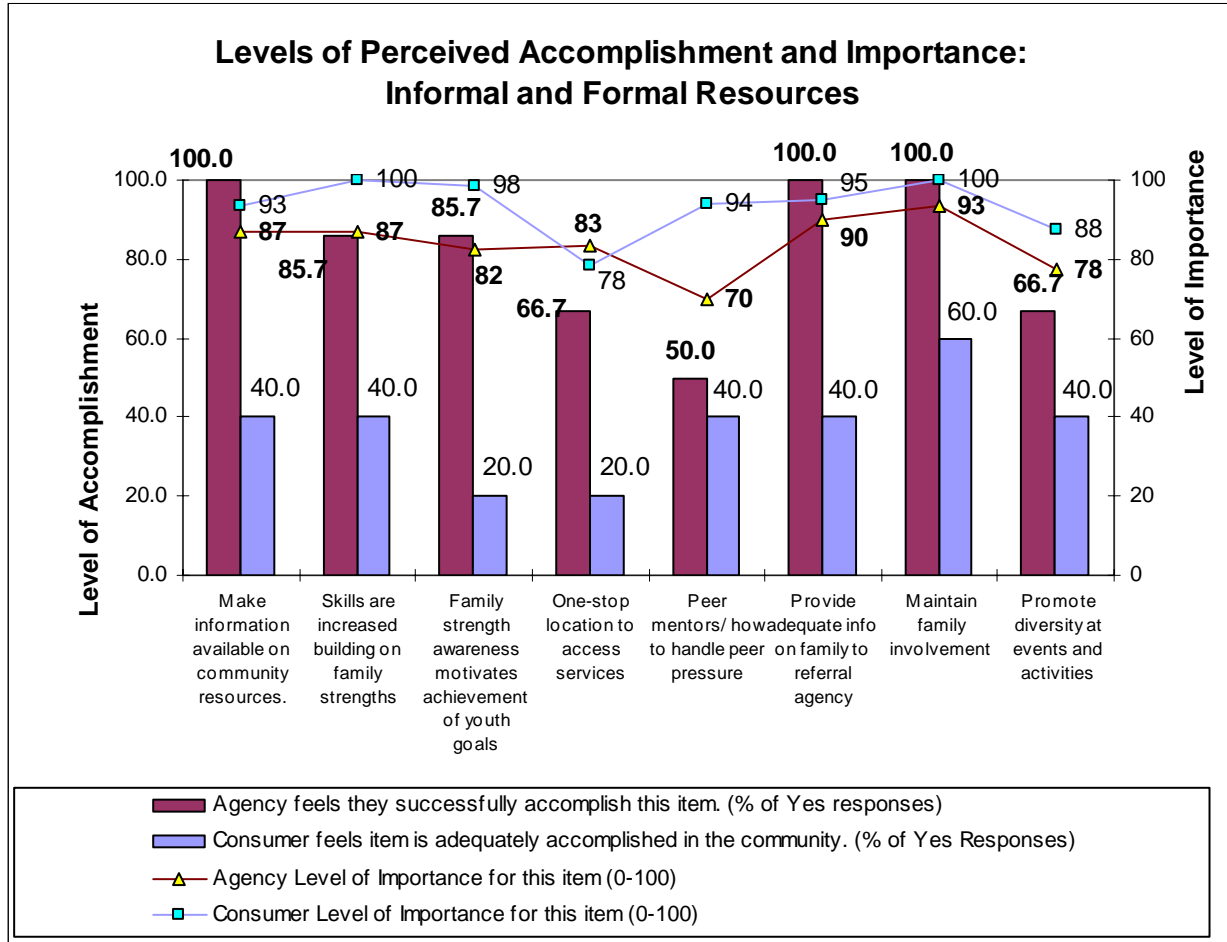


Figure NA-5 above illustrates the levels of accomplishment and importance for the Informal and Formal Resources items, comparing the ratings reported by providers and consumers. The columns represent the level of accomplishment or the percent who responded yes to each item. The lines represent the average level of importance for each item on a scale of 0 to 100.

Seven of the eight items in the Informal and Formal Resources domain were rated as more important among the consumers than the providers. Only having a one-stop location to access services was rated slightly more important by the provider stakeholders. Again, the perception of accomplishment of the items in this domain was substantially different for providers as compared to consumers. Providers indicated much higher levels of accomplishment, with five items demonstrating a 40% to 60% higher level than that indicated by consumers.

The results indicate that, for consumers, there is considerable disparity across all items in this domain comparing the importance of the standards to their perception of achievement levels in the community at present. For providers, there was disparity between level of accomplishment and level of importance on just three items: one-stop location to access services, having peer mentors teach children how to handle peer pressure, and promoting diversity at community events. The consensus for the Wraparound exemplary practice implementation is shown to be consistent with the need for improved informal and formal resources.

Figure NA-6.

