Queensland University of Technology

**REDUCING SENIORS SOCIAL ISOLATION PROJECT
NETWORK ANALYSIS REPORT**

**SENIORS INQUIRY LINE, BCC & CULTURALLY APPROPRIATE
VOLUNTEER SERVICE
OBSERVATION REPORT
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Project Team

Dr Robyn Keast
Organisational Diagnostics
School of Management
Queensland University of Technology
GPO BOX 2434
Brisbane Q 4001
Email: rl.keast@qut.edu.au

Professor Kerry Brown
Organisational
Director of Research
Faculty of Business
Queensland University of Technology
GPO BOX 2434
Brisbane Q 4001
Email: ka.brown@qut.edu.au

Sam MacAulay
Organisational Diagnostics (Network Analysis)
School of Management
Queensland University of Technology
GPO BOX 2434
Brisbane Q 4001
Email: s.macaulay@qut.edu.au

Background

The growing social and financial cost of elders' social isolation is an escalating concern for governments at all levels. A key strategy to reduce isolation is the integration of a range of stakeholders to pool resources, knowledge and expertise in order to improve policy development and service delivery outcomes. While collaborative initiatives and cross-sector working models have considerable currency in the public policy arena they are relatively new and untested models of working. A comprehensive process of evaluation is required to provide the validation necessary for continued and informed pursuit of the agenda for cross government collaborative action.

The Cross Government Project to Reduce Social Isolation of Older People is an example of one such a collaborative initiative. This project relies on a cross-government and sectoral committee to guide and oversee a suite of trial projects aimed at reducing the social isolation of senior citizens through more integrated and innovative service models. While this multiplex project comprises stakeholders from many sectors and levels of government in direction setting, the Department of Communities has Lead Agency responsibility for developing and administering the overall evaluation of this project.

Two of the projects funded to address the social isolation of seniors, the Brisbane City Council 'Linking Seniors' and the Culturally Appropriate Volunteers Service, differ from the mainstream project model in that they operate on a network approach. Such a model emphasises the importance of organisations working together, forming partnerships and networks and therefore focuses on establishing improved connections/relations between service providers as a way to increasing seniors' access to services and social connections. Indeed, networked arrangements have become an important mechanism for building the capacity to recognise complex health and social problems, systematically planning for how such problems might best be addressed, and delivering needed services (Provan et al, 2005).

Conventional evaluation methods, which focus on the individual characteristics of individual or organisations, fail to identify the nature and complexity of the connections/relationships that exist between network actors (Knoke and Kukiniski, 1982; Scott, 2000). Moreover, such count and measure approaches are unable to capture the dynamics of network formation and evolution (Scott, 2000; Watts, 2003).

Further, it is widely argued that by uncovering previously unverifiable relationships occurring within a network, network analysis can assist community leaders and the networks themselves in building and sustaining optimal local service and support networks (Milward and Provan, 1998; Provan et al, 2005).

Network Analysis

Network analysis is an empirical tool that can be used to measure, map and analyse social structure on the basis of the multiplex relationships between people, agencies and communities (Wellman, 1983; Kenis and Scheneider, 1991). A mathematical underpinning enables network analysis to produce data that accurately measure and map/visualise the nature of the transactions or relationships between actors. As such it provides a robust body of evidence, grounded in rigorous analytical methods and processes that brings forward and uncovers information previously based on intuition or assumption. The project aimed to develop an evaluation model that maps, measures and assesses connections or linkages created by the two specifically network orientated projects – Brisbane City Council (BBC) 'Linking Seniors' and

Culturally Appropriate Volunteer Service (CAVs). The application of a network approach in the evaluation process will provide insights into the linkages and connections between agencies and the overall structure of the networks. In doing so, a benchmark determine the impact of current structures, strategies and systems is established.

Privacy of Respondents

Network maps and metrics provide strong visual images of the connections and disconnections within a system. Therefore, careful consideration should be given to the display of names within network maps to respect respondents' rights and adhere to ethical standards. This evaluation report has been modified to protect the confidentiality of participants. De-identified names have been used for organisations who have been identified by others but who have themselves not agreed to participate. Given that network analysis has often been applied to uncover broad patterns and structures, such anonymous results often spark more useful dialogue.

