# Organizational Networks of Collaboration for Community-Based Living

# Dennis L. Poole

This exploratory study of the Texas Community Awareness and Relocation Services (CARS) Project examines organizational networks of collaboration for community-based living. A high degree of collaboration in these networks is needed to help nursing facility residents negotiate the complex process of moving to community-based settings. Social network analysis reveals considerable variations in local organizational networks of collaboration among lead nonprofit providers before and after implementation of the CARS Project in five test sites. These variations probably affected their collaborative capacity of each site and, ultimately, the project's outcomes.

The 1999 decision of the U.S. Supreme Court in *Olmstead* v. L.C. requires states to transition eligible persons with disabilities from nursing facilities to community-based living. The complexity of the task is challenging, not merely because of the sheer numbers of people involved, but also because of the potential scope of services engaged in a single transition: outreach, assessment, discharge planning, housing, durable medical equipment, home health, assisted living, family or peer support, transportation, and myriad other services (Chaney and Croke, 2003).

Successful outcomes often hinge on the presence or absence of local organizational networks of collaboration for community-based living. In a cross-site comparison of five demonstration projects, Morrissey and others (1994) report that network characteristics were more influential than any other survey data in predicting outcomes in coordination of community services for persons with chronic illness. Other scholars (Provan and Milward, 1994; Banaszak-Holl, Allen, Mor, and Schott, 1998) document the influence of local network behavior on outcomes in similar state-funded projects. Still others (Hawe and Shiell, 2000; Valente, 1996) report that state efforts to implement or diffuse innovations at the local level depend on the

*Note*: I recognize the contributions of Deborah Duvall, Bethany Wofford, Stephanie Rivaux, and Jongserl Chun, members of the evaluation team who assisted in data collection for the study.



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willingness of community organizations to adopt innovations and reconfigure local service delivery systems to ensure success (Eiken, Stevenson, and Asciutto, 2002; Hawe and Shiell, 2000; Valente, 1996). Creating synergy between state goals and local actions is difficult, particularly when the local ecology or network of relationships fosters learned helplessness among vulnerable population groups likely to benefit from the innovation (Faber and Wallerstein, 2002; Levy and Pescosolido, 2002; Minkler, Wallace, and McDonald, 1994).

Interestingly, most states are counting on the nonprofit sector to spearhead transition initiatives at the local level. The lead nonprofit actors of choice in many cases are independent living centers (ILCs). Presumably they have the contacts, experience, and infrastructure to transition persons with disabilities from nursing facilities to community-based settings, as well as the collaborative relationships to be successful in these efforts (Center for Medicare and Medicaid Services, 2003; Eiken, Stevenson, and Asciutto, 2002; Eiken, Stevenson, and Burwell, 2002). Yet early reports raise questions about the capacity of some ILCs to perform this leadership role. A major barrier to success in the Maine Home to the Community Project, for example, was that ILCs worked in isolation from nursing facilities and other key community actors (Saucier, Bolda, Richards, and Keith, 2001). Adversarial relationships between ILCs and local service providers have been cited as impediments to success in other transition projects (O'Day, 1999).

Given the potential impact of the *Olmstead* ruling on a large, vulnerable segment of the American population, considerable attention should be devoted to the assessment of nonprofit capacity to build organizational networks of collaboration for community-based living. These networks can increase local opportunities to communicate new information, mobilize and share scarce resources, reduce gaps or overlaps in service delivery, and empower vulnerable population groups in the process (Hays, Hays, DeVille, and Mulhall, 2000; Vicary and others, 1996). Hence, the lead nonprofit actor in statefunded transition projects must be able to bridge social gaps and mobilize cooperation among diverse stakeholders in the community. In other words, they must have the capacity to function as strategic bridging actors among community stakeholders whose "economic, political, and social differences can create chasms of misunderstanding, mistrust, and antagonism that hamper effective joint action" (Brown, 1992, p. 1).