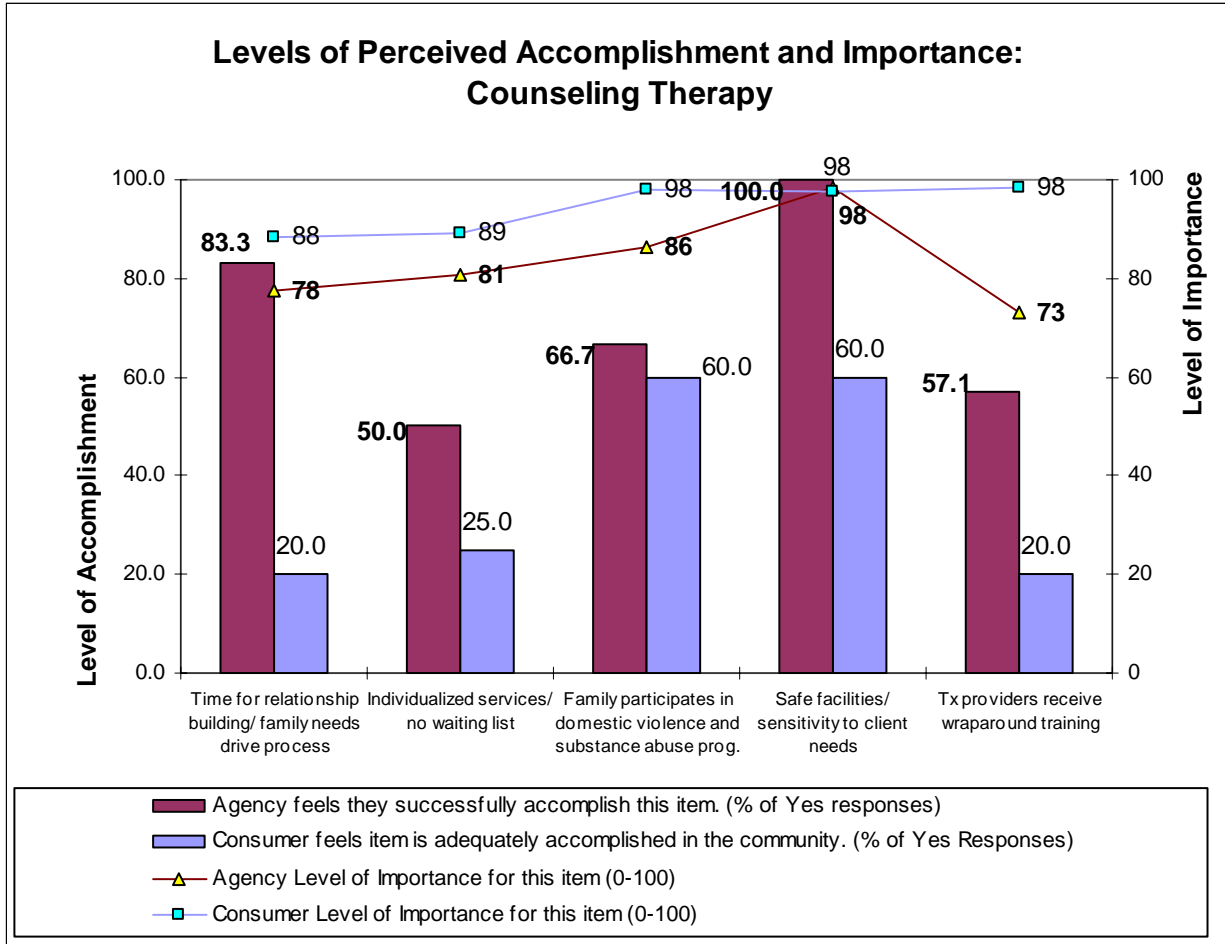


Figure NA-6 above illustrates the levels of accomplishment and importance for Counseling and Therapy items, comparing the ratings reported by providers and consumers. The columns represent the level of accomplishment for each item, while the lines represent the average level of importance for each item on a scale of 0 to 100.

All five items in the Counseling and Therapy domain were rated by consumers higher than or at the same level of importance as providers, with an average difference of 11 points. For the level of accomplishment in this domain, providers indicated much higher levels than consumers on four of the five items with an average difference of 45.3%. For the item “family participates in domestic violence and substance abuse programs,” providers and consumers indicated the most similar levels of accomplishment, with a difference of only 6.7%.

The results indicate that, for consumers, there is considerable disparity across all items in this domain comparing the level of importance to their perception of achievement levels in the community. For providers, there was disparity between level of accomplishment and level of importance on three items: individualized services, family participation in domestic violence and substance abuse programs, and wraparound training for providers. Consensus on wraparound is directly in line with the needs identified by both the provider and community stakeholders.

Figure NA-7.