Methodology and Administration

In order to obtain network relational and operating data, a purpose built instrument *The Network Linkage Survey* was developed. Departmental personnel and Seniors' Committee members as well as perhaps most importantly personnel from each of the two network projects informed the content, structuring and language of this instrument. The Linkage Survey comprised a set of questions around five variables (shared information, shared resources, joint planning and programming, referrals and participation in seniors' events) identified from the literature and discussions as being important indicators of network connection and operation. Additionally, a set of four questions was included to obtain further insights into the operation of the network and its perceived impact.

Early in the evaluation design phase a decision was reached that; in view of a number of project specific considerations (e.g. cultural and language sensitively) the Network Linkage instrument would be administered by the individual network coordinators. A further benefit of this approach was the increased potential for a higher response rate.

Mapping and Measuring Linkages

Data generated from the Linkage Survey and questionnaires was processed, Different software and analytical orientations provide for different insights and emphasis. In this instance, UCINET was used as the principal data analysis mechanism while Mage and Pajex provided alternative visualisation options.

Measures

Network analysis can be undertaken at a number of levels of operation (including whole of community, network and organisation and individual) (Provan and Milward, 2001), for the purpose of this evaluation the agreed level of analysis and therefore the focus of the study was the network. That is, the set of organisations working together to provide the basis for the service to seniors. Adopting the network as the level of analysis was underpinned by (a) the limited capacity to focus on impact of the projects on seniors (i.e. the stage of development of projects, access to seniors and ethical considerations) and (b) the assumption that since the network provided the basis for the operation it was instructive to examine its operation and capacity to deliver the project. In view of this the most relevant network measures for understanding network operation and effectiveness include:

Measures of Structure Density – measures the number of connections compared to the total number of possible connections. The density measure ranges from 0 to 1. The higher the density ratio the higher the level of cohesion within the network is argued to be. Cohesion is an important indicator of collective action towards achieving outcomes. However, excessive density can perturb creativity and innovation and comes at a higher cost than fragmentation. Thus, the level of diversity must be requisite to the network's goals.

Centrality – degree to which network activity is centred on one or a few actors (the core) providing insights on where influence and power may be concentrated, blockages and patterns of flow. A node/actor is central when it has a higher number of ties with other nodes/actors.

- Betweenness - measures the extent to which a particular node/actor lies 'between' the various other nodes/actors. A node with few ties may play an important intermediary role within a network. The 'betweenness' measure provides an indication of the brokerage capacity that a 'poorly' but 'strategically' connected node can have in a network.

- Burt (1992) has defined this concept as a structural hole – that is, a tie that bridges two otherwise unconnected networks (or network components). Unbridged holes can act as impediments to information diffusion and thus bridging these holes can act as a crucial source of improved performance.

Centralisation – provides a measure of the degree to which a whole network has a centralised structure. Whereas density describes the general level of connectedness in a network, centralisation describes the extent to which this connectedness is organised around particular nodes or a 'cluster of actors'. This can also provide an indication of the level of 'hierarchy' in a network.

Assessment of Performance

A network's performance can be assessed from a combination of (1) its robustness to the removal of ties, (2) its efficiency in terms of the distance (path) to traverse from one node to another, (3) information benefits allocated to central nodes. These performance aspects will be coupled with visualising techniques and basic qualitative network statistics to provide an interim report guiding further analysis and evaluation of the projects.

Brisbane City Council 'Linking Seniors'

Background and Purpose

The purpose of this project was to develop a strategy that identifies and reduces the social isolation of older people. As a result of the project the following results are expected:

- reduced social isolation of identified older people;

- increased knowledge and skills of community stakeholders and gatekeepers in identifying and responding to isolated older people; and

- consolidation of local networks and strategies developed to ensure the most effective use of resources.

Development Strategy and Operating Method

This project was established to develop a whole-of-community response to meeting the needs of socially isolated older people by building on the capacity of the Brisbane north networks. This project aimed to work with existing stakeholders to strengthen partnerships and develop more efficient pathways for identifying, connecting and assisting socially isolated individuals. In this way, the project concentrates on strategies that enhance the ability of the networks and gatekeepers to foster natural social networks rather than direct service delivery.

