AUSTRALIAN PRIMARY HEALTH CARE RESEARCH INSTITUTE

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MAPPING ABORIGINAL HEALTH PARTNERSHIPS FOR EVIDENCE-POLICY TRANSFER (MAHPET)

RESEARCH TEAM REPORT TO APHCRI

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ACKNOWLEDGMENT

The MAHPET project logo represents people working together as a network of services to provide better health outcomes for Aboriginal people. The artist is Mick Torrens, a Bundjalung man from Casino, NSW. Mick Torrens holds copyright over this artwork and he has granted the MAPHET project the license to use this work in reports and presentations.

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EXECUTIVE SUMMARY

Background

Health care problems in Aboriginal communities are often complex and partnerships are often formed between community controlled and and mainstream health services to address the health needs of Aboriginal communities.

Service partnership as a form of organisation can be problematic, necessitating teamwork, coordination and negotiation of stakeholder interests in order to achieve partnership aims.

While Aboriginal community controlled health services must play a critical and lead role in the culturally appropriate application of knowledge, "community control" should not mean that these services bear the brunt of responsibilty for this servicing. Formation of effective genuine partnerships between mainstream and Aboriginal and Torres Strait Islander organisations may help in shouldering the responsibility for delivery of crucial health services.

Research is needed that can help develop Aboriginal community controlled and mainstream health service partnerships. The aim of this research was to see if an action research process that used social network analysis and role clarification tools was a way to do this. The project title was *Mapping Aboriginal-mainstream Health Partnerships for the Evidence-policy Transfer* (MAHPET). MAHPET involved two case studies in different states with links between an Aboriginal health service and mainstream health care services. Both partnerships sought to improve the local service response to chronic disease, one with diabetes and the other with mental Illness/social & emotional wellbeing.

This study seeks to add knowledge about the use of network analysis and role clarification techniques to inform the development and transferability of findings about Aboriginal-mainstream primary health care partnerships related to diabetes and mental health (both areas of national health priority).

Each partnership involved links between an Aboriginal health service and mainstream private and public health care services related to two diffeent chronic diseases in two states that operate under a system of area health governance.

Method

We sought to develop a research method through which a primary health care service partnership could be described in an objective manner and in such a way that partners could identify (1) where there were network strengths and where improvements might be made in order to then (2) work on solving a network problem.

A local research group (LRG) was established in each of the partnership sites that would guide culturally responsive data collection drawing on adaptations of the following tools: (1) social network analysis (SNA), (2) team member role clarification using an adaptation of the Work Practice Questionnaire (WPQ) and the Team Climate Inventory and (3) key informant interviews/focus groups. The purpose in using these techniques was to generate quantitative and qualitative data on stakeholder relations (system linkages), team or partnership practices and policy response related to a specific problem(s) identified.

The research question was the following:

Does the use of action research incorporating network analysis and role clarification (a) strengthen Aboriginal – mainstream primary health care partnerships and (b) promote the transfer of the evidence about the effectiveness of these partnerships into policy?

To answer this research question the study involved four main processes:

- The establishment and conduct of local research groups (LRG)
- The development and administration of a network analysis and role clarification process
- Identification of a problem and working on it.

- Collection of evidence about the value of the process to strengthen the service partnership and then influence policy about such service delivery at the local and state level.

The data from the SNA surveys were entered into UCINET software to generate maps and tables that displayed the presence of links between workers and agencies. The data were summarised and reported descriptively.

Data were then presented to the LRGs to inform the areas of strength and opportunities for partnership development for each of the following network relationships:

- sharing of clinical information

- sharing of cultural information

- the provision of team-based care

- management and planning of services

- policy development

Because of the small number of participants, the results from the TCI and WPQ questions were analysed descriptively and all participants (Aboriginal and non-Aboriginal) were analysed as one group. Analysis was a simple display of those items that were scored highest and lowest.

The project generated considerable qualitative data from the LRGs, focus groups, meetings and key informant interviews. The project coordinator reviewed and collated these data and both the project coordinator and one of the chief investigators then iteratively themed the data for use in this report.

The key informant interviews were recorded and notes were made from these recordings. Themes were identified first according to the interview questions and then other themes were iteratively identified as the researcher listened to the recodings and read the notes.

Approval for the study was gained from the human research ethics committees of the University of Sydney, the NSW Aboriginal Health and Medical Research Council, the Aboriginal Health Council of SA and the relevant Area Health Service.

Findings

LRGs and other meetings

Three LRGs were held at the mental health site and (to date) two at the diabetes site. At both sites the LRGs were able to engage participation from service managers, service providers, community representatives and policy officers. The specific problem identified by the mental health LRG was to improve team-based care (a network framed problem), while the diabetes site LRG identified the specific problem as client access to and use of diabetes nedication.

The following issues were discussed in the mental health LRGs

- SNA results were an accurate description of the linkages between workers and agencies and demonstrated which were the main activities of the partnership.

- The survey identified the functional place of the respective teams and also role position of various workers thereby revealing role and relationship strengths and weaknesses in the partnership.

- The survey highlighted the demand on the Aboriginal team as a cultural resource for other teams when there was an Aboriginal client. Concern was expressed (1) that the Aboriginal team were not resourced to do this and (2) that mainstream teams should also develop some cultural resources of their own.

- Challenges were identified as the need to re-engage all of the teams to the objectives of the partnership, to strengthen team based care and to improve worker morale across the teams.

The meetings identified the following tasks:

- Ensure feedback to core agency participants
- Convene a planning workshop to start dealing with issues that the research has raised
- Identify resource support requirements to work on the problem of improving collaborative care

The following issues were discussed in the diabetes LRGs

- Communication across the partnership
- Coordination supports
- Current and future roles of Aboriginal staff in the clinics
- Lack of management processes.

The LRG asked the research team to take the issues to the clinic management group to consider how to deal with the network problems identified.

Other than unpacking elements of the problems at the first LRGs, both partnership made limited progress in addressing their problem. There were four issues related to this.

- Some staff in the diabetes project could not see a link between the network analysis and role clarification process and working on the problem of medication.
- The process of network analysis and role clarification conducted in a participative manner in a cross-cultural context took much longer than we had planned.
- When the coordinator of the diabetes project resigned this stalled any decision-making about working on the problem.
- In the mental health program one of the teams indicated that it was not committed to the partnership as it currently operated. The process used to problem solve (LRG meetings and workshops) up until this time had not resolved this.

In addition to the LRGs other meetings were held in each project and the composition and function of these meetings varied according to the structure and needs of each project.

Survey

Surveys were all conducted by face-to-face interview except for four surveys that were conducted by telephone or videoconference. The two tables below list who took part in the surveys and what were the main findings

	mental health (conducted May-July 2007)		Diabetes (conducted June to August 2007)	
	identified	surveyed	identified	surveyed
number	21	20	29	22
	Staff included in the network analysis of the mental health partnership included Aboriginal health workers, mainstream mental health service providers and service managers. Of these, 4 were Aboriginal and 16 were non Aboriginal.		Staff members of the diabetes clinics who included Aboriginal health workers and health education officers, medical officers, nurses & others.

Clinic and service managers.

Of those surveyed, 5 were Aboriginal and 17 were non Aboriginal. Of the 7 not surveyed, 5 were Aboriginal. | |

SUMMARY (MENTAL HEALTH)	SUMMARY (DIABETES)
The SNA data identified that the focus of the partnership was in the exchange of clinical information and in the management and planning of services. Agencies across the network were not as well connected in the provision of team-based care. The Team Function data identified a lack of agreement about the value of the partnership and also that morale was an issue. As distinct from the internal networks, there was less connection in the management and planning with other agencies currently external to the partnership. However some key agencies were identified with whom this could occur. Identification of the position of each of the workers and teams in relation to each other illustrated where their were role strengths and weaknesses. This led to discussion in the LRG about strategies for partnership change.	The SNA data identified the focus of the partnership as a clinical service with minimal links to do with management and planning or policy development. The operation of the partnership was shown to be highly centralised on the role of the Program Coordinator. The lower connectivity of the Aboriginal workers prompted discussion about their role in the clinics. The Team Function data identified that while there was agreement about the legitimacy of the partnership goals, there was less agrement that these goals were clearly understood or that evaluation of the partnership occurs.

Key informant interviews

Three following main themes emerged from these interviews.

- Value of the method - Show the network – validate concerns - put issues on the table

Almost all the informants indicated that the MAHPET process had been useful, specifically the visual display of the maps that illustrated the network and gave it a framework.

The value of the maps as visual displays had impact because they "put issues on the table", thereby requiring attention. However, the confronting aspect of some of the data and subsequent discussion was termed in one of the sites as "the difficult discussions that we had to have". Nevertheless, this was then framed in an affirming way by these informants who observed that despite these difficulties, the partners continued to engage in these discussions, thereby signifying their commitment to working together and in wanting to make improvements.