To contribute to the discussion, we conducted an exploratory study of local organizational collaboration in the Texas Community Awareness and Relocation Services (CARS) Project, a core component of the state-promoting independence plan. This project was designed to assist persons with physical disabilities to move from nursing facilities to community-based settings. Given the complexity of the transition process, our research questions during this phase of the evaluation were threefold: (1) Did local networks of collaboration

change during implementation of the project? (2) Who were the key organizational actors in these networks? (3) Did local networks of collaboration influence relocation outcomes of the project?

# Texas Community Awareness and Relocation Services Project

The Texas Community Awareness and Relocation Services (CARS) Project was a one-year pilot initiative designed and implemented by the Texas Department of Human Services (DHS) during the state fiscal biennium of 2002–2004. State officials designed the project to increase community awareness of persons with disabilities at risk of nursing facility placement in five geographically diverse areas of the state. The chief goal of the project was to relocate eligible nursing facility residents in these areas to community-based settings. The five lead local nonprofit actors in the project were Accessible Communities, Inc. (ACi); Combridge, Inc.; Austin Resource Center for Independent Living (ARCIL); Crockett Resource Center for Independent Living, Inc. (CRCIL); and Houston Center for Independent Living (HCIL). (CRCIL and HCIL operated their local transition projects under a subcontract with ARCIL.)

During the first quarter of the CARS Project, we gathered baseline data from local administrators and staff, community agency representatives, and consumers through on-site interviews at each of the five sites (Poole and Duvall, 2002). Using operations audit procedures (Anthony and Young, 2002), we found considerable variation in the mission, budget, organizational structure, administration, staff, strategy, service delivery area, and community networking activities among the five lead nonprofit actors. As we note later in this article, these differences probably affected the strategic bridging potential of each local project.

#### Accessible Communities

ACi provided CARS Project services in the twelve-county Coastal Bend area of South Texas, including the urban hub, Corpus Christi. ACi's mission is to assist individuals and families with disabilities to live independently in the community through community development, advocacy, and resource development. The recently established independent living center at ACi played virtually no role in this local CARS Project. ACi provided administrative leadership and fiscal oversight of project, but colocated project services and staff at the Coastal Bend Council of Governments, where the Area Agency on Agency's (AAA) ombudsman and information and referral programs were housed, providing excellent opportunities for interagency collaboration in community outreach and relocation. The project coordinator (who was also the founder and director of ACi) had more than twenty years of experience in health care, rehabilitation, housing, and community-based programs, as well as a long track record of

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success in building and sustaining several areawide organizational collaborations in behalf of persons with disabilities. Upon notification of the state contract award, she immediately formed the Advisory Council for Community Awareness and Relocation Services, representing key stakeholders in the area: consumer groups, advocates, nursing facility administrators, and community-based service providers. She also hired a relocation specialist who had worked with DHS in the area for twenty years, thus bringing to the project her extensive knowledge of agency forms and procedures and community-based services, as well as close professional affiliations with DHS caseworkers and local service providers. The budget for the ACi project was \$134,491, with a goal of relocating forty nursing facility residents to community-based settings.

#### Combridge

The CARS Project served the rural county of Coryell (home of Fort Hood) and its contiguous urban neighbor, Bell County. The three principal partners in the project were Combridge, the Area Agency on Aging of Central Texas, and the Heart of Central Texas Independent Living Center. The historical mission of the lead provider, Combridge, is to serve as a communication bridge in building community capacity in behalf of persons with disabilities through local organizational collaborations across service sectors (public, private, nonprofit). CARS relocation services were provided by two licensed professionals: a nurse and a social worker. They were stationed at the Heart of Central Texas Independent Living Center, but supervised by the project coordinator in Combridge's adjacent facility. The social worker had considerable experience in long-term care at a nursing facility, and the nurse had worked in hospital discharge planning. The project coordinator (president and cofounder of Combridge) had years of experience negotiating health and human service systems in long-term care as a professional and a person with a significant physical disability. An experimental psychologist and registered nurse with a chronic disability, she strongly influenced the professional orientation of the project through validated assessment instruments and sophisticated protocols. The Area Agency on Agency served as fiscal agent of the project and allocated a part-time ombudsman to provide project outreach services to area nursing facilities. The total budget of the Combridge project was \$249,214, with a portion dedicated to

research development and project administration.