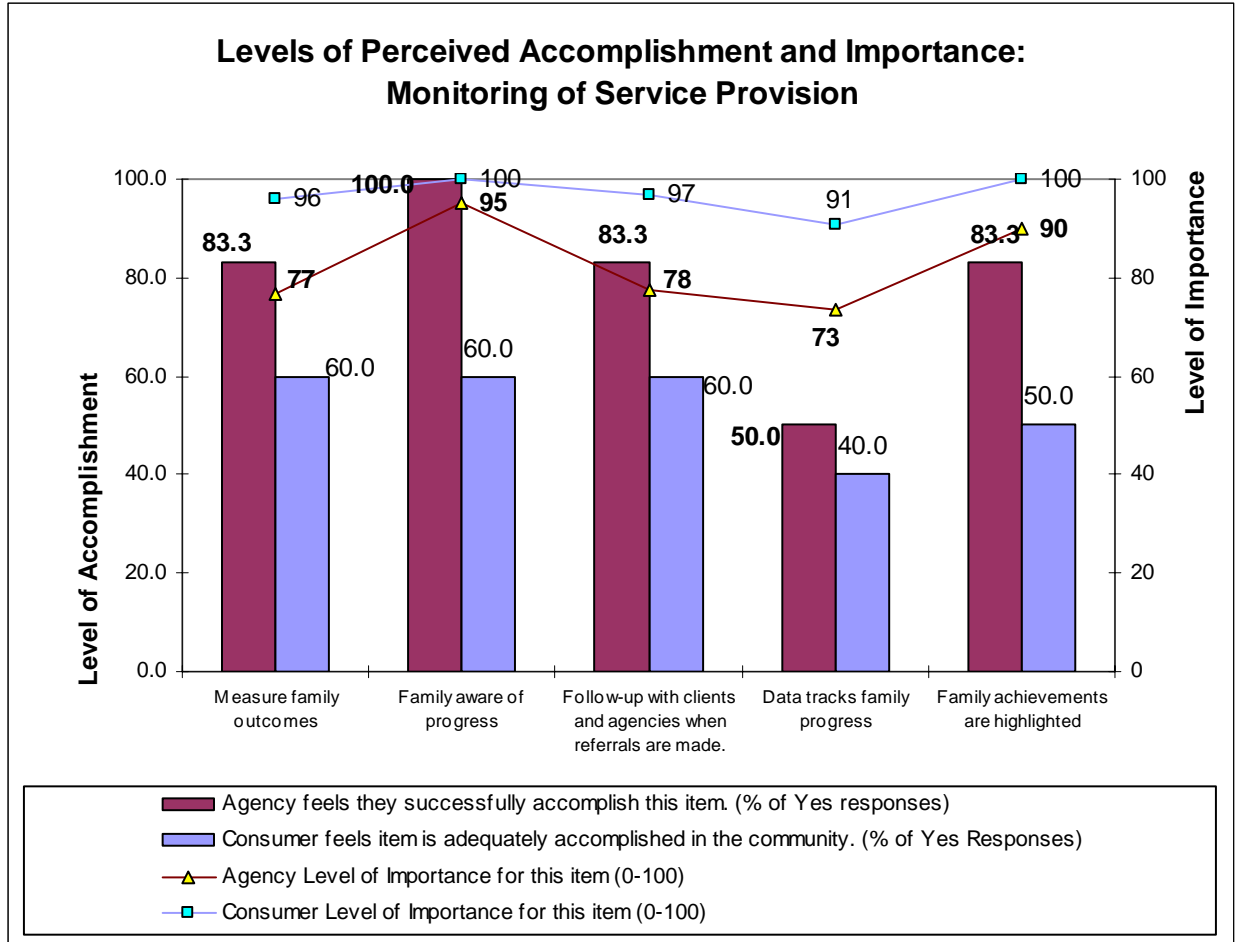


Figure NA-7 above illustrates the levels of accomplishment and importance for Monitoring of Service Provision items, comparing the ratings reported by providers and consumers. The columns represent the level of accomplishment for each item, while the lines represent the average level of importance for each item on a scale of 0 to 100.

All five items in the Monitoring of Service Provision domain are rated by the community stakeholders at 91 or greater. However, consumers ranked the level of achievement on all five items between 40% and 60% indicating a substantial difference between current achievement levels and the importance ratings from the consumer’s perspective. Meanwhile, provider stakeholders reported importance in the range of 73 to 95 and levels of achievement between 83.3% and 100%.

The results indicate differences between provider and consumer perspectives as well as between the desired and the achieved Monitoring of Service Provision. The consensus for the Wraparound exemplary practice implementation and the standards are consistent with the needs identified by the stakeholders for improved Monitoring of Service Provision.

Figure NA-8.