In view of these objectives the network analysis aspect of the evaluation was directed at:

1. providing a picture or map of the total set of relationships occurring between actors (organisations) related to the project – based on aggregate network relational data;

2. unpacking the total network map to provide a set of individual network maps related to each of the five variables identified (information sharing, resource sharing, joint planning and projects, referrals and involvement in seniors' events);

3. using a range of visualisation and analytical processes to provide additional insights into the structural properties of the service network, locational attributes of key actors and an indication of performance.

Network Map 1: All Existing Relations Between Members, No Scaling, with Pendants:

This network map provides a 'raw' visual image of the aggregate or total set of relationship variables (information sharing, shared resources, joint planning and programming, referrals and participation in seniors' Events) existing between the network actors at the time of data collection (April, 2006). This map includes pendant actors. That is, actors/nodes that are connected to the graph by only one tie; cases like these will "dangle" off of more central cases that are more heavily connected.

While this map has not been scaled to provide a more accurate indication of the structure of the network connections, it nevertheless provides a useful starting point to the analysis.

As a starting point Map 1 provides a complete picture or account of all actors or organisations identified as linked in some way to the project. This information can be used to determine the suitability of the range of services in terms of the project goals/objectives. Subsequent considerations would focus on expanding or limiting the spread or diversity, or would centre on the expansion or reduction of members or alternatively revising the existing level of connection to the more peripheral actors.

The map also demonstrates that there is a core set of organisations clustering at the centre of the network map with three sets of 'pendants' emerging from core nodes. Displaying pendants and isolates provides a useful insight into the relational dynamics of the network. In particular it highlights the core and peripheral node, that is, those that are perceived to be less connected and less involved in the project. In doing so, this map provides network members and administrators (evaluators) with important diagnostic information regarding the apparent strength of relationships and the composition of the network. Such information can be used to strategically inform the re-structuring or composition of the network and direct efforts to relationship/connection building tasks or, if relevant, membership deactivation.

Given that one of the objectives of the project to link together existing service actors, the overall composition and structure of the network provides some evidence of success, particularly with respect to the more established and service oriented organisations.

Involvement in Seniors Events

Map 18: Joint Involvement in Seniors Events, No Scaling, with Pendants:

The contribution of this map is that it provides a full picture of the suite of organisations involved in seniors' events and the linkages or relationships between these agencies. This provides decision makers and network participants with some initial insights with which to inform service delivery processes or to coordinate such services.

Network Operation Data

In addition to the Linkage Survey, network members were also asked to complete a set of four questions designed to obtain more insights into the operation of the network (i.e. what keeps members together), the networks impact on their organisation and impact on broader community, and finally the limitations to working in a network model. For each question network actors were provided with a set of responses and requested to reply using a five point scale in which 1 = least accurate and 5 = most accurate.

Network Processes

Network Process Measures	Mean (n=9)
Members of this network have shared values	4
Members of this network have a commitment to similar goals	4.3
Rules & procedures guide network action	3.4
There is reciprocity between network members	4
There is a high level of trust between network members	4

The network members are linked by contractual relationships	2
Network members have mutual understanding and empathy	4
There are strong social relationships between network members	3.5
There is a government mandate/requirement to network	3
The network operates using traditional directive processes	2
Network members have strong & frequent communication	3.7
Others	-

Impact of Network on Organisation

Organisation Impact Measures	Mean (n=9)
Ability to serve my clients better	3.8
Acquisition of additional funding or resources	2
Acquisition of new knowledge or skills	3.75
Better use of my organisation's resources	3.5
Building new relationships helpful to my organisation	4.3
Heightened public profile for my organisation	3.8
More seamless service delivery	3
Savings on programs	2
Improved referrals for my clients	3
Other	

Overall Impact of Network on Community

Overall Network Impact Measures	Mean (n=9)
Greater capacity to service the community	3.5
Reduced duplication/overlap in the service system	3
Reduced confusion: re service system	3
Greater ability to address complex problems effectively	3.2
Better informed decision making	3.7
More information/advice regarding available services	4.4
Ability to work together to achieve project outcomes/or service	4.2
Improved referral process for service system	3.7
Improved integration of service system	3