- Opened up problem-solving communication for action on issues

Following on from its value in putting issues on the table, a major use of the MAHPET information was to open up problem-solving communication. In both sites this communication was concerned with the purpose of the partnership and what were appropriate worker roles, which in one site led to an increased role of Aboriginal Health Workers in clinical duties.

MAHPET enabled both partnerships to self examine; in the diabetes site to re-evaluate the purpose of the clinic and to consider which members of the community were being best served and in the mental health site to examine which partners benefited most and who were the partnership drivers.

- Impact on policy

The level of impact on policy to date was identified at the local level, that is, within the clinical partnerships. Informants suggested that any wider policy impact might occur as an outcome of a final report. These local policy impacts were described as the following:

- Formation of decision-making groups at both sites to consider and act on the findings
- Commitment at both sites to bring the MAHPET data into future planning
- A formal memorandum of understanding agreed upon at the diabetes site and a partnership agreement drafted at the mental health site
- The changed role of the Coordinator and Aboriginal Health Workers in the diabetes partnership.
- A commitment to the partnership to be included in the staff work plans at the diabetes site and a similar commitment is being considered at the mental health site

Discussion

The findings from the key informant interviews do indicate that the MAHPET process had been of value in helping each partnership. However, this value was not in ways that had been anticipated either by the research team or by the partnership stakeholders. Four broad indicator types were proposed and these have been used to reflect on the success of MAHPET.

- Resolution of the problem that each partnership wanted to work on.
- Improved partnership function
- Lessons learnt and influence of the partnerships on service processes and policy.
- Capacity building

In addition to these indicators, the following issues also became evident as important factors for success.

Time required to use SNA with a PAR approach

MAHPET ran for two years, which was six months longer than planned. While there were numerous factors that caused specific delays, many of these factors were unrelated and occurred across both sites. Hence the reason for the much longer time may relate simply to the period that is required in general to establish a cross-cultural action research study that involves collaborative problem identification and change.

Preconditions for an action research process using social network mapping

The capacity of partners was an issue in both sites and the value to which MAHPET could be utilised was most likely diminished in situations were there was not the work capacity to use the information to make partnership improvements.

The extent to which stakeholders were engaged in the participatory research process also appeared to be an important underpining. In the mental health program, more so than in the diabetes program, we were able to initiate and sustain engagement over the duration with service staff and managers and also to some extent with the relevant health policy makers in the state health department.

Putting information about the partnership "on the table"

It does appear that the MAHPET process brought network problems to the surface and if so it would be expected that the partnership might feel worse (the problems were made obvious) before it would feel better.

Need for robust discussion and problem solving process

Respones to the survey data verified that the SNA mapping and the other tools adequately described the networks, identified their strengths and weaknesses and also the problems to work on. MAHPET did facilitate considerable discussion through the action research groups (LRGs) and the problem-solving meetings in both programs. However, these did not seem to be enough to make significant problem-solving gains. Hence, to optimise the value of the tools in helping partnership problem solving, as much attention needs to be given to strategies beyond the problem identification stage and this would require considerable resources, an iterative approach and considerable time.

1. BACKGROUND

Health care problems in Aboriginal communities are often complex; the significant disparity between not only Aboriginal and Torres Strait Islanders' health and that of other Australians, but also Indigenous peoples in other countries has been well documented over some time.[2,3] Partnerships are often formed between community-controlled and and mainstream health services to address the health needs of Indigenous communities.

While numerous high level government reviews and policies advocate service partnerships, little work has been done to critically assess such partnerships and how to strengthen them. [4, 5, 6]

Research is needed that can help develop Aboriginal community-controlled and mainstream health service partnerships. The aim of this research was to see if an action research process that used social network analysis and role clarification tools was a way to do this. The project title was *Mapping Aboriginal-mainstream Health Partnerships for the Evidence-policy Transfer* (MAHPET). MAHPET involved two case studies in different states with each case study involving links between an Aboriginal health service and mainstream health care services. Both partnerships sought to improve the local service response to chronic disease, one with diabetes and the other with mental health/social and emotional wellbeing.

1.1. Human service partnerships

Partnership approaches are explicitly identified in the 2006 National Chronic Disease Strategy and its accompanying National Service Improvement Framework for Diabetes, in the Third National Mental Health Plan (2003-2008) and the National Social and Emotional Wellbeing Framework (2004-2009), in the 2004 Aboriginal and Torres Strait Islander Primary Health Care Review and in the 2005 NSW Aboriginal Chronic Conditions Area Health Service Standards. [6, 7, 8, 9, 10, 11] A major deficit, however, observed in the National Chronic Disease Strategy, was that despite significant improvements in multidisciplinary care within services, implementing change across services and sectors remains a challenge.

These policies advocate the following:

- That coordinated and integrated care across service sectors and settings requires the establishment of primary health care networks as key elements in multidisciplinary care to patients with complex conditions

- Regarding diabetes, the respective policies identify the need to improve culturally appropriate systems of care that will limit the progression of the complications of diabetes and improve medication access, particularly in rural and remote areas and for Aboriginal and Torres Strait Islander peoples

- Regarding mental health, the respective policies identify the need to develop linkages between mental health and social and emotional wellbeing (SEWB) services that includes mental health assessment, crisis management and other culturally responsive procedures, as well as mental health training for Aboriginal and mainstream health workers

Service partnership as a form of organisation can be problematic, necessitating teamwork, coordination and negotiation of stakeholder interests to achieve partnership aims. A National Institute of Clinical Studies literature review identified that the prerequisites, enablers and drivers of partnership performance are goal setting and feedback, leadership, human resource management, organisational climate and culture, structure, organisational knowledge and learning transfer, quality management, and training and development.[12] Theory derived from this evidence does suggest that conducive partnership conditions exist when there is goal predictability, collective efficacy (worker agreement

about goals and confidence in other team members) and role clarity.[13] However, these conditions are not often met when working with chronic health conditions (where treatment goals can change), in cross-cultural and cross discipline settings (where workforce differences may create tension) and in rural settings (where role ambiguity is more the norm than role specificity).[14, 15]

Relating organisational performance to successful partnerships, Villeneau et al surveyed senior mental health service managers in the United Kingdom to identify the following six factors for successful partnerships: (1) integrated assessment processes, (2) coordination processes for joint working, (3) commitment and involvement of a person in authority, (4) improved information sharing and access to information, (5) valuing and recognising the role of partnership stakeholders, and (6) a locality wide joint strategy.[16]

We also draw on our own previous work with a cross-cultural mental health partnership in South Australia.[17] We made observations about the partnership on three relationship levels. These were well established and formalized at the executive management and service management levels, but relationships at the level of service workers were not well formalised. This meant that the sustainability of the program was threatened by a lack of process for workers to agree on the legitimacy of program goals and develop confidence in each other (collective efficacy). We recommended more regular and structured communication amongst workers and joint training in cross-cultural mental health care. We considered that this would enable staff to test their agreement about common care management processes.

Sibthorpe et al conclude that three major factors interplay to sustain primary health care innovations, these being (1) stakeholder social relations, networks and champions, (2) political, financial and societal forces (sometimes evident as policy) and (3) motivations and capacity of agents in the system.[18] While there are many examples of service partnerships reported in the literature there is little evidence about the use of tools to: (1) develop and sustain successful partnerships and then; (2) to inform relevant policy development so that partnership success is transferred to other locations. This study will add to the body of knowledge about the use of these tools.

1.2. Cross-cultural impacts on service partnerships

Tackling chronic disease in Aboriginal communities is not just a problem of inadequate understanding of biological causation and therapeutics, but also inadequate understanding about how biomedical and public health knowledge can be appropriately applied to meet the needs of these communities.[19] While Aboriginal community controlled health services must take a critical and lead role in the culturally appropriate application of this knowledge, "community control" should not mean that these services bear the brunt of responsibilty for this servicing. Formation of effective genuine partnerships between mainstream and Aboriginal and Torres Strait Islander organisations may help in shouldering the responsibility for delivery of crucial health services.

An underpinning basis from which to design cross-cultural health care programs is to understand the multiple cultural factors that are at play in any one situation. Health anthropology provides theoretical guidance by advocating approaches that include the following:

- Multiple cultural contexts that need to be considered from the perspective of the client, the health care provider and the health care organization.[20, 21]

- The use of cultural resources to understand the client's culture, such as negotiating with the client, working with cultural intermediaries (such as Aboriginal health workers) and partnerships with community organizations.[22, 23]

- The need for clinician reflectivity as a prerequisite to working with the client and in discussing their explanatory understanding of their illness.[24, 25]

- Living with a chronic disease involves a psychosocial component.[26, 27] For some groups, such as Aboriginal Australians, past intergenerational events impact on psychosocial, cultural and community causes of a person's illness and their response to this[28].