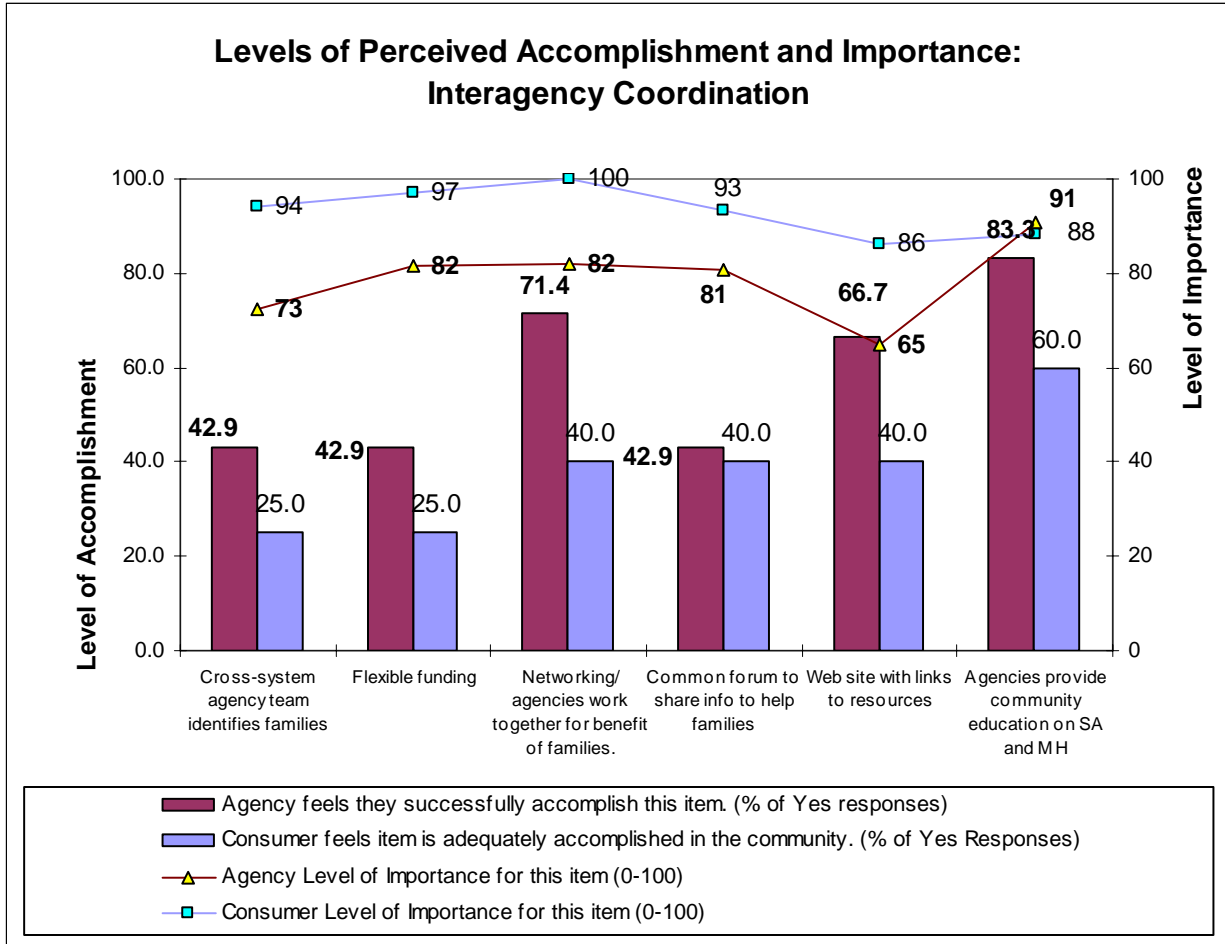


Figure NA-8 above illustrates the levels of accomplishment and importance for Interagency Coordination items, comparing the ratings reported by providers and consumers. The columns represent the level of accomplishment for each item, while the lines represent the average level of importance for each item on a scale of 0 to 100.

Five of the six items in the Interagency Coordination domain are rated by the community stakeholders at 86 or greater (out of 100). However, consumers ranked the level of achievement on all six items between 25% and 60% indicating a substantial difference between current achievement levels and the importance ratings from the consumer's perspective. Meanwhile, provider stakeholders reported importance in the range of 65 to 91 and levels of achievement below 50% for three items: cross-system agency teams to identify families, flexible funding, and having a common forum to share information to help families.

The results indicate differences between provider and consumer perspectives on some items as well as differences between the desired and the achieved Interagency Coordination. The consensus for the Wraparound exemplary practice implementation and the standards are consistent with the needs identified by the stakeholders for improving interagency coordination.

Review of Relevant Literature

The emergence of the wraparound process as an alternative paradigm to the traditional treatment planning processes for children & adolescents with emotional & behavioral disorders is described by Van Den Berg, et al. (1996). This research compares current practices in the field to the wraparound process and describes procedures to aid communities in the implementation of the wraparound process. Positive results were reported for individualized wraparound strategies among foster children with confirmed emotional/behavioral disturbances and their families by McDonald et al. (1995).