Austin Resource Center for Independent Living

ARCIL provided CARS services in the nine-county Austin–San Marcos metropolitan area. Incorporated in 1982, ARCIL defines itself as a consumer-driven, community-based, nonprofit corporation dedicated to the empowerment of persons with disabilities to achieve maximum independence and equal community access. The organization administers several programs, among them information and

CARS relocation services were provided by two licensed professionals: a nurse and a social worker. referral, peer counseling, independent living skills training, advocacy, transportation, employment assistance, and community education. It is also a major collaborator with state agencies in the Texas Independent Living Partnership, a project similar to CARS.

ARCIL administrators have more than forty years of combined experience in community services and joint collaboratives for persons with disabilities. The CARS project coordinator, who worked part time as a relocation specialist, had a bachelor's degree in mathematics, a teaching certificate in secondary education, twenty-five years of experience in business, and some volunteer service with ARCIL. She had a steep learning curve to overcome, especially during the early stages of the project because of her lack of knowledge and experience in the field of disabilities, not to mention long-term care. Other project staff were a full-time relocation specialist, who had twelve years of experience with DHS adult protective services, and a part-time assistant from private industry, who contributed clerical and computer skills. The project budget was \$149,667, with a portion for administrative and fiscal oversight of two project subcontractors (CRCIL and HCIL).

#### Crockett Resource Center for Independent Living

CRCIL, under a subcontract with ARCIL, provided project services in nine counties of East Texas. The mission of CRCIL, established in 1987, is to realize the full integration of and independence for persons with disabilities (no matter how significant their disabilities) and to gain full consumer control over services and supports necessary for living independently in the community. The organization achieves its mission through independent living training, resource development, and advocacy. The executive director of CRCIL and the supervisor of programs provided local administrative oversight of the CARS project. Both had considerable knowledge and experience in the provision of independent living services, though mainly with adults under the age of sixty-five. The only full-time direct service staff member of the project was the CARS relocation specialist. A registered nurse, she joined the project with nine years of experience in home health, including five years as a visiting nurse for community-based service providers. She was knowledgeable about DHS community-based services, operating procedures and forms, community-based caseworkers, disease management, and barriers to community living. Nevertheless, nursing facility administrators strongly resisted collaboration with this local CARS project, as did the AAA, which provided ombudsman services to senior adults with disabilities in their facilities. The CRCIL project site budget was \$77,071.

# Houston Center for Independent Living

HCIL, a subcontractor of ARCIL in the state project, was responsible for service delivery in Harris County and the City of Houston. The Center for Barrier Free Living (CBFL), which founded HCIL in 1980, was established to advocate for equal rights and opportunities

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Concept mapping revealed a high degree of complexity in the relocation process from nursing facility to community-based living in the five project sites.

for persons with disabilities. HCIL, its first consumer-controlled service project, provides services in a thirteen-county area, but limited the scope of the CARS Project to Harris County and the City of Houston. The mission of CBFL/HCIL is to promote the full inclusion, equal opportunity, and participation of persons with disabilities in every aspect of community life. Its mission is fulfilled primarily through advocacy, but also through information and referral, peer support, independent living skills training, and service coordination. The high advocacy orientation of CBFL/HCIL is partly reflected through its grassroots efforts over the past decade to help persons with disabilities leave nursing facilities, efforts that administrators of the organization described as adversarial. Two CFBL/HCIL administrators provided local administrative oversight of the local CARS Project: the executive director, a woman with a learning disability who grew up in a family deeply involved in the civil rights movement; and the director of programs, a person with a significant physical disability who had worked on and off for the organization since 1980. Most of their college course work had been in political science. Two full-time relocation specialists were employed by the CARS project. One, a mother of two children with developmental disabilities, had a good working knowledge of local services for children (but not adults) and job training as an advocate. The other relocation specialist had a significant physical disability (requiring use of a wheelchair), a master's degree in rehabilitation counseling, and policylevel experience with the Americans with Disabilities Act. Since neither relocation specialist had professional training or prior work experience in long-term care, they had a steep learning curve to overcome in this local CARS project. The total budget was \$123,772.