- Dealing with chronic illness requires attention to both the physical (clinical) aspects of the illness as well as these psychosocial, cultural and community factors.[29]

The MAHPET project sought to bring Aboriginal and mainstream services providers, managers, policy officers and researchers together to critically assess two such partnerships. This approach is advocated by the National Public Health Partnership as that research required to develop "*better integration of the health problem [and] the knowledge needed for action*" (p10).[30] Such an approach is proposed as the mechanism through which to improve research uptake into policy.[31, 32] Throughout the course of the project, the team were reminded, through the valuable input of our associate investigators, of the importance of Aboriginal health policy and associated research as a process and not as a product (as Lomas[32] described). It is this very policy process of developing Aboriginal-mainstream primary health care partnerships that this study will both facilitate and investigate at the local, regional and state level.

Aboriginal health workers in health service partnerships

If mainstream health services are to work with Aboriginal people, then of fundamental importance is the capacity of mainstream health professionals to work alongside, and learn from Aboriginal health workers. Linked to this is the role and status of Aboriginal health workers in the partnership team. A direct relationship has been found in one Australian study between the delivery of diabetes services and the number of employed Aboriginal health workers. The study found that the factors following factors hindered the role of these workers:[33]

- Insufficient and discontinuous training of AHWs in the use of clinical guidelines.

- Lack of clear role division in chronic care.

- Lack of stable relationships between AHWs and non-Aboriginal nursing staff.

- High demand for acute care that limits opportunities for AHWs to be involved in chronic care.

In Canada, Mignore and Boone found in their work with teams that included Aboriginal health workers that the following three factors were important to effective team functioning:[34]

- Clarity about each others' roles.

- Appreciation of each others' respective knowledge base.

- Confidence in each others' competence.

A recent interview study in New South Wales[35] involving 11 Aboriginal Health Workers and related specifically to diabetes proposed such solutions as:

- More Aboriginal-friendly service environments

- Relationship development between pharmacists and Aboriginal Health Workers

- Cultural awareness programs for pharmacies and their staff

- Provision of disease-state management services

- Medicine education programs by pharmacists for Aboriginal Health Workers

1.3. How the MAHPET study fits into this context

This study seeks to add knowledge about the use of network analysis and role clarification techniques to inform the development and transferability of findings about Aboriginal-mainstream primary health care partnerships related to diabetes and mental health (both areas of national health priority).

A local primary healthcare delivery system involves a somewhat unique and complex interaction of stakeholders and conditions. Knowledge about problems inherent in such systems cannot readily be reduced to discrete and generalisable cause-effect interventions, because solutions may not be applied in identical ways in different systems.[36] This applies to Aboriginal and Torres Strait Islander communities in particular, as what may work in one community may not necessarily succeed in the next. However, for complex primary health care system problems, knowledge about problem solving processes can be "transferred" into policy.

The MAHPET study focuses specifically on the use of tools to examine the first factor identified by Sibthorpe et al [18], that is, stakeholder relations.

The main goal of the project was to see whether the tools that were used (e.g., social network analysis; adaptations of the Team Climate and Work Practice Questionnaires; local research groups; the action research approach) were useful to stakeholders to improve how the partnerships worked. If the tools and the approach were found to be effective, then we would expect to see improvements over time in the partnerships. These might be indicated by Aboriginal health workers providing mainstream workers with cultural information; mainstream workers linking in more with Aboriginal health workers in terms of being sensitive to and aware of cultural matters; mainstream workers providing Aboriginal workers with clinical knowledge; and also in the partnership utilising their community expertise to improve service delivery. More appropriate delivery of services would hopefully lead to improved outcomes for the community.

1.4. Background description of the service partnerships

Each partnership involved links between an Aboriginal health service and mainstream private and public health care services related to two different chronic diseases. The project was in two states that operated under a system of area health governance.

Mental health partnership

An Aboriginal Medical Service (AMS) and the related state government Area Health Service jointly developed the Aboriginal primary mental health care partnership in 2003. The aim of the program is to improve the mental health and social and emotional well-being of Aboriginal people living in the area.

At the commencement of the research, the partnership model included four services working in Aboriginal mental health, including:

- the Social and Emotional Well-Being team (SEWB) of the AMS
- the local community mental health service
- the regional hospital and
- a community-based rural outreach service.

The partnership was formalised through the signing of a Memorandum of Understanding. There is a partnership program manager and also a part-time project officer employed by the Area Health Service (AHS). The governance structure for the partnership comprises a management committee and Linkages group. The management committee consists of service managers and a representative from the local Aboriginal Health Advisory Council (AHAC). The service providers drawn from the partners make up the Linkages group. The operation of both the management committee and Linkages group is governed by a Terms of Reference.

The SEWB team had stable staffing during the 18 month period of the study. Prior to this, over a two-year period, nine different people were employed in the three positions in the SEWB team. The AHS Mental Health Program employed the partnership program manager, but for two years this worker was situated in the AMS as team leader of the SEWB team. The aim was to help build capacity, establish and maintain team cohesiveness, develop and implement culturally appropriate processes, ensure positive linkages and earn from the expertise of Aboriginal health workers. A further aspect of the role was to identify an Aboriginal person who was prepared to undertake the role of team leader. The partnership program manager eventually ceased performing the team leadership role at the start of the study period. For a while a new program manager was employed from the AHS office, but at present this position is vacant.

On the periphery of this partnership are other services that provide mental and social wellbeing services to Aboriginal people in the area, and also policy-influencing organizations based offsite, in the state capital city.

Diabetes partnership

The diabetes service partnership provides a dedicated "traveling" outreach clinic to five Aboriginal communities located in the region. The clinics are set up in either community health posts or community health centres situated in local hospitals. The clinic team includes a broad range of staff including:

- Aboriginal health workers (AHWs) employed by the AMS
- Aboriginal health education officers (AHEOs) employed by the local AHS, situated at the Community Health Service (CHS)
- medical specialists
- general practitioners (GPs)
- nurses
- allied health clinicians (pharmacist, dietician, podiatrist, diabetes educator) and
- a medical scientist

Staff are employed by the AMS, the local AHS or as private practitioners. The partnership Coordinator is a nurse employed by and situated at the mainstream AHS, at the level of a clinical nurse consultant (CNC).

The service home base was originally physically situated in the local AMS. However due to a lack of space at the service, the diabetes partnership coordinator position was moved to the CHS. The move took place amidst concerns about the impact that relocating the service may have on access for Aboriginal clients, workers and community members.

The partnership commenced in 2004 under a state health department Primary Health Care Initiatives grant focussing on collaboration between agencies providing services to the local Aboriginal communities. The partnership eventually took a clinical focus on diabetes after a three-month consultation with AHWs, AHEOs, community members and elders. The aim of the program is that partnership agencies work together to provide a one-stop assessment, intervention and ongoing case management and follow up to Aboriginal people with diabetes in the local region.

Management of the partnership initially involved a Steering Committee and a Management Committee, but of late neither of these committees have met. A Memorandum of Understanding (MOU) regarding the service was signed during the period part of this study between the AMS and the AHS. The service partnership was recognised as having made considerable gains, icluding the achievement of National Diabetes Service Supplier status of the AMS increased community access to specialists.

Future plans for the partnership included the employment of an Aboriginal enrolled nurse, who could work alongside the CNC, to embed the clinic outreach role into the position description of staff and to build capacity the role of these staff through training. Ongoing concerns held by the partnership related to issues such as:

- the uncertain viability of the service caused by temporary funding cycles
- staff changes in the AMS
- the tenuous nature of the partnership, which, until the recent MOU, was held together through goodwill, rather than formal processes
- the need for clear staff roles and responsibilities and
- the lack of any processes for program review

# 2.	METHOD

We used a participatory action research approach to examine and then respond to the service network issues in service partnerships in Aboriginal health at two different sites, related to different chronic conditions (mental health and diabetes).

We sought to develop a research method through which a primary health care service partnership could be described in an objective manner and in such a way that partners could identify (1) where there were network strengths and where improvements might be made, in order to then (2) work on solving a network problem.

A Local Research Group (LRG) was established in each of the partnership sites that would guide data collection, particularly in relation to any cultural issues arising. The data collection drew on adaptations of the following tools:

1.	Network mapping, also known as Social Network Analysis (SNA).[37, 38]

2.	Team member role clarification using a role analysis technique (RAT),[39] adaptation of the Work Practice Questionnaire (WPQ)[40] and the Team Climate Inventory (TCI).[41]

3.	Key informant interviews/focus groups.

The purpose in using these techniques was to generate quantitative and qualitative data on stakeholder relations (system linkages), team or partnership practices and policy response related to a specific problem(s) identified by and within each partnership network.