Malysiak et al. (1998) examines the theoretical and paradigmatic basis to better define fidelity in a Wraparound approach to service delivery, drawing on team discussion data with 7 families in Tampa, FL, follow-up interviews with 56 of these participants, and a review of case files. The literature is examined in an effort to clarify terms and suggest a paradigmatic and theoretical base for wraparound. Results suggest that wraparound is an emerging collaborative model based in systems theory. This research also proposes steps in clarifying the process of implementation and evaluation of the wraparound approach that can contribute to better definitions for treatment fidelity.

Research on Wraparound as an intervention is also abundant. Family-centered policy and practice has generally used expert models that define families with children with serious emotional disturbances as dysfunctional. Wraparound engages these families as decision-making participants using naturally occurring strengths to wrap individualized supports around the child and family. Malysiak (1997) posits that Wraparound's principles can be used to descriptively identify and ensure the integrity of the collaborative model.

Wraparound as described by Handron et al. (1998) is a strengths-based, family-driven orientation role that focuses on the uniqueness of each child and family. The professional's role in wraparound is to offer an historical perspective and clinical practice implications for family nurses or service providers as other disciplines are explored. This case study demonstrates how structural family therapy may be used as a theoretical framework in concert with the Wraparound process. Another case study by Epstein (1997) on the actions of professional social workers and family workers in a family support program designed with a wraparound philosophy (Kaleidoscope, Inc, a nonprofit child welfare organization in Chicago, IL) found that more than 33 percent of a social worker's day is devoted to indirect care activities (e.g., writing reports, attending meetings, & collateral contacts), and that family workers spend more of their time working directly with families.

Finally Carney et al. (1997) and Rosenblatt (1996) define the individualized wraparound processes for children with the most challenging emotional/behavioral disturbances and their families, and provide an overview of the state of research. It is argued that the future of wraparound depends on carefully defining the process, including how to best integrate wraparound services with reforms based on the principles of a comprehensive system of care. A strong commitment must be made at all levels to the process of accumulating knowledge and building and creating innovative research along with programs.

As an intervention, wraparound was demonstrated to be effective in Ontario with children ages 2 to 15 with moderate to severe emotional difficulties who would have needed residential care if not provided with Wraparound services as an alternative. The approach was to provide participants with services they requested. Parents identified in-home help, stress reduction and individual (one-on-one) services as the major contributors to success. The program was demonstrated to be cost-effective with cases averaging 17% of the mean cost of local community out-of-home placements (Brown, 1996). A wraparound service model in Baltimore, MD targeting 25 severely maladjusted youth resulted in one youth being returned home and 24 being diverted from out-of-state residential treatment centers to wraparound services (Hyde, 1996).

In an evaluation of a community-based treatment program in rural New England using a Wraparound model, the research examined adjustment to home and school among children with severe emotional and behavioral problems. The Child Behavior Checklist and the Teacher Report Form provided standardized information on the severity of problems according to parents and classroom teachers. The wraparound services included intensive home and school-based services. The results indicated substantial improvement in child functioning in the home though these results were not found in the school (Clarke, 1992). Keller (1999) describes a technology transfer initiative in which network therapy (a version of Wraparound) was used in substance abuse treatment utilizing peer and family support in New York City. Following counselor training that included a didactic seminar, role-playing, use of videotaped illustrations, and clinical supervision, counselors implemented the NT approach. Using a comparison group, Keller et al found that network therapy patients had significantly less positive urinalysis (UAs) than comparison group patients. In 1994, a community initiated wraparound services model called Breakthrough for Families, targeting the most hard-to-reach families (i.e., those struggling with parental substance abuse, youth at high risk, and other complex needs cutting across existing categorical programs) reported strong positive outcomes (Ray, 1998).

The Comprehensive Substance Abuse Treatment and Rehabilitation program instituted in Missouri in 1991 offered wraparound services and intensive case management. Eleven domains typically affected by substance abuse were measured, and satisfaction with treatment services was assessed based on a questionnaire and inventory from 280 clients at 10 facilities. The results of three separate programs (i.e., general, women with children, and adolescents) indicated that, as length of participation increased, positive effects also increased (Evenson, 1998).

In addition to describing the positive outcomes for treatment versus comparison groups in the Fostering Individualized Assistance Program (FIAP) in Florida, the evaluation research also details the approach and participants in the program. The Florida participants ranged in age from 7 to 15 at entry and had been adjudicated dependent, and averaged 2.6 years in out-of-home placement with an average of 4 placement changes per year. Family specialists served as clinical case managers, providing strengths-based assessment, life-domain planning, home-based services, brokered services, and follow-along monitoring and supports. While there was a significant increase in days in incarceration for both groups, there was a significantly greater

likelihood that an FIAP child would achieve permanent placement. The findings support the superiority of individualized strategies of service delivery such as Wraparound for children with severe emotional and behavioral disturbances (Clark, 1996).