Greater ability to improve community capacity	3.75
Other	-

Limitations of Network Approach

Limitation Measures	Mean (n=9)
Takes too much time	2.3
Takes too many resources	2
Loss of control/autonomy	2
Can be a delay before results are seen	2.8
Strained relations in my organisation	1.8
Difficultly in dealing with partners	2
Hard to know what is going on	1.8
Accountability (e.g. a lack of control within the network)	2
A lack of recognition of contributions	2
Complexity of structures	2.5
Other draw backs	-

Summary and Preliminary Insights

The use of network analysis has afforded some new and interesting insights into the nature of the relationships/connections within the model of operation for the project. To summarise it has displayed that there is a network model operating and that this is providing the foundation for a more integrated and linked set of services. It can be assumed that in establishing this foundation the network will have an increased capacity to link seniors to required services, thus increasing their level of connection to the broader service and support community. There is some evidence of fragmentation within the network that could be a focus for additional work.

Overall the measures for the full set of variables have shown that the network is not densely connected, that is not tightly connected. Depending on the network's goals and objectives this may present as an area of future work in terms of strategic relationship building. However, it is important to note that a high level of density, while useful for cohesion around core goals is not always relevant for a network aimed at enhanced linkages. The results also show that although having a set of core or central actors (dominant across most variables) the network is not highly centralised, i.e. not hierarchical in its structure, reinforcing the network property variables discussed later. Moreover, it demonstrates that the Seniors' Inquiry Line, while not included in the 'big three' central actors, nonetheless is an important node linking other actors to a range of variables. Thus there is some evidence to suggest Supplementary data drawn from the questionnaires provides some preliminary support for the initial interpretation of the network maps, especially in terms of the strong perception of a network operating model, the emphasis on the better use of existing resources, improved referrals and relations between agencies. Specifically, for the network processes, four of the possible eleven responses (shared values, common purpose, reciprocity, trust and understanding and empathy) secured a mean rating of four, this coupled with the high responses for strong personal relationships

and communication; suggest that network governance processes underpin the network's operation. Such a high interpersonal level may in part be explained by the relatively long history of operation of some of these organisations and their ongoing service delivery connections and interpersonal interactions over this time. With respect to the impact of the network on 'own' organisations it would seem that members considered the network to have contributed in two particular areas (a) organisation enhancement including the ability to make new relationships (4.3), heightened public profile (3.8) and the acquisition of new knowledge or skills, and (b) in terms of service delivery such as improved ability to service clients (3.8) and better use of own organisations resources (3.5). The network's impact on the community seems to have had most purchase in terms of securing more information (4.4) and providing a foundation or basis from which organisations can work together within the community (4.2). However, it is apparent from the responses that the network members see a wide range of benefits going to the community by working in a network approach. Overall respondents did not consider the network approach to have excessive drawbacks with seven of the ten possible answers securing a mean of 2 and less. For the remaining three the responses were – takes too much time (2.3) delay in results (2.8) and complexity of structures (2.5).

CAVS Seniors Isolation Collaboration Network: Interagency Network Model

The aim of the Culturally Appropriate Volunteers Project is to provide culturally appropriate social support services to socially isolated people from culturally and linguistically diverse (CALD) backgrounds, utilising volunteers. CAVs started as an innovative collaboration between a Blue Care service and a multicultural and volunteer nursing service with the intention of developing a collaborative interagency approach to volunteer services. Since the purpose of this network centred on the establishment of an operating network to develop a service, the focus of the network analysis has been directed at the network itself. In doing so, the analysis has embedded the data relating to the network coordinator within the main organisation.

Map 21: All Existing Relations Between Members, No Scaling, with Pendants:

This map provides an overall impression of the number of organisations noted as being connected to this project. It also indicates that there is a set of set actor organisations that are more closely linked and that three pendant organisations 'hang' from a multicultural and volunteer nursing service. This establishes that particular service as a key player and potential broker to external or peripheral network linkages and resources.