2.1. Research Question

The research question was:

Does the use of action research incorporating network analysis and role clarification (a) strengthen Aboriginal–mainstream primary health care partnerships and (b) promote the transfer of the evidence about the effectiveness of these partnerships into policy?

To answer this question, the research worked through four main phases:

- The establishment and conduct of the LRGs

- The development and administration of a network analysis and role clarification process

- Identification of a problem held to be important by each separate partnership, which then works together on that problem

- Collection of evidence about the value of the process to strengthen the service partnership and then influence policy about such service delivery at local and state levels

2.2. Participatory Action Research

The NHMRC Road Map for improving Aboriginal and Torres Strait Islander research identifies that one priority research theme for sustainable health gain is the engagement of research and *action* in Aboriginal and Torres Strait Islander communities.[42] A participatory action research approach is advocated as an appropriate methodology, because it promises progress that has not been forthcoming to date. Researcher driven, descriptive types of studies have prevailed over other types of research conducted in Aboriginal communities. This has resulted in a continuation of the description of problems, rather than a search for solutions.[43, 44]

It was hoped that a participatory action research approach would provide research outcomes in this project, through implementation of progressive improvements in the primary health care network at the local level. These outcomes could include a shared ownership of the problem, a community-based definition and analysis of the problem and an orientation towards community action.[45] Hence one of

the aims of using this method was that there should be immediate and relevant research outcomes for the local community and service stakeholders.

In relation to building research capacity we concur with the points made by Anderson and also Tsey, that to maximise research benefits to Aboriginal and Torres Strait Islander communities there needs to be community "buy in" to the research, particularly through building research capacity as a very product of the research act.[46, 47] Our participatory methodology sought to immerse local Aboriginal and mainstream stakeholders in the project specifically and formally through the LRGs. At the outset MAHPET engaged both Aboriginal and non-Aboriginal chief and associate investigators, each with varying degrees of experience in research. The MAHPET team sought to build upon this varied experience in a meaningful way, through involvement of all investigators in the design and implementation of the research strategies, as well as through the process of dissemination and publication.

The approach is represented in the diagram below.

Fig 1: MAHPET participatory action research framework
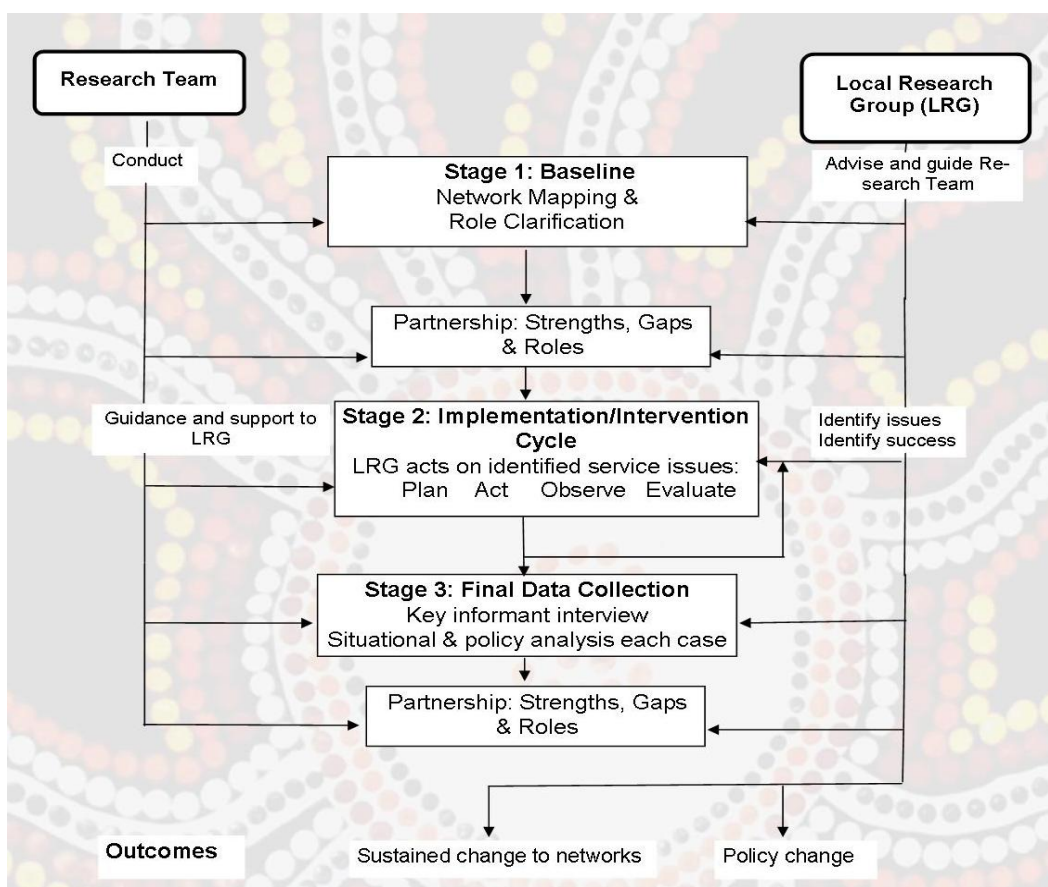
2.3. Local Research Groups

The purpose and composition of the LRGs was an important aspect of the process. The LRG was to be the forum through which the research team would engage with the stakeholders in using the survey findings in action – to identify and respond to network strengths and weaknesses and to work on the designated problem.

The LRG for each partnership involved (a) health workers and service managers from each service partner (b) relevant policy officers from local AHS' and State Health departments, (c) community members (including elders) and (d) the researchers.

The roles of each LRG were as follows:

- Advise on the research processes to be used to map the partnership. This included providing comment on the development of the survey tools and also suggested names of workers and agencies who should be included in the surveys
- Provide cultural guidance and ensure that the research was conducted in a culturally secure way
- Confirm the network problem to work on
- Provide feedback on the research findings and the implications for the partnership
- Facilitate work on the network problem

Research staff were to facilitate the LRGs and record the deliberations. Deliberations were to be fed back at subsequent meetings with the aim of solving the identified network problem.

Because each LRG formed a part of the research process, informed consent was obtained from all members. A set of group norms were established to guide the discussion of the findings from the network mapping. We considered this important because the network mapping identifies the position of workers in the network, and we did not want these workers threatened or felt harmed in this discussion. These norms were the following:

- Cultural safety is for everyone
- Importance of respect and confidentiality
- Focus on the issue; not the person

In the third and final LRG meetings we used the following prompts to elicit discussion about the value or otherwise of the value of the MAHPET process to the partnerships:

- Has the MAHPET project been useful?
- What did the project tell you?
- How have you been able to use the information from the project?
- How could you use the project/information in the fututre?
- What is the next step for the partnership?
- Is the information useful for sustainability?

2.4. Network analysis and role clarification tools

The following suite of tools were presented to each LRG so that a decision could be made on the final instruments to use for the network mapping and role clarification.

(1) Social Network Analysis (SNA)

We adopted the social network analysis technique described by Provan et al and Fried et al.[36,37] Key service providers and managers from each location were purposively selected for their information richness and breadth related to the local problem. These key advisors were asked to list the workers and agencies with whom they interact about related client matters. These listings were then combined and considered to create a final composite list that is called the "bound" local service network. Workers and agencies on this bounded network were then surveyed to elicit information on their links with all the other workers or agencies on list related to the sharing of clinical and cultural information, the provision of team-based care, management and planning of services and policy development. Analysis of agent connectedness and network density (an indicator of how many agents are linked to each other) was then fed back to the stakeholders to assess network strength and weakness. The following descriptors were used for the network relationships that were included:

- Clinical information – exchange of information about the client's condition/illness and the treatment and care of that condition

- Cultural information – exchange of information about the customs of Aboriginal people (identity, habits, language and communication, laws and morals, connections to land, family and community)
- Team care – joining with other workers to provide care related to diabetes or mental health
- Management and planning – joining with other workers about the organisation of resources (staff, funding, equipment) and the development of strategies so that services can achieve their goals
- Policy development – joining with other workers in the negotiating and preparing of statements at local, regional and statewide level

(2) Role clarification

Role analysis technique (RAT): A qualitative group work technique that generates participants' perception of their own role and the role of other group members, which are then discussed for assessment of congruence.[38]

Work Practice Questionnaire (WPQ): A validated tool designed to measure the individual, team, workplace and organisational factors that influence work practices related to alcohol and other drugs. We proposed an adaptation of the scales (reworded to cover mental health or diabetes care) covering individual factors (role adequacy and legitimacy, individual motivation and reward and career motivation), team factors (capacity, support and cohesion), and an organisational factor (organisational legitimacy).[39]

Team Climate Inventory (TCI): A psychometrically robust 32-item five-factor instrument applicable for group-level analysis of team vision, participant safety, support for innovation, task orientation and interaction frequency.[40]

(3) Interviews/focus groups

Qualitative data generated from the LRGs and key stakeholder interviews to describe changes in partnership linkages, problem resolution and impact on local, regional and statewide policy formulation.