Interventions with chronic juvenile delinquents and their families have often been unsuccessful in reducing crimes because they fail to account for the social system in which the delinquents operate. The Wraparound model described by Northey et al. (1997) includes the following premises: the quality of attachment to others affects the adolescent's behavior; interventions must take the adolescent's interpersonal interactions into account; interventions should focus on intrapsychic and interactional experiences of the adolescent, family, extended family and "fictive" kin networks, and the integration of these premises in a systems perspective decreases conflict in the network. The key to the model is impacting family interactions at different levels, building on family strengths, and clarifying meanings associated with problematic behavior.

In addition to empirical evidence of the effectiveness of Wraparound for children and adolescent with severe behavioral and emotional disorders who may have co-occurring substance abuse issues, strong support is also found among service providers and consumer families. Support among providers and consumers has been found by Quinn (1995) who surveyed 180 direct service providers about barriers to providing services, specific service priorities for system development and how services could best be developed and implemented and found support for a Wraparound model. Telephone surveys with 20 youth receiving community-based, wraparound services in Vermont indicated a high degree of satisfaction, sense of involvement, and feelings of unconditional care. Further, each of these variables was related to behavioral adjustment. Wraparound was also found to enhance youth's sense of involvement and their perceptions that care was unconditional, and this was strongly associated with satisfaction with services (Rosen, 1994).

In Vermont, the Wraparound Care Initiative provided residential, educational, and behavioral outcome data for a cohort of 40 youth receiving Wraparound care over a 12-month period. After 12 months, youth who had previously been removed from their homes or were at risk of removal were residing in significantly less restrictive community-based living arrangements and exhibiting significantly fewer problem behaviors than at intake (Yoe, 1996).

The use of wraparound approaches across a variety of educational settings to prevent out-of-school and out-of-home care was reported by Eber, et al. (1997). The researchers examined the application of a school-based Wraparound approach for the past three years by the La Grange (IL) Area Dept of Special Education. The project has been implementing a school-based individualized service network for students with emotional and behavioral disabilities that are now being integrated into larger special education, mental health, and social services systems. Students who were identified through self-contained special education classrooms were compared to students who were identified from various other school and mental health settings and were found to be less clinically involved. Eber (2002) also explored combining a school-based wraparound approach and a school-wide systems approach to positive behavioral interventions and supports to create more effective school environments and improved

outcomes for students at risk/with behavioral challenges. These approaches are complementary and provide options for further research and practice.

The Choose-Get-Keep (CGK), is based on the values of psychiatric rehabilitation including consumer choice, individual planning, and consumer involvement in the rehabilitation process (Farkas & Anthony, 1989). In addition to the technology of psychiatric rehabilitation, such as how to set goals with consumers, how to “connect” with consumers, how to teach skills to consumers, and how to develop resources with and for consumers (Cohen, et al., 1985; 1986; 1988; 1990) the CGK approach has been evaluated in a variety of community applications. In a multi-site comparison of the CGK approach in three psychosocial rehabilitation centers in Virginia, Georgia, and Oregon, competitive employment was achieved for 41% of 275 clients. Skills were found to increase and symptoms decreased for those who became employed (Rogers, Anthony, Toole & Brown, 1991). At Boston University, a supported education program model incorporating the CGK approach was developed and demonstrated effective for patients who were “psychiatrically disabled.” Employment and self-esteem significantly increased over a two and one-half year period and hospitalizations significantly decreased (Unger, Anthony, Sciarappa & Rogers, 1991).

The exemplary approach known as Wraparound Milwaukee has been in operation since at least 1995 and has served over 650 youth (Kamradt, 2000). It has been highlighted by SAMHSA as an exemplary practice (Burns and Goldman, 1999). The approach of this model is to serve youth with multiple needs across system lines in the areas of juvenile justice, child welfare, and mental health. Care is coordinated using a public managed care organization. As with other Wraparound programs, the focus is on a strengths-based approach to children and families, family involvement in the treatment process, needs-based service planning and delivery, individualized service plans, and an outcome-focused approach.

There are four key components in Wraparound Milwaukee: care coordination, the child and family team, a mobile crisis team, and a provider network. The foundation of the program is provided by the care coordinator, who provides assessments, works with the family to create the team, conducts team meetings, helps identify needs and resources, arranges for services, and monitors implementation. The central focus of activity is the child and family team, which consists of family members, natural supports, and providers. This group is active in planning, implementing and tracking progress. The mobile crisis team is a group of professionals who are available for 24-hour crisis intervention. They work with the family to avoid removal of youth from their home, school, and community. The provider network has allowed the program to expand their service to cover a variety of areas not normally available to the youth they serve.

Outcomes of Wraparound Milwaukee have been measured by looking at several factors (Kamradt, 2000), and each measure showed improvement after participation in the program. Youth in residential treatment has decreased by 60 percent since the inception of the program. Clinical scales have shown significantly decreased impairment in mental health. Recidivism rates for participants have dropped for a number of different types of offenses.