Map22 : All Relationships Represented with Node Repulsion, Excluding Pendants, and Scaling Node Size for Betweeness Centrality

With the removal of pendants the relative betweeness measure is adjusted and instead of one broker actor, a number of actor organisations come into play as important hubs within the network.

Map 23: All Relations with Pendants Represented with Node Repulsion, Scaled for Betweeness Centrality

Again this map provides a different perspective of the total network. Importantly it (and the previous others) highlights the differences of network measures when pendants are included and not included.

Quantitative Measures	
Measure	Statistic
Density - With Pendants	0.8269
Centralisation – With Pendants	26.26%
Average Path Distance – With Pendants	1.449

Overall this set of maps and analyses indicates that the CAVs network has made ground in terms of its level of connection and that, although there are some key actors, the network is not highly centralised around these. The average path distance of 1.4 suggests that there is a level of efficiency in terms of traversing or navigating within the network. Given the history of the project and its ongoing efforts to form a network model of operation, it could be said that the project has made some good grounds in that direction. However, it is to be noted that the establishment of a network model is only part of the objective and as yet there has been limited progress in providing a volunteer service to seniors within this context.

Involvement in Seniors Events

Map 38: Joint Involvement in Seniors Events, with Pendants, Nodes Scaled for Betweeness Centrality:

This result indicates that involvement in seniors' events is not a high function of many of the project organisations. The map presents a very sparsely interconnected pattern of operation with key players apparently representative of service delivery organisations and funding bodies. The figure displays a set of three core organisations with three pendants and three isolates.

Map 39: Joint Involvement in Seniors Events, Node Repulsion Used, with Deletion of Pendants, Nodes Scaled for Betweenness Centrality:

Continuing from previous map, the next map highlights the centrality of the big three players in terms of their involvement in seniors' events. As has been mentioned previously, this is likely to be explained at least in part by their more focused service delivery role and greater level of client contact.

With a density score of 0.16 it can be said that the network exhibits a low overall level connectedness with respect to involvement in seniors' events. However, the map and shows that there are three key or central organisations involved in seniors' events.

Given the nature of the organisations, that is, their service delivery orientation and therefore strong client focus, this result is perhaps to be expected. This result is supported by the centralisation measure (including pendents), which at 42% suggests a mid level of centralisation or hierarchy of involvement. The average path distance of 1.7 is probably best explained by the smaller number of actors involved in this activity.

Quantitative Measures	
Measure	Statistic
Density - With Pendants	0.1667
Centralisation – With Pendants	42.86%
Average Path Distance – With Pendants	1.733

Summary and Preliminary Observations

This network analysis process of the patterns of relations or connections within the CAVs network has provided some valuable insights and information on its actual perceived operation and structure. Overall the network can be described as fairly sparse consistently achieving a lower density measure (apart from the information sharing variable which secured a density rating of 0.8). However, there was some evidence of centralisation, which suggests that there is a core set of organisations providing some coherency around tasks and action. Importantly, this core appears to be working to provide some redundancy to lessen the expected over-reliance of the network on the coordinator as the centralising element. This redundancy reduces the vulnerability of the network. The maps have also highlighted the existence of both pendants and isolates, i.e. organisations that have limited connection to others within the network. In general, the path distance required to navigate the network and secure resources increases in accord with the additional commitment for the variable. For example, information sharing had an average path distance of 1.449 whereas shared resources 1.949, shared programming and planning 2, referrals 1.758 and participation in seniors' events was

1.733. This means that it was easier (or less steps/people to go through) to secure information than other service aspects.

Additional Network Operating Data

As with the previous project, in addition to the Linkage Survey, network members were also asked to complete a set of four questions designed to obtain more insights into the operation of the network (i.e. what keeps members together), the networks impact on their organisation and impact on broader community, and finally the limitations to working in a network model.