# Methodology

During the first phase of our evaluation (Poole, Duvall, and Wofford, 2006), concept mapping revealed a high degree of complexity in the relocation process from nursing facility to community-based living in the five project sites. By order of importance (from high to low), community stakeholders identified fourteen key components that a state project should have in place to transition persons with disabilities successfully to community-based living: Housing, Relocation Case Management, Assessment, Community-Based Services, State Policy and Funding, Transitional Assistance, Consumer-Centered Planning, Community Education and Advocacy, Caregiver Support, Administrative Procedures, Discharge Planning, Nursing Facility Collaboration, Independent Living Skills, and Personal Support.

Community stakeholders also identified the need for a high degree of organizational collaboration throughout all components of the relocation process, except Personal Support. The components needing the greatest amount for collaboration were Relocation Case Management, Assessment, Community-Based Services, Transitional

Assistance, Housing, Community Education and Advocacy, and State Policy and Funding (Poole, Duvall, and Wofford, 2003).

Having learned that considerable collaboration was needed to move a person with disabilities from nursing facilities to communitybased settings, we then used social network analysis (SNA) to examine local networks of collaboration before and after implementing the CARS Project. Unlike traditional research methodologies that focus on attributes and behaviors of individual actors, SNA analyzes networks of relationships among social entities (Knoke and Kuklinski, 1982). Social network analysts quantify relational properties of networks through statistical measures such as density, degree, and betweenness (Wasserman and Faust, 1994). These properties can affect flow of information and resources among family, friends, and other natural helpers who surround an individual, as well as among formal service providers in the community (Faber and Wallerstein, 2002; Israel, 1985; Levy and Pescosolido, 2002; Morrissey and others, 1994). Our SNA study focused specifically on informational contact between local service providers, whom we refer to here as organizational actors, before and during implementation of the CARS Project.

With consultation from local CARS coordinators and staff, we developed a list of organizational actors that typically have a role to play in the delivery of services to persons with disabilities, before and after their transition from nursing facilities to community-based living. Following are the names and abbreviations of the final list of the twenty-one organizational actors represented in the SNA study. All but those marked with an asterisk are nonprofits:

- Area Agency on Agency (AAA)
- Assistive technologies provider (ATP)\*
- Community Awareness and Relocation Services Project (CARS)
- Community resource coordination groups (CRCG)
- Department of Human Services (DHS)\*
- Disabilities advocacy organization (DISDADV)
- Durable medical equipment provider (DME)\*
- Food Stamp Office (FOODST)\*
- HELP Center (HELP)
- Home health care provider (HHEALTH)\*
- Hospital/medical provider (MED)\*
- Hospice (HOSPICE)
- Housing authority (HOUSAU)
- Independent living center (ILC)
- Long-term-care advocacy organization (LTCADV)
- Texas Department of Mental Health/Mental Retardation (MHMR)\*
- Nursing facilities (NF)\*
- Texas Commission for the Blind (TCB)\*
- Texas Rehabilitation Commission (TRC)\*
- Thrift shop (THRIFT)
- Transportation (TRAN)\*

Response rates varied among the five project sites . . . which left holes in some local SNA data sets more than others.

Next, we asked local project coordinators and staff to identify individuals they thought would be in a position to represent each organizational actor in the SNA study. The list of actors identified as potential participants consisted of 107 representatives. Seventy-six completed usable social network questionnaires, resulting in an overall response rate of 71 percent. Response rates varied among the five project sites—ACi (89 percent), Combridge (89 percent), HCIL (82 percent), ARCIL (65 percent), and CRCIL (42 percent)—which left holes in some local SNA data sets more than others. To deal with the problem, we analyzed the data as undirected, symmetrical data, making no distinction between senders and receivers of information. We assumed that if one organizational actor in a local network reported informational contact with another organizational actor (absent in the study), informational contact had been confirmed, thus requiring fewer actor participants to fill the data sets.