The chosen tools

The following tools were chosen and for the following reasons:

SNA – because it would make a collective and public description of the partnership

TCI – because it was a relatively short and well-validated self-report tool to do with team factors relevant to a partnership

WPQ – relevant items were chosen around individual and team factors that influence work practices. Particular concerns related to the WPQ were the following:

- The use of the western definition of mental health implied in the WPQ may not make it applicable to Aboriginal staff where the term social and emotional wellbeing is used.

- The WPQ was long and not as applicable when compared to the other tools.

- The Individual Career Motivation subscale might not be as relevant to Aboriginal staff, as this would not capture motivations that were more community-oriented.

Changes to instruments were made to make them relevant to the topics at hand as well as grammatical changes to ensure some questions made sense within the context. Some subscales were dropped (particularly from the WPQ) for the sake of brevity and reduced duplication across the suite.

In both programs it was agreed that the RAT originally proposed might be used later on (e.g., as a group exercise after the data collection period) as a means of further working on the partnerships. However, as the project developed the RAT technique was not used because the administration and responding to the data from the other instruments took considerable time. In addition, both partnerships had internal issues to deal with before the RAT technique would have been appropriate.

2.5. Aboriginal Health Worker focus group (diabetes project)

In the diabetes project only five of the 10 Aboriginal Health Workers (AHW) and Health Education Officers (AHEO) from the clinics participated in the survey. This was because of some workers unavailabilty for the interview, or because (it was suggested) the survey was not an appropriate method for collecting data from them. The survey asked questions in quite a direct manner about relationships with others with this data then displayed along with workers' titles. Hence there was not anonymity and anecdotal evidence from workers suggested they were not comfortable in providing information in this way. We were informed that a more narrative, "yarning" or story telling approach may be more acceptable. In order to capture more of the voices of the Aboriginal staff, we decided to hold a focus group with them. The value of the focus group approach was later verified when two health workers informed one of the research officers that it was good that someone was interested in how they feel, as some of their frustrations were being heard.

An Aboriginal research officer and non-Aboriginal research coordinator conducted the group that was held at the Aboriginal Medical Service. Two groups were held. In the first group the facilitators commenced the discussion by asking the AHWs and AHEOs what health means to them and what had been their experiences as Health Workers. Once a level of comfort was established, issues were raised around their role and of cultural beliefs around taking medication. The research facilitators ensured the discussion covered the following themes:

- Current role of the AHWs and AHEOs in the diabetes clinic clinics.

- The role AHWs and AHEOs would like to see for themselves in the diabetes clinic.

- The unique contribution and knowledge that AHWs and AHEOs can bring to the diabetes clinic.

- How to get from what AHWs and AHEOs do now to what they want to do.

- Ways the AHWs and AHEOs could improve the ability of Aboriginal clients to access and use medications

The sessions were of two hours each. Five AHWs and one AMS manager attended the first session and spoke about the issues outlined above. These issues were thematically coded and analysed. They were fed back to the second focus group, which consisted of three of the original AHWs who participated in the first session, two additional AHWs and a different manager from the AMS. The goal of the second session was to confirm that the summary provided by the researchers was consistent with the message the first focus group wished to provide and to provide additional information to the first session. Following the second session, additional comments were included in the summary. Permission was given by the participants for the data to be presented to the Steering Committee and LRG and permission was also given to include the summary of results in the final project report.

2.6. Key informant interviews

A key informant interview was conducted at the diabetes site in response to the survey. This was at the request of the diabetes program coordinator and that person's line manager, who wanted to add contextual information to the survey findings. At this interview we covered the following topics:

- The original vision/aims/objectives as well as any evidence they based the programme on/service philosophy and underlying concept of the program.

- The success of the program in achieving vision/aims/objectives.

- Challenges faced and how they have been overcome/continuing challenges

- Workers and their intended roles

- Other contextual issues (from program inception to the present)

- Future vision for the program.

At the end of the project we also conducted interviews with key informants from both sites. These were used to seek information about whether the participatory action research process had been

valuable in helping each partnership to work on its problem. Thirteen informants from the mental health project and 10 from the diabetes project were identified (see table 1). Key informants were identified as those most closely involved with one of the teams and who were informed about what the research had involved.

In the mental health partnership 11 out of 13 interviews were conducted and in the diabetes partnership eight of the 10 were conducted.

The following were the interview prompts:

- The informant's expectations of MAHPET and whether these were met

- Usefulness of the MAHPET process and the information it generated

- Current and anticipated future changes to the mental health/diabetes partnership as a result of MAHPET

- Extent that MAHPET enabled your voice to be heard/facilitated your input to the partnership

- The influence of MAHPET on policy

- Cultural and methodological safety of the research

All of these interviews were recorded and notes made from these rather than verbatim transcripts.

Table 1: Identified key informants

Mental health project	Diabetes project
1. Statewide country mental health manager	1. CEO Aboriginal Medical Service
2. CEO Aboriginal Medical Service	2. Aboriginal portfolio manager, Area Health Service
3. Regional mental health manager	3. Regional community health manager, Area Health Service
4. Social and emotional wellbeing team member, Aboriginal Medical Service	4. Diabetes clinic pharmacist
5. Regional Principal Mental Health Clinician	5. Diabetes clinic pathology technician
6. Team leader, Outreach Service	6. Manager local community health service
7. Team member, mainstream mental health team	7 Clinic manager, Aboriginal Medical Service
8. Aboriginal mental health policy officer, Department of Health	8. Aboriginal health worker, Aboriginal Medical Service
9. Senior portfolio manager, Department of Health	9. Manager, local Aboriginal health clinic
10 Regional hospital mental health liaison	10. Aboriginal health education officer,. Area Health Service
11 and 12. Aboriginal members of LRG (only one interviewed)	
13. Partnership project officer	

2.7. Project records

The following documentary sources were used to describe activities that occurred during the project and also the response of stakeholders to these activities.

- E-mail correspondence
- Project staff field notes
- LRG and other meeting minutes and reports
- Workshop and feedback session reports

2.8. Analysis

Stakeholder survey

Social Network Analysis (SNA)

The data from the SNA surveys were entered into UCINET software[48] to generate maps and tables that displayed the presence of links between workers and agencies. The data were summarised and reported descriptively.

Data were summarised for use by the LRGs to inform the areas of strength and opportunities for partnership development for each of the following network relationships:

- sharing of clinical information
- sharing of cultural information
- the provision of team-based care
- management and planning of services
- policy development

To overcome some of the bias associated with self-report surveys, we did not use the data that each worker reported as evidence of their own links (called OutDegree), but rather we used what all the other workers said about their links to this worker (called InDegree) as the link score for that particular worker. For example if worker A reported links to 20 out of 22 other workers (OutDegree score), that is A's reporting about them self and this score would be subject to A's possible bias of over - or under-estimating of their links. If 17 of the 22 other workers reported links to A (InDegree score), that then is the self-reporting of those 22 workers about who A is linked to – while this is still subject to the bias of under - or over-estimation, it is more likely that this bias will be evened out across the 22 respondents.

Maps

Separate maps were made for each type of relationship. The maps displayed each of the workers as a circle and the links between them as lines. The size of circles were adjusted according to the number of links involving that worker. This made it possible to see which workers were the most highly linked and who were the main "connector" workers in the network for each relationship. In the mental health site we also mapped the links between the agencies in the partnership and other outside agencies and in this case each circle represented an agency.

Tables

We used two sets of tables to show link scores.

Worker scores: The first were the scores that showed the number of other workers with whom each was linked (degree centrality) and then also a score that showed the extent to which a worker was an intermediary link between others (betweenness centrality). These centrality scores were measures of a worker's importance, either in terms of the number of other workers with whom they were linked or the role that they played as an intermediary, gatekeeper or broker between groups of other workers.

Network scores: The second were scores that showed the number of total links across each of the relationships surveyed. When this score is divided by the number of workers in the network (mean links) this shows the average number of others that each worker is linked to. Higher mean links

indicates that more workers are involved with each other and this suggests a stronger network relationship relative to a network with lower mean links (all other things being equal, particularly as the number of links does not measure the frequency or effectiveness of communications across a link).

An example of a map and table (network scores) is provided here.

The map (Fig 2) is a sociogram that displays which workers are linked in a management and planning network. Each worker is represented by a circle. The colour represents a category of worker, which in this figure is yellow = Aboriginal, blue = non-Aboriginal and red = non-Aboriginal but working for the Aboriginal Medical Service. The circle size represents number of links they have with other workers . The most central actor in this network is the program coordinator.

Table 2 shows the mean number of links for each relationship according to the Aboriginal status of the worker and also the total number of links per network relationship. The most highly linked relationship is for team care (total links) and the non-Aboriginal staff are more highly linked on this than the Aboriginal staff (mean links).