Network Operation Data

Network Processes

Measures	Mean (n=8)
Members of this network have shared values	3.875
Members of this network have a commitment to similar goals	3.875
Rules & procedures guide network action	3
There is reciprocity between network members	3.5
There is a high level of trust between network members	4.25
The network members are linked by contractual relationships	2.5
Network members have mutual understanding and empathy	4.3
There are strong social relationships between network members	3
There is a government mandate/requirement to network	1.8
The network operates using traditional directive processes	2.4
Network members have strong & frequent communication	3.125
Others	-

Impact of Network on Organisation

Measures	Mean (n=8)
Ability to serve my clients better	3.5
Acquisition of additional funding or resources	2.5
Acquisition of new knowledge or skills	4.2
Better use of my organisation's resources	4
Building nee relationships helpful to my organisation	4.5
Heightened public profile for my organisation	3.7
More seamless service delivery	2.7
Savings on programs	2
Improved referrals for my clients	3.2
Other	Improved communication within agency, staff, volunteers and board

	members

Overall Impact of Network on Community

Measures	Mean (n=8)
Greater capacity to service the community	2.8
Reduced duplication/overlap in the service system	2.6
Reduced confusion: re service system	3
Greater ability to address complex problems effectively	3.25
Better informed decision making	3.75
More information/advice regarding available services	4.125
Ability to work together to achieve project outcomes/or service	4.125
Improved referral process for service system	3.37
Improved integration of service system	2.6
Greater ability to improve community capacity	4.
Other	-

Limitations of Network Approach

Takes too much time	3(n=8)
Takes too many resources	2.3
Loss of control/autonomy	2.25
Can be a delay before results are seen	3
Strained relations in my organisation	1.8
Difficultly in dealing with partners	2
Hard to know what is going on	2
Accountability (e.g. a lack of control within the network)	1.8
A lack of recognition of contributions	2
Complexity of structures	2.3
Other draw backs	Changes in personnel – not easy to have same perspective & so will pose difficulty for working project. Different goals & objectives limited

	resources to participate often Changes in personnel

Collectively these responses indicate that the CAVs project operates from a broad network governance orientation in which trust, common purpose and mission and understanding are key aspects. Further, the findings suggest that the network is not driven by a directed mandate but rather a common goal to improve services to seniors and reconnect them to services and their community. On reflection, this result is not surprising given the history of this group/network and the clear intention or direction to work together to provide a stronger base from which volunteer services may be delivered. It is interesting to note that while respondents have stressed the network mode of operation and the importance of relationships, this is slightly at odds with respondent data provided on the perceived quality of relationships. In terms of impact of the network on organisation there was an emphasis on acquiring new knowledge or skills (4.2), building relationships helpful to organisation

(4.5) and better use of my organisation's resources (4). Similar to the BCC Linking Seniors project, CAVs network members identified the primary benefits of the network to the community as obtaining more information and advice regarding available services, (4.125), ability to work together better to achieve project outcomes

(4.125) and also greater ability to improve community capacity.

With respect to limitations of the network approach the issue of time (3) and delayed results (3) presented as the most concerning for respondents. Next frequently identified areas of limitation were too many resources (2.3), complexity of structures

(2.3) and loss of control/autonomy. Thus for most respondents the network is seen to operate as a network governance model; has a relatively clear and agreed purpose, provides some positive benefits to agencies, as well as to the broader community. This assessment is supported by the reflections of one respondent who stated: "*If the network is well organised, has identified outcomes and the group/individuals look to complete these objectives then networks are excellent, if not then the above problems will arise*".

Identifying and monitoring perceptions of benefits and drawbacks of the network approach is an important task to track and assess progress. Such data also provides network administrators with insights into the attitudes of participants and therefore can assist to pre-empt potential network problems.

Conclusions

This evaluation of the network based projects within the Reducing Seniors' Social Isolation project has shown that each of the two models has developed a set of relationships and patterns of connection that is specific to their objectives and service context. Such an individualistic approach is consistent with the broader network literature, which indicates that networks must be 'fit-for-purpose' or 'requisite' to need and context (Keast and Brown, 2005; Mandell and Steelman, 2003). That is, there is no 'one best' or predetermined model of network relationship and structural arrangements.

With respect to individual analysis of the projects, the CAVS model presented as more linked than initially expected, although clearly not a densely linked model.