The SNA survey instrument consisted of two sections. The first asked respondents to provide background information on the organization they represented in the study. The second section asked them to identify whether they had informational contact with other organizations in the local network before implementation of the CARS Project (June 2002) and nine months later when the survey instrument was distributed to them (February 2003).

Since we could not administer the questionnaire prior to project start-up, we asked survey respondents to think back to organizational relationships that existed at that time. In an effort to reduce problems normally associated with recall, we encouraged them to review records or consult with other staff in their organization before completing the survey.

Finally, we entered the SNA survey response data into UCINET for Windows, a software program developed specifically for social network analysis (Borgatti, Everett, and Freeman, 2002). UCINET requires squared data matrices, with an equal number of rows and columns for each matrix. When more than one respondent represented the same organization, scores from the respondent with the highest ratings on the variable were entered to maintain consistency in the structure of the data matrices between the five project sites. We used NETDRAW, a program embedded in UCINET, to display the SNA data graphically.

# **Findings**

The study findings are presented in the tables and figures that follow. The graphs, generated by NETDRAW, provide visual representation of network data reported in the tables. Each node in a graph represents an individual organizational actor in a local network. Beside each node is an abbreviation for that actor. A line between nodes indicates the presence of an informational contact tie between two actors in the network. Arrows at the ends of each line indicate that informational contact had been experienced by both actors even if only one actor reported such contact.

#### **Network Density**

Density is a measure of network cohesion. The average is calculated by the total number of contact ties between pairs of organizational actors in the network divided by the total number of possible ties. Average density scores range from 0 (no cohesion) to 1 (complete cohesion): the higher the score, the greater the degree of cohesiveness or connectedness in the network. Network connectedness is important in transition projects such as CARS that require a great deal of interorganizational collaboration. It can affect how quickly and efficiently information flows between organizations and how easily people gain access to information about services and other resources (Wasserman and Faust, 1994).

Table 1 presents average contact density scores for each of the five local networks before and after implementation of the CARS Project. Before the project, average contact density scores were similar across four of the five project site networks. The exception was ARCIL, where 51 percent of all possible ties in the network was present, reflecting a greater degree of cohesiveness or connectedness between local organizational actors than the other project site networks. Nine months after implementation of the project, average density scores increased in the project site networks of ACi, Combridge, and ARCIL. The largest proportional increase in network density was achieved by ACi. Average density scores remained virtually unchanged in the local project networks of CRCIL and HCIL. Thus, local network connectedness increased in three of the five local site networks during implementation of the CARS Project.

# **Network Degree Centrality**

Degree centrality is a measure of network activity. The score is calculated as the percentage of organizational actors directly connected to other members of the local project site network. Scores above 60 percent indicate a substantial amount of network activity concentrated in a small number of actors, and scores below 40 percent indicate a substantial amount of fragmentation in network activity. Highly centralized networks can weaken the capacity of local communities to distribute information beyond a small core of well-positioned actors.

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Table 1. Average Contact Density Scores Between Local Organizational Actors Before and After Implementation of the CARS Project

	ACi Project Site Network	0 ,	ARCIL Project Site Network	,	HCIL Project Site Network
Before Implementation	.40	.43	.51	.38	.39
After Implementation	.61	.53	.61	.36	.40

before and Arter implementation of the CAKS Project								
	ACi Project	Combridge Project	ARCIL Project	CRCIL Project	HCIL Project			
	Site Network	Site Network	Site Network	Site Network	Site Network			
Before Implementation	44.74%	57.63%	48.68%	57.89%	34.21%			
After Implementation	57.11	51.05	43.16	65.00	39.21			

Table 2. Network Degree Centrality Contact Scores Between Local Organizational Actors
Before and After Implementation of the CARS Project

Information . . . probably flowed more quickly between organizational actors in the ACi's balanced network than in CRCIL's highly centralized one.

Highly fragmented networks can also weaken community capacity by not having an adequate core of actors to coordinate flow of information to peripheral members of the network (Borgatti and Everett, 1999).