The Polk County Wraparound Project for African American Adolescents will implement the Wraparound model consistent with the following recommendations (Burns and Goldman, 1999):

- ◆ Wraparound must be based in the community.
- ◆ Services and supports must be individualized, built on strengths, and meet the needs of children and families across life domains to promote success, safety, and permanence in home, school, and community.
- ◆ The process must be culturally competent, building on the unique values, preferences, and strengths of children and families, and their communities.
- ◆ Families must be full and active partners in every level of the wraparound process.
- ◆ The wraparound approach must be a team-driven process involving the family, child, natural supports, agencies, and community services working together to develop, implement, and evaluate the individualized service plan.
- ◆ Wraparound child and family teams must have adequate, flexible approaches, and flexible funding.
- ◆ Wraparound plans must include a balance of formal services and informal community and family resources.
- ◆ An unconditional commitment to serve children and families is essential.
- ◆ The plan should be developed and implemented based on an interagency, community-based collaborative process.
- ◆ Outcomes must be determined and measured for the system, for the program, and for the individual child and family.

References and Literature Cited

- Brown, R.A. & Hill, B.A. (1996). Opportunity for change: exploring an alternative to residential treatment. *Child Welfare*, 75(1), 35-37.
- Burns, B.J., Schoenwald, S.K., Burchard, J.D., Faw, L., and Santos, A.B. (2000). Comprehensive community-based interventions for youth with severe emotional disorders: Multisystemic therapy and the wraparound process. *Journal of Child and Family Studies*, 9, 283-314.
- Burns, B.J. & Goldman, S.K. eds. (1999). Promising practices in wraparound for children with serious emotional disturbance and their families. *Systems of Care: Promising Practices in Children's Mental Health, 1998 Series, Volume IV*. Washington, DC: Center for Effective Collaboration and Practice, American Institutes for Research.
- Carney, M.M. (1997). An evaluation of wraparound services with juvenile delinquent youth. *Dissertation Abstracts International* 57(10), 4542A.
- Clark, H.B., Lee B., Prange, M.E., McDonald, B.A. (1996). Children lost within the foster care system: Can wraparound service strategies improve placement outcomes? *Journal of Child and Family Studies*, 5(1), 39-54.
- Clarke, R.T., Schaefer, M., Burchard, J.D., Welkowitz, J.W. (1992). Severe behavioral disorder: An evaluation of project wraparound. *Journal of Child and Family Studies* 1(3) 241-261.
- Cohen, M., Anthony, W. A. (1988). A commentary on planning a service system for persons who are severely mentally ill: Avoiding the pitfalls of the past. *Psychosocial Rehabilitation Journal* 21(1), 69-72.
- Cohen, M., Anthony, W. A., Farkas, M. (1990). Tertiary prevention: Psychiatric rehabilitation. In Hudson, C. G. (Ed.), Cox, A. J. (Ed.) (1991) *Dimensions of state mental health policy*. New York, NY: Praeger Publishers.
- Connell, J. P., Kubisch, A.C., Schorr, L.B., Weiss, C.H. (1995). *New approaches to evaluating community initiatives: Concepts, methods, and contexts*. Washington DC: The Aspen Institute.
- Cook, T.D. and D.T. Campbell. (1979) *Quasi-Experimentation: Design and Analysis for Field Settings*. Chicago, IL: Rand McNally.
- Cronbach, L.J. (1982). *Designing Evaluations of Educational and Social Programs*. San Francisco CA: Jossey-Bass.
- Danley, K. S., MacDonald-Wilson, K. L. (1996). *The Choose-Get Keep Approach to Employment Support: Operational Guidelines*. Boston, MA: The Center for Psychiatric Rehabilitation.
- Dittes, J. and Kelley, H. (1956) Effects of different conditions of acceptance upon conformity to group norms. *Journal of Abnormal and Social Psychology* 53, 100-107.
- Eber, L, Nelson, C. M. (1997). School-based wraparound planning: integrating services for students with emotional and behavioral needs. *American Journal of Orthopsychiatry* 67(3), 385-395.
- Eber L. (2002). Wraparound and positive behavioral interventions and support in the schools. *Journal of Emotional and Behavioral Disorders*, 10(3), 171-180.
- Epstein, M. H., Jayanthi, M., Dennis, K., Potter, K., Hardy, R., McKelvey, J., Frankenberry, E. (1997). Professional activities of family workers and social workers working in a family support program. *Community Alternatives* 9(2), 143-159.