Indeed, the projected pattern for this network was much more centralised with the network coordinator operating almost as a hub or conduit for the connections to other

members. This contrary result is particularly pleasing and perhaps not so surprising given the build up or staged evolution that this group of agency has experienced and the likelihood of enhanced relationships as a result. Having multiple points of connection provides for redundancy and theoretically does not expose the network to vulnerability should a central player/node be removed. Nevertheless, since networks require some driving to achieve outcomes the ongoing function of a coordinator role remains an essential consideration. While there has been no actual delivery of volunteer services to seniors, the network analysis has shown that there is a good collective foundation based on network principles and processes that may contribute to achieving this goal. For the BCC Linking Seniors project, the data analysis has demonstrated that the project has begun to make inroads in terms of meeting its goal of better linking agencies and thus linking seniors to support services. This was particularly the case in terms of the variables relating to information sharing, resource sharing, referrals and involvement in seniors events.

A finding common to both networks is the reduction in levels of connection as the five variables were examined. That is, for both network projects information sharing was the most active or connected set of ties. As the commitment level for each variable increased there was a generally reduced set of ties. This result is not surprising since participating organisations, unless they have a lot to gain, will limit their participation and commitment to lower level tasks and resources.

Limitations

As for any form of evaluation the network analysis approach has both benefits and limitations. In particular, since the relational/connections data has been obtained and based on an individual perception there is the potential for personal agendas to impact on results. In order to limit the potential for respondent bias and improve recall regarding connection, the methodology employed a linkage instrument that was specific in terms of time lines and content (Knoke and Kuklinski, 1982; John and Cole, 1998). However, administrators should be cognisant of the potential for the data generated to have an erroneous impact on the patterns of relationship and be cautious in their application. Nonetheless, it is considered that this approach will provide important additional information to better inform the main evaluation of these projects and the broader suite of initiatives being undertaken within the Reducing Seniors' Social Isolation intervention agenda. As Rogers (1987: 285) states: network analysis can be used to turbo charge other evaluation processes, and in particular case studies.

Going Forward: Drawing on the network analysis insights

As noted previously the purpose of this network analysis of the two project networks was to provide previously unavailable data and insights into the patterns of connections and nature of relationships between members. In doing so, the evaluation and resulting report provide the project, evaluation and administration teams with a body of information with which to diagnose the existing arrangements, modify relationships (i.e. strengthen particular links and reduce or remove redundant or ineffectual links; bring in more actors; or adjust operating mechanisms) and ultimately make a better informed judgement on the performance of these often intangible outcomes. It should be noted however that each project network is individual with its own set of relationships and therefore most of these network measures remain particular to that entity. This situation of individualism is further emphasised by the fact that each of the networks has different purpose and goals and therefore should be built and operated 'fit-for-purpose'.

Possible Areas for Further Examination/Consideration

Drawing on the work of Provan and Milward (1995; 2001) Milward and Provan (1998) and Provan et al (2005) the following questions provide broad direction to guide

further considerations of the results. These questions will provide network members and administrators with a framework to diagnose, modify and ultimately evaluate the network results.

Table 1: Questions to Frame Further Interrogation of N/A Results

1. Which agencies are most central in the network and are these agencies essential for addressing the needs of clients and/or achieving the goals of the project?

2. Which core network members have links to important resources, through their involvement with organisations outside of the project network?

3. Are critical network ties based solely on personal relationships, or have they become formalised and stabilised over time?

4. Are some relationships strong (multiple), while others are weak (single, e.g. information sharing)? Should the weak relationships be sustained as is, or should they be strengthened? Are the strong relationships over committed in terms of effort and could they survive a reduced emphasis?

5. Which subgroups have strong working relationships? How can these be mobilised to meet the broader objectives of the network project?

Source, drawn from Provan et al 2005: 606

To conclude this report has shown that by documenting, mapping and measuring relationships and connections between organisations involved in a network-based project, network members and administrators can enhance their capacity to diagnose the pattern of relationships and adjust to make them requisite to the objectives sought. In the same way, by focusing on the nature and pattern of connections, network analysis provides an alternative evaluation approach. Accordingly this document is presented as both an interim report to guide the understanding of project administrators and evaluators and as a supplementary contribution to the overall evaluation report.

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