Table 2 presents degree centrality contact scores for each of the five local networks before and after implementation of the CARS Project. Before the CARS Project, degree centrality contact scores were fairly similar in four of the five networks. The major difference was HCIL's degree centrality score, which indicated a higher degree of fragmentation in local network activity than elsewhere. Degree centrality scores at the other four project sites indicate a greater degree of balance between centralized and decentralized network activity. Nine months after implementation of the project, ACi network activity became more centralized, and Combridge and ARCIL network activities became less centralized. Nevertheless, network activity remained fairly well distributed among core and periphery actors in these three networks. Apparently the CARS project helped these three sites strike a core-periphery balance to control flow of information among the organizational actors in these sites. The CRCIL network, in contrast, became the most highly centralized network, and HCIL remained the most highly decentralized one (despite a modest shift toward centralization).

Figures 1 and 2 visually illustrate the difference in network degree centrality between, respectively, ACi (a balanced network of core and periphery actors) and CRCIL (an unbalanced one characterized by a high degree of centralization). Note that there are more large nodes (core actors) in the ACi network than in the CRCIL network and more small nodes (periphery actors) in the CRCIL network than ACi's. Information about CARS Project services probably flowed more quickly between organizational actors in the ACi's balanced network than in CRCIL's highly centralized one.

### **Actor Betweenness Centrality**

Actor betweenness centrality measures the position of organizational actors in each local project site network. It refers to the number of times an actor falls on paths between pairs of other organizational actors in the network. Actors with high betweenness centrality scores are in a good position to function as gatekeepers or brokers of information, develop and mediate collaborative relations between actors

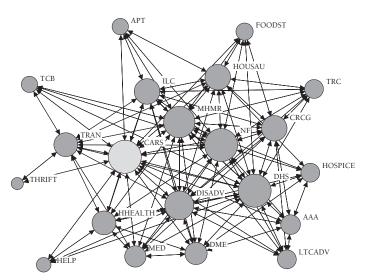
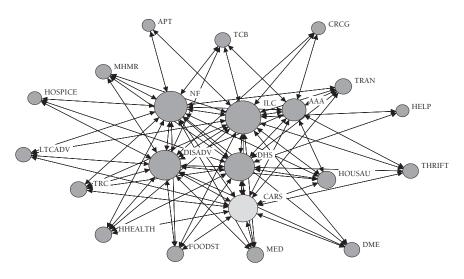


Figure 1. Degree Centrality of ACi Local Site Network Nine Months After Implementation of the CARS Project

Figure 2. Degree Centrality of CRCIL Local Site Network Nine Months
After Implementation of the CARS Project



in a network, and manage the flow of information to people in need of services (Wasserman and Faust, 1994). Since the capacity of a community to move persons with physical disabilities from nursing facilities to noninstitutional settings depends greatly on interorganizational collaboration, it is important to know who the key betweenness actors or players were in the local project site networks and whether CARS was one of them.

				, ,					
ACi Projec	ct Site	Combridge Project	Site	ARCIL Projec	ct Site	CRCIL Proje	ct Site	HCIL Project	Site
CARS	28	CARS	20	MHMR	16	ILC	45	AAA	38
DHS	16	CRCG	17	CARS	13	NF	28	DHS	26
NF	15	AAA	14	HOUSAU	13	DISADV	23	MHMR	17
MHMR	13	DHS	14	NF	12	DHS	21	HHEALTH	14
DISADV	8	ILC	10	AAA	8	CARS	12	TRAN	13
TRAN	7	HOUSAU	9	DISADV	6	AAA	6	ILC	11
HOUSAU	4	HHEALTH	3	ILC	5		0	DISADV	11

Table 3. Actor Betweenness Centrality Contact Scores After Implementation of the CARS Project by Project Network Site

Table 3 presents actor betweenness centrality contact scores nine months after implementation of the CARS Project. The top eight key actors across most of the five sites were CARS, DHS, NF, AAA, MHMR, DISADV, ILC, and HOUSAU. The CARS Project was the key actor in the local networks of ACi and Combridge. It was also a key actor in the network of the ARCIL project, though with much lower betweenness scores than ACi and Combridge. However, CARS ranked a distant fifth in the CRCIL network and was not a key actor at all in the local network of the HCIL project.