The presentation of these maps and tables only used dichotomous data from the survey, that indicated whether a link existed or not. We did not include the data on link frequency or link effectiveness on the maps as this would make them too busy.

Fig 2: Sociogram of management and planning network

18
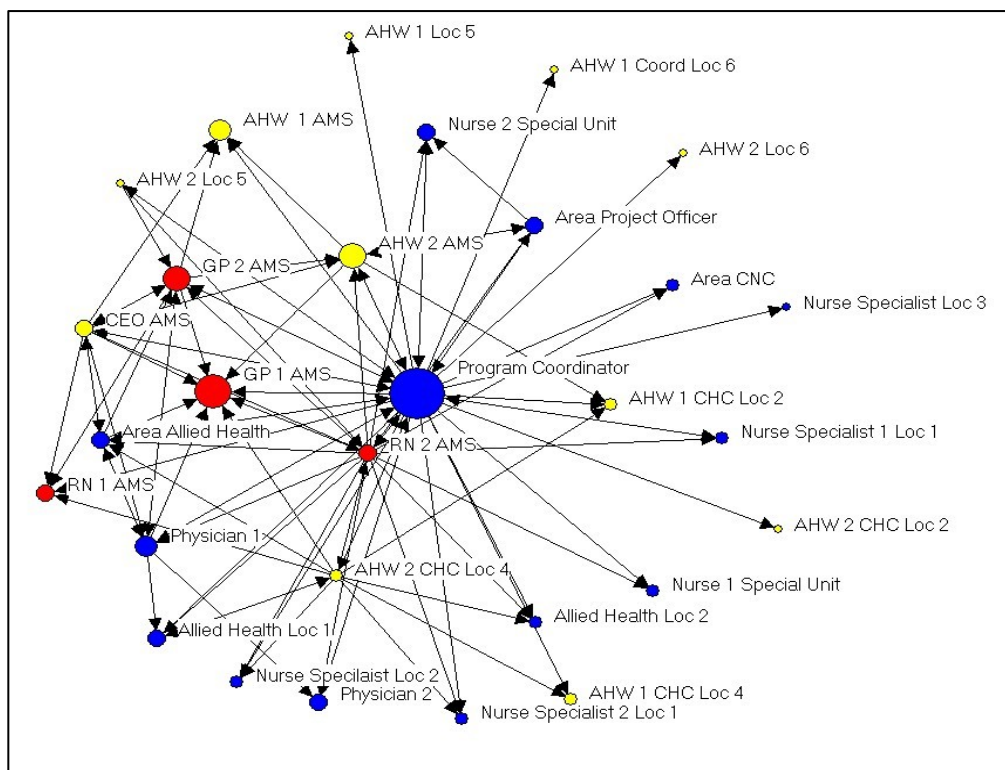
Table 2: Mean links by work status and total links across seven network relationships

	Aboriginal staff	non-Aboriginal staff	total links
Clinical info			
Give	3.0	6.9	155
Recive	3.3	6.6	158
Cultural info			
Give	7.4	2.1	92
Receive	2.2	3.7	120
Team Care	6.7	10.8	261
Mgmt/ Plan	2.1	3.3	84
Policy	1.1	1.3	34

Team climate and work practice survey

Likert-type items were described using means and 95% confidence intervals. Because of the small number of participants, the results were analysed descriptively and all participants (Aboriginal and non-Aboriginal) were analysed as one group. Analysis was a simple display of those items that were scored highest and lowest, identified from those where confidence intervals did not cross.

Feedback prompts

In action research there are not distinctive data collection and analysis phases. Part of our analysis of the findings from the survey included the interpretation of these findings by the members of the LRG. Eliciting these interpretions required a data collection strategy and we used the following prompts to elicit discussion at the second and third LRG meetings.

Second LRG

In the large group:

- Which workers/agencies are/should be most central to the network?

- Which workers/agencies have strong links and how can these be capitalised?

- Are there opportunities to strengthen some links between workers/agencies?

Then in small group work

- What are the good things that you've seen from today's presentation?

- What are the challenges that stand out from today's presentation?

- Turn the challenges into questions that can be acted upon.

Third LRG

- How useful was the MAHPET project to you and how have you been able to use the information from the project?

- What were your expectations of MAHPET and were these expectations met?

- What has changed in the partnership or what future changes do you anticipate as result of the MAHPET project?

- Did the MAHPET project help you to have input about the partnership?

- Has the MAHPET project had any influence on policy about Aboriginal-mainstream service partnerships, locally, in the region or in the state?

- Was the research conducted in a culturally safe way?

Project records (LRGs, focus groups, meetings and key informant interviews)

The project generated considerable qualitative data from the LRGs, focus groups, meetings and key informant interviews. The project coordinator reviewed and collated these data into files under the following relevant headings"

- Background

- Method

- Results

- Issues

- Appendices

Both the project coordinator and one of the chief investigators then iteratively themed the data for use in the research report. Specifically we were looking for data that would inform the following:

1. What was the sequence of events/activities (formal and informal - planned and unplanned)?

2. What was the purpose of each activity?

3. Who was involved?

4. What were peoples' reactions?

5. What was the outcome?

The key informant interviews were recorded and notes were made from these recordings. Themes were identified from the notes according to the interview questions and other themes were iteratively identified as the researcher listened to the recordings and read the notes.

2.9. Ethical issues

Approval for the study was gained from the human research ethics committees of the University of Sydney, the NSW Aboriginal Health and Medical Research Council, the Aboriginal Health Council of SA and the relevant Area Health Service. Participants were provided with an information sheet and signed a consent form prior to taking part in the study. Where the study involved collecting data from Aboriginal participants, this was conducted either by a research officer who was Aboriginal or a research officer who had worked with that community and with whom the participants were comfortable.

Anonymity

An area of concern related to participant anonymity that can be jeopardised in case studies of relatively small organisational partnerships, where an action research approach was used to feed back the findings to the participants. The maps displayed staff positions in the partnership and these positions were able to be identified. Participants were informed of this prior to consent and where findings were sensitive and of specific concern, this was discussed with the relevant individuals and/or organisation prior to reporting.

3. FINDINGS & DISCUSSION

3.1. Local Research Groups

Three LRG meetings were held for each site. The intention was that the LRGs be small working groups with consistent membership from health worker, management, policy maker and community. However, the number and type of people who attended each meeting varied. Information of the LRGs at each of the sites are detailed below.

Table 3: Local research groups (mealth health site)

MENTAL HEALTH	LRG1	LRG2	LRG3
Date	Feb 2007	July 2007	April 2008
Attended	Participants (13) – Managers, service providers, community reps, policy officers, and research team.	Participants (19) – Managers, service providers, community reps, policy officers, and research team.	Participants (13) – Managers, service providers community representative, policy officers and the research team
Purpose	Seek input from the participants about th research, the methods to be used and the problem to be worked on.	Feedback of baseline results and respond to the questions • What good things from the data are important? • What are the challenges/problems? • Next steps	Establish whether the research project had benefited the partnership and to identify future partnership tasks.
Issues discussed	• Research tools and network bounding • Problem to be worked on • How to handle the presentation of data in a way that maximises the understanding and security of those involved The overall problem identified was the provision of co-care or supportive care (team care). This was broken down to the following subproblems: Movement of clients through the service network (patient journey) • Communication strategies (information exchange, transfers, co-care) • Funding for sustainability and development of services • Confidence with others in terms of competence (trust skills, cultural competence)	The survey results were presented and the response was as follows: • Results were an accurate description of the linkages between workers and agencies and demonstrated which were the main activities of the partnership. • The survey identified the functional place of the respective teams and also role position of various workers thereby revealing role and relationship strengths and weaknesses in the partnership. • Highlighted the demand on the Aboriginal team as a cultural resource for other teams when there was an Aboriginal client – concern expressed (1) that the Aboriginal team were not resourced to do this and (2) that mainstream teams should also develop some cultural resources of their own.	The feedback regarding the value of MAHPET process was recorded at this final LRG. The overall views expressed included that; • The survey had provided an accurate description of the partnership linkages at the time that it was conducted, • The MAHPET process had brought to the surface both the strengths, weaknesses and tensions that existed in the partnership; and • The ensuing discussions promoted by the survey feedback had been difficult but useful.

| | | • Challenges identified as the need to re-engage all of the teams to the objectives of the partnership, to strengthen team-based care and to improve worker morale across the teams.