- Evenson, R. C., Binner, P. R., Cho, D. W., Schicht, W. W., Topolski, J. M. (1998). An outcome study of Missouri's CSTAR alcohol and drug abuse programs. *Journal of Substance Abuse Treatment* 15(2), 143-150.
- Farkas, M. D. (Ed.), Anthony, W. A. (Ed.) (1989). *Psychiatric rehabilitation programs: Putting theory into practice*. Baltimore, MD: The Johns Hopkins University Press.
- Fulbright-Anderson, K., Kubisch, A. C., Connell, J.P. (1998). *New approaches to evaluating community initiatives: Theory, measurement, and analysis*. Washington DC: The Aspen Institute.
- Handron, D. S., Doser, D. A., McCammon, S. L., Powell, J. Y. (1998). A wraparound: The wave of the future: Theoretical and professional practice implications for children and families with complex needs. *Journal of Family Nursing* 4(1), 65-86.
- Headland T.N, Pike, K. L., Harris M. , eds. (1990) *Emics and Etics: The Insider/Outsider Debate*. Frontiers of Anthropology 7. Summer Institute of Linguistics. Sage Publications.
- House, E.R. (1994). Integrating the qualitative and quantitative. In *The Qualitative-Quantitative Debate: New Perspectives*, C.F. Reichardt and S.F. Rallis (eds.). San Francisco, CA: Jossey-Bass.
- Hudson, C. G. (Ed.), Cox, A. J. (Ed.) (1991). *Dimensions of state mental health policy*. New York, NY: Praeger Publishers.
- Hyde, K. L., Burchard, J. D., Woodworth, K. (1996). Wrapping services in an urban setting. *Journal of Child and Family Studies* 5(1), 67-82.
- Kamrodt, B. (2000). Wraparound Milwaukee: Aiding youth with mental health needs. *Juvenile Justice Journal* 8(1), 14-23.
- Keller, D. S., Galanter, M. (1999). Technology transfer of network therapy to community-based addictions counselors. *Journal of Substance Abuse Treatment* 16(2), 183-189.
- Knoke, D. & Kuklinski, J.H. (1982). *Network analysis*. Sage University Paper series on Quantitative Applications in the Social Sciences, Series number 07-028. Newbury Park, CA: Sage Publications.
- Malysiak, R. (1997). Exploring the theory and paradigm base for wraparound. *Journal of Child and Family Studies* 6(4), 399-408.
- Malysiak, R. (1998). Deciphering the tower of Babel: Examining the theory base for wraparound fidelity. *Journal of Child and Family Studies* 7(1), 11-25.
- McDonald, B. A., Boyd, L. A., Clark, H. B., Stewart, E. S. (1995). Recommended individualized wraparound strategies for foster children with emotional/behavioral disturbances and their families. *Community Alternatives* 7(2), 63-82.
- Northey, W. F., Primer, V., Christensen, L. (1997). Promoting justice in the delivery of services to juvenile delinquents: The ecosystemic natural wrap-around model. *Child and Adolescent Social Work Journal* 14(1), 5-22.
- Patton, M.Q. (1997). *Utilization-focused evaluation*. (3rd ed.) Thousand Oaks, CA: Sage Publications, Inc.
- Quinn, K. P., Epstein, M. H., Cumblad, C. L. (1995). Developing comprehensive, individualized community-based services for children and youth with emotional and behavior disorders: Direct service providers' perspectives. *Journal of Child and Family Studies* 4(1), 19-42.
- Ray, J., Stromwall, L. K., Neumiller, S., Roloff, M. (1998). A community response to tragedy: Individualized services for families. *Child and Adolescent Social Work Journal* 15(1), 39-54.

- Rogers, E. S., Anthony, W. A., Toole, J., Brown, M. A. (1991). Vocational outcomes following psychosocial rehabilitation: A longitudinal study of three programs. *Journal of Vocational Rehabilitation* 1(3), 21-29.
- Rosen, L. D., Heckman, T., Carro, M. G., Burchard, J. D. (1994). Satisfaction, involvement, and unconditional care: The perceptions of children and adolescents receiving wraparound services. *Journal of Child and Family Studies* 3(1), 55-67.
- Rosenblatt, A. (1996). Bows and ribbons, tape and twine: Wrapping the wraparound process for children with multi-system needs. *Journal of Child and Family Studies* 5(1), 101-117.
- Scott, J. (2000). *Social network analysis: A handbook*. Newbury Park CA: Sage Publications.
- Unger, K. V., Anthony, W. A., Sciarappa, K., Rogers, E. S. (1991). A supported education program for young adults with long-term mental illness. *Hospital and Community Psychiatry* 42(8), 838-842.
- VanDenBerg, J. E., Grealish, E. M. (1996). Individualized services and supports through the wraparound process: Philosophy and procedures. *Jrl of Child & Family Studies* 5(1), 7-21.
- Wasserman, S. & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge, MA: Cambridge University Press.
- Wasserman, S. & Galaskiewicz, J. (1994). *Advances in social network analysis: Research in the social and behavioral sciences*. Sage Publications.
- Yoe, J. T., Santarcangelo, S., Atkins, M., Burchard, J. D. (1996). Wraparound care in Vermont: Program development, implementation, and evaluation of a statewide system of individualized services. *Journal of Child and Family Studies* 5(1), 23-29.