Figures 3 to 7 provide visual representations of actor betweenness centrality scores for each of the five project site networks: the higher the betweenness centrality score of an actor, the larger the node. Note that CARS is a large node in the project site networks of ACi, Combridge, and ARCIL, but a small node in the project site networks of CRCIL and HCIL. Thus, CARS became a key actor—a gatekeeper or broker of information—between organizational actors in three of the five project site networks.

TCB HOUSAU TRC

TRANS

THRIFT

DISADV

HHEALTH

MED

DME

LTCADV

Figure 3. Actor Betweenness Centrality Contact Scores in the ACi Network

TRC

HHEALTH

APT

HOUSAU

CARS

AAA

FOODST

CRCG

DISADV

HELP

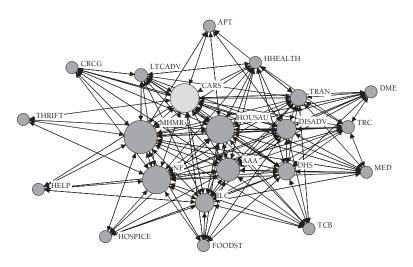
DHS

HOSPICE

MED

Figure 4. Actor Betweenness Centrality Contact Scores in the Combridge Network

Figure 5. Actor Betweenness Centrality Contact Scores in the ARCIL Network



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# Study Summary

The SNA study revealed differences in the network characteristics of the five local project sites. The networks of ACi, Combridge, and ARCIL became more cohesive or connected during implementation of the CARS project, while those of CRCIL and HCIL remained virtually unchanged. The project site network of CRCIL also became more highly centralized, while HCIL's remained the most decentralized (fragmented) network. The other three project site networks demonstrated greater balance between centralization and decentralization, though ARCIL's became slightly less balanced than it had

HOSPICE

NE

LTCADV

DISADV

DHA

THRIFT

CARS

HOUSAU

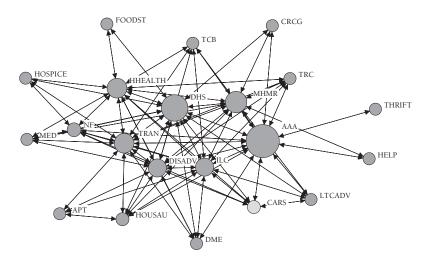
THRIFT

DME

DME

Figure 6. Actor Betweenness Centrality Contact Scores in the CRCIL Network

Figure 7. Actor Betweenness Centrality Contact Scores in the HCIL Network



been. During implementation, CARS became a key actor in the project site networks of ACi and Combridge and, to a lesser extent, ARCIL's. CARS did not become a key actor in the HCIL network and had become only a distant actor in CRCIL's. Information about CARS probably flowed more easily and quickly in the project site networks of ACi, Combridge, and ARCIL than those of CRCIL and HCIL.

#### Discussion

Regarding limitations of the study, some local networks had more survey participants than others, creating uncertainty about how well we filled some of the holes in the local SNA data sets. SNA survey participants also had to rely on memory to recall changes in the amount of informational contact they had with organizational actors before and after implementation of the local CARS project. In addition, the small sample population of the study (five local networks) prevented us from computing statistical associations between local networks of collaboration and local project performance or controlling for background variables such as budget size. Response rates in each network were low for social network analysis, especially for ARCIL and CIRCL. Finally, symmetry of informational contact between organizational actors could not be verified.

Based on local activity data reported to the evaluation team in the larger study (Poole and Duvall, 2002), we know that local project staff provided relocation services (completed relocation applications, located community-based housing, calculated client personal budgets, contacted potential support systems, and so on) to 236 nursing facility residents in the five pilot test sites. The highest percentage of relocation assistance was reported by HCIL (30 percent), followed by ACi (25 percent), ARCIL (22 percent), Combridge (15 percent), and CRCIL (8 percent). We also know that 97 of the individuals who received relocation assistance moved to a community-based setting. ACi relocated the highest number (47), followed by Combridge (21) and ARCIL (16). The two project sites with the smallest number of relocations were CRCIL (8) and Houston (5). Interestingly, the local project that provided the most assistance, HCIL, achieved the fewest number of relocations.