The meeting identified the following tasks:
• Ensure feedback to core agency participants
• Convene a planning workshop to start dealing with issues that the research has raised
• Identify resource support requirements to work on the problem of improving collaborative care | |

Table 4: Local research groups (diabetes site)

DIABETES	LRG1	LRG2	LRG3
Date	Feb 2007	Nov 2007	NOT YET HELD
Attended	Participants (17) – Managers, service providers, community reps, local policy officers, and research team.	Participants (14) – Managers, service providers, community reps, local policy officers, and research team.	
Issues	• Research tools and network bounding • Problem to be worked on • How to handle the presentation of data in a way that maximises the understanding and security of those involved The issue of access to and use of diabetic medication was identified as the problem to work on and the nature of the problem was described as follows: • Access issues (e.g., not enough money to buy medications; transport; accessing GPs) • Service Provision (e.g., Multiple service providers present conflicting information; too many medications to take; interactions/dangers associated with food/alcohol/other medications) • Education (e.g.,	Findings from the research were presented and issues were identified around: • Communication across the partnership • Coordination supports • Current and future roles of Aboriginal staff in the clinics and • Lack of management processes. The LRG asked the research team to take the issues to the clinic management group to consider how to deal with the network problems identified. Following this, the LRG will: • Discuss ways to tackle the issues presented in the findings; • Develop strategies to improve access to and use of medications for Aboriginal people in the region. • Discuss how LRG members and the clinic team will be involved in	

| | | Understanding why it's important to take medications; education about how medication works) | the action phase of this research. | |
| | | • Client Issues/Beliefs e.g.,fear of admitting/ denial of being ill; sharing medications; forgetting scripts/not getting repeat prescriptions filled; remembering to take medication; fear of side effects | | |

<u>Policy representation</u>

At the mental health site we were able to secure the regular attendance of a policy officer from the state office, but we were not able to do this at the diabetes site. The previous association of the mental health policy officer with the mental health project and the chielf investigator may have had something to do with this.

<u>Community representation</u>

Approximately half the Local Research Group in the diabetes project was comprised of community members – these were Aboriginal Health Workers and Aboriginal Health Education Officers from participating organisations as well as members from each of the participating communities. One of the tasks of these community members was to assist in disseminating findings from the research to other community members. Additionally, project progress and outcomes were reported to the regional and local Elders Councils.

Value of the MAHPET to facilitate work by the LRGs on the identified problems

The intention was to have each LRG identify a service problem that they would work on once the baseline survey had shown where the partnership was strong and where partnership improvements could be made. The assumption to test was to see if the identification of these strengths and weaknesses would help the LRG (and hence the partnership) to solve that problem.

In the mental health partnership, the problem to work on was identified as the need to improve team-based care, specifically to do with the movement of clients through the service network, communication strategies and confidence with other staff. Hence the problem was easily framed in network terms, that is, the way that the partnership functions. In the diabetes project the problem was framed as a clinical issue, related to clients' access to and use of diabetic medication.

Other than unpacking elements of the problems at the first LRGs, both partnership made limited progress in addressing their problem. There were four issues related to this.

• Some staff in the diabetes project could not see a link between the network analysis and role clarification process and working on the problem of medication.

• The process of network analysis and role clarification conducted in a participative manner in a cross-cultural context took much longer than planned.

• When the coordinator of the diabetes project resigned this stalled any decision-making about working on the problem.

- In the mental health program one of the teams indicated that it was not committed to the partnership as it currently operated and the process used to problem solve (LRG meetings and workshops) up until this time had not resolved this.

The network analysis and role clarification did highlight two network problems, however, that then drew the attention of the stakeholders. In the diabetes program the networks were shown to be highly centralized and focused heavily on the role of the coordinator. In the mental health program, role clarification identified an absence of ownership of the Aboriginal staff in the partnership. Bringing these two network problems to the surface then required attention before it was possible to move onto other problem solving.

3.2. Other meetings

In addition to the LRGs other meetings were held in each project and the composition and function of these meetings varied according to the structure and needs of each project.

Mental health partnership

Additional planning meetings were held to begin addressing the problem, that is, to improve the processes of collaborative care across the current partner services and also to expand the number of agencies in the partnership. Some of these meetings occurred though existing structures in the partnership such as the joint service meetings and joint management meetings. In addition there were two one-day workshops to work through specific issues. The focus of these workshops included discussion about the roles and responsibilities of the mainstream and Aboriginal service providers as well as different models of care. Hence these discussions formed part of a role and service clarification process.

1. Joint planning workshop

The first joint planning workshop occurred in February 2008 with the purpose of bringing the four teams together to discuss and then to prioritise the issues to work on to improve team-based care. Seventeen staff attended from the four teams and an external facilitator was used to structure the discussion around the following three questions:

- What is most important to improve the support and care of other teams and team members?

Discussion focussed on the benefit to clients of a team-based approach, the need for effectiive communication and information-sharing processes, efficient response times to requests and referrals, valuing the different skills across the teams and ensuring that meetings are conducted in a way that is culturally inclusive of members from all of the teams

- How can we identify and address issues of low morale?

Discussion focussed on the need to value relationships between workers across the teams, to celebrate the diversity of these staff, to ensure that workers support members from their own and other teams as well, and for workers to reflect on their own practice and balance personal and professional life.

- What is unique and different about mainstream and Aboriginal health care that is valuable for the community?

There was considerable discussion about Aboriginal health care and the value of a holistic and family-centred focus as well as a proactive approach to home visits and follow up. Regarding mainstream health care, discussion was about the systematic approach to documentation. There was also discussion about the value to the client when workers across teams shared their knowledge, but also that each team had a responsibility to increase its own cultural capacity and not rely only on the Aboriginal team.

Near the end of the workshop the Aboriginal team expressed concern that the partnership was not intitiated or owned by them, that it did not meet their needs and that they were not adequately resourced to participate in the partnership.

2. Team care workshop

After the joint planning workshop an additional workshop was held in March 2008 specifically to determine what strategies could be used to improve team based care. Eleven staff attended and the same external facilitator was used. All the four core teams were involved in planning for the workshop which was to include discussions around the care of three hypothetical clients. Those attending included three staff from those agencies that were identified as being future members of the partnership, however no staff from the Aboriginal team attended due to urgent service delivery issues that arose on the day of the workshop.

Strategies discussed included the use of a client-oriented strength-based approach, developing cultural capacity in each of the teams to reduce pressure on the Aboriginal team, using crisis presentations as opportunities to commence care planning, improving referral processes, the inclusion of partnership working in staff job descriptions, and ongoing training.

Diabetes partnership

With the diabetes partnership, additional meetings were held with the managers of the Aboriginal Health Service, the Area Health Service and local Aboriginal policy staff in the absence of existing clinic management meetings. The purpose was to have a forum with decision-making managers to deal with the issues raised in the survey and LRG discussions. Three meetings were held, and present were the CEO of the Aboriginal Medical Service, the Area Community Health Service Director and also Aboriginal portfolio officers from the Area Health Service. The Coordintor of the diabetes clinic attended the first meeting but resigned, with the position remaining vacant for the period of the remaining meetings.

Discussion focussed on the function of the service, the role of the service coordinator and the role of Aboriginal staff in the service. After three meetings, further progress was put on hold until the vacancy of the service coordinator position was filled, which had only just occurred at the time of this report.

Both the CEO of the Aboriginal Medical Service and the Area Community Health Director indicated that the MAHPET process had provided the stimulus and also the content for them to meet and review the management of the partnership as well as consider the clinic role of the Coordinator and Aboriginal health staff.

3.3. Network mapping survey

Network bounding

The first survey task was to generate a list of people to survey, which was called the bounded network. Which names to include on the lists were identified by consultation with two to three key Aboriginal and non-Aboriginal service providers involved in each program. The bounded networks included all relevant clinic staff and managers purposively recruited from those health services that were core to each of the mental health and diabetes partnerships. We called this bounded network the "internals" and the network mapping here was worker-to-worker. However, because a service partnership does not exist in isolation, we also sought to map the network between these core agencies and other key agencies. We called this the survey of the "externals" and this network mapping was agency-to-agency (although the actual agent surveyed was a service manager or key service provider who responded on behalf of their agency). Because of time constraints and staffing issues at the diabetes site, we were only able to conduct the externals survey at the mental health site.

Survey

Surveys were all conducted by face-to-face interview except for four surveys that were conducted by telephone or videoconference.

Participants

		Mental Health (conducted May-July 2007)		Diabetes (conducted June - August 2007)	
		identified	surveyed	identified	surveyed
	number	21	20	29	22
	type	Staff included in the network analysis of the mental health partnership included Aboriginal health workers, mainstream mental health service providers and service managers. Of these, 4 were Aboriginal and 16 were non-Aboriginal.		Staff members of the diabetes clinics who included Aboriginal health workers and health education officers, medical officers, nurses and others. Clinic and service managers. Of those surveyed, 5 were Aboriginal and 17 were non-Aboriginal. Of the 7 not surveyed, 5 were Aboriginal.	
external	number	52	48	survey not conducted	
	type	The ' external' service agencies included in the bound network were made up of governmental and non-governmental agencies actively working in Aboriginal mental health.			