Budget size apparently does not account for differences in relocation outcomes. Rather, what is important are the local networks of collaboration. Both the most successful local project site (ACi) and the least successful one (HCIL) operated on virtually the same level of funding—one without a close affiliation with an independent living center and the other with one.

ACi was the only lead nonprofit contractor that developed and used a strategic bridging structure—the Advisory Council for Community Awareness and Relocation Services—throughout all phases of project implementation. The project coordinator, who had used similar structures in the past, obviously understood their strategic bridging value in complex local service initiatives involving multiple and diverse community partners (Brown, 1992; Poole, 1997; Poole, Ferguson, DiNitto, and Schwab, 2002; Waddell and Brown, 1997). She also understood the need to build cooperative, interagency linkages through outposting (Hookey, 1982), that is, through the colocation of project staff at AAA, one of the key local players in the service delivery system for adults over age sixty-five. AAA had long-term

area and ready access to up-to-date information on resources to facilitate transition to community-based living. Then, too, the project coordinator understood the need to hire a highly competent professional as the lead relocation specialist, who had worked at DHS for many years in community-based services for persons with disabilities. Professionalism is often identified as a key predictor of success in service innovations such as CARS that require coordination of complex information (Gopalakrishnan, Bierly, and Kessler, 1999; Poole, Ferguson, and Schwab, 2005; Swanson, 1994). Thus, it is no surprise that the CARS project at ACi scored highest in actor betweenness scores among the five project sites and the largest increase in network connectedness to transition people from nursing facilities to community-based care.

HCIL, in contrast, had none of these strategic bridging elements in place. Its long history of adversarial relationships with lead pure

collaborative relationships with many area nursing facilities in the

In many
instances, the
lead nonprofit
provider of choice
may not be an
independent
living center.

in place. Its long history of adversarial relationships with local nursing facilities and many local service providers probably exacerbated this structural weakness. The CARS project at HCIL provided relocation assistance to many nursing facility residents, but did not have the connections or collaborative relationships with other key actors to get them out of a nursing facility. The high advocacy orientation of the host organization undoubtedly performed a valuable function in the community, particularly with regard to the promotion of civil rights, but may not have fit well with the high collaborative needs of the CARS project. Collaborative relationships between ILCs, AAA, nursing facilities, and other key local actors have been cited as predictors of success in other transition projects (Eiken, Stevenson, and Asciutto, 2002; Eiken, Stevenson, and Burwell, 2002). Adversarial relationships have been associated with isolation, antagonism, and other impediments to success (O'Day, 1999, Saucier, Bolda, Richards, and Keith, 2001). Such relationships may explain why the local organizational network at the HCIL project site was highly disconnected and fragmented, with the lowest actor betweenness scores of the five sites. CARS never became a key actor or player in the local network to transition persons with disabilities from nursing facilities to community-based care—hence, the low number of relocations.

#### Conclusion

States are developing and implementing service initiatives to transition qualified persons with disabilities from nursing facilities to community-based care. Many are counting on the nonprofit sector, particularly independent living centers, to spearhead innovations at the local level. The exploratory study reported here on the CARS Project raises questions about the capacity of some nonprofits to perform this critical leadership role, especially in the capacity to build networks of collaboration among many local organizational actors to help nursing facility residents negotiate the complex process of moving to

community-based settings. SNA network analysis uncovered considerable variation in the network characteristics of the lead non-profit providers before and after implementation of the project in five test sites of the state. These characteristics probably affected the collaborative capacity of each project site, and ultimately its relocation outcomes.

Future state transition initiatives should give added weight in the selection process to lead nonprofit contractors with a proven track record in building and sustaining organizational collaborations. A well-articulated process for prequalification of lead providers who are expected to build networks of collaboration for community-based living should be standardized and put in place. State officials should also scrutinize the collaborative potential of its administrative and professional staff and whether their historical relationships with community stakeholders have been adversarial or collaborative. In many instances, the lead nonprofit provider of choice may not be an independent living center.

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