Findings

Selected results from the survey are displayed below to show the sort of information that was obtained. The information was shown to the LRGs in the form of maps and tables (for an example see figure 2 and table 2) but for brevity the main findings have been tabulated into narrative points here.

mental health partnership	diabetes partnership
SNA SURVEY (INTERNAL) • The management and planning and also the clinical information exchange networks were the most highly connected. • Less connection was observed in the provision of team care. • Non-Aboriginal workers were more connected than Aboriginal workers in the giving and receiving of clinical information, management and planning and policy. • Aboriginal workers were more connected than non-Aboriginal workers in the giving of cultural information. • Across all the relationships, connections centred largely on three workers and the question was raised about what would	SNA SURVEY • The team care network was the most highly connected, followed by the giving and receiving of clinical information. • Less connection was observed in the policy development network, followed by management and planning and the receiving of cultural information. • Non-Aboriginal workers were more connected than Aboriginal workers in the giving and receiving of clinical information and the provision of team care. • Overall, Aboriginal workers were more connected than non-Aboriginal workers in the giving of cultural information. • The Program Coordinator was highly central in the giving and receiving of

happen to the partnership if the workers in these positions were to change or their role changed.
- The place of each of the teams in the partnership relative to each other was shown, particularly the role of the Aboriginal team in the provision of cultural information.

clinical information, the giving and receiving of cultural information, the provision of team care, management and planning and, to a lesser extent, policy development. This worker was also the most important person in relation to maintaining the flow of information across these networks.

TEAM FUNCTION SURVEY (TCI and WPQ)
- Team spirit, teamwork and staff morale scored low relative to other items.
- While overall the purpose of the partnership was rated as being worthwhile, Aboriginal workers were less likely to:
  o Agree with the program objectives.
  o Agree that the objectives of the program were worthwhile to the community.

SNA SURVEY (EXTERNAL)
- Identified other agencies that were relatively highly connected to the internal agencies and also the chain of links through to important policy agents.
- Agencies were more highly connected on the exchange of clinical and cultural information and less connected on management and planning and also on policy.

TEAM FUNCTION SURVEY (TCI and WPQ)
Team Vision
- There was strong agreement that the goals of the Program were worthwhile to the Aboriginal community.
- There was less agreement that the goals of the Program were clearly understood or that these goals can be achieved.
Team Safety
- Responses in relation to safety in the team were generally high.
Task Orientation
There was reasonably strong agreement that:
- Program workers were concerned about achieving the highest standards of performance.
- Staff provided useful ideas and practical help to enable other workers to do their job to the best of their ability.
- Workers observe and provide feedback to each other to maintain high standards of work.
There was less agreement that:
- The Program has clear goals for members to achieve excellence as a team.
- The Program evaluates potential weaknesses to achieve best possible outcomes.
Interaction Frequency
- Workers agreed that staff keep in regular contact with each other, but were less likely to agree that team members have frequent formal meetings.
Work Practices
- There was strong agreement that:
  o Responding to diabetes-related issues is important.
  o Team members have a genuine role to play in responding to these issues.
  o The skills of the team mean that the team is well equipped to respond.
  o In general, team members had a good relationship with other diabetes program staff.
- There was less agreement about morale being high among the team and

	encouragement and support being often provided.
SUMMARY The SNA data identified that the focus of the partnership was in the exchange of clinical information and in the management and planning of services. Agencies across the network were not as well connected in the provision of team-based care. The Team Function data identified a lack of agreement about the value of the partnership and also that morale was an issue. As distinct from the internal networks, there was less connection in the management and planning with other agencies currently external to the partnership. However some key agencies were identified with whom this could occur. Identification of the position of each of the workers and teams in relation to each other illustrated where their were role strengths and weaknesses. This led to discussion in the LRG about strategies for partnership change (see description of LRG results above).	SUMMARY The SNA data identified the focus of the partnership as a clinical service with minimal links to do with management and planning or policy development. The operation of the partnership was shown to be highly centralised on the role of the Program Coordinator. The lower connectivity of the Aboriginal workers prompted discussion about their role in the clinics. The Team Function data identified that while there was agreement about the legitimacy of the partnership goals, there was less agrement that these goals were clearly understood or that evaluation of the partnership occurs.

3.4. Aboriginal Health Worker and Health Education Officer focus group

Ten Aboriginal Health Workers and Aboriginal Health Education Officers from the diabetes project attended the post-survey focus group and the following issues were discussed:

- Benefits of the partnership were confirmed as was the value placed on the roles of both the Aboriginal workers and also the visiting specialist staff.

- The importance of cultural and community input from the Aboriginal workers in case conferences. The front line role of these workers was described as being important to the clinical success of the program and these Aboriginal workers expressed a desire to play a greater clinical role.

- A range of cross-cultural challenges in providing a clinical service were described, including issues to do with communication and difficulties Aboriginal workers faced in performing their roles.

- Potential solutions to some of the issues related to Aboriginal workers playing a greater role in the delivery of outreach clinics.

The focus group provided a forum for the Aboriginal workers to express the value of the partnership program, their current role and also what they hoped for their future role. Hence the discussions formed a part, although not all, of a role clarification process.

3.5. Key informant interviews

Across both parnerships, common themes regarding the value of the research emerged. These included:

1. Expectations of how the research would help the partnerships and ultimate usefulness of the project results.

2. Identification and affirmation of one's own values, beliefs and goals in relation to the partnership, and those of other partnership members.

3. Got issues onto the table

4. Focus on client needs and improving accessibility in Aboriginal health and social and emotional wellbeing/ppls journey through services.

5. Finding ways of sharing and ways to go forward together.

6. Accessibility to research team: feedback and communication during the research project.

7. Suitability to this topic of the methodology, including cultural security and personal safety.

8. Transferability/usefulness of research.

Below is a summary of the themes drawn from the interviews.

1. Expectations regarding how the research could help the partnerships and ultimate usefulness of the project results.

Some of the key informants held few expectations about the capacity of the research process to help the partnership. However, others hoped there would be a number of different outcomes from the research in their area. For example, that service delivery may improve through better coordination of Aboriginal and mainstream services, including planning across the collaborating services and intensification of service delivery.

It was hoped that there would be more flexibility around delivery of health services and this expectation had to a certain extent, been met. Another expectation was that a there would be greater understanding around roles and information available to partnership members from the research. One informant hoped that the strength of the partnership would become clearer, as would the way the network members communicated with each other and that the partnership would become formalized and relationships between partners mended, following on from the research.

> "In terms of the clients, I would hope that they are the main beneficiaries.... that they get a service that really is meeting their needs.... I think there's been quite a bit of movement forward since the research began. I think there's been a lot of good will and planning."
>
> Key informant, mental health partnership

Key informants on the whole felt their expectations of the project had been met. One participant who had hoped to understand the strengths and weaknesses of the mental health network, found the SNA most helpful. It mapped out relationships, the strengths of various links, as well as exposing where they were the most fragile and people or agencies were isolated in the network. It also showed them where the key, or most dominant partnership members were and also exposed those areas where links were too thin with minimal or no links (that is, "isolates" in the network). This provided useful information to their network for planning and future policies in the partnership.

However, another key informant from the mental health partnership stated that they had expected the preliminary report to contain recommendations, which it did not.

In terms of the worth of participating, this participant felt that the project results illustrated the strengths of relationships that existed between individuals and agencies and identified areas that required some work. They also experienced a sense of roles becoming clearer within the network, with the mapping out of results on the board providing a picture and making them easier to understand:

> "One photo equals many words."
>
> Key Informant, mental health partnership

Another informant from the mental health network had hoped that the research would break down those things that made it difficult for clients to access services within the partnership. This expectation was eventually met, as information arose during the project meetings that led to more workers being able to go out into community to see clients, rather than holding appointments only at the service providers premises.

2. Identification and affirmation of one's own values, beliefs and goals in relation to the partnership, and those of other partnership members.

The research outcomes provided confirmation for one informant from the diabetes partnership, that the network co-ordinator's role needed to be supported, for example through the employment of an assistant, so that they could focus on clinical issues, rather than time consuming administrative tasks between clinics.

Additionally, the focus groups held with one of the partnership AHWs and AHEOs provided clear evidence of their wish to take on a more clinical role in service delivery. The informant hoped that as a result of the research outcomes, AHWs would be able to more actively participate before, during and after outreach clinics. This included acting as a kind of broker between clinicians and community members to ensure clear two way communication between the two and optimum effectiveness of the clinics. It was hoped that any future partnership management groups would consider providing extra training to allow AHWs and AHEOs to increase their skills and pursue this more clinical role.

This participant felt comfortable with the project processes:

> "(They) allowed issues to be raised so they could be addressed and not fester... (and) problems did get dealt with (unfortunately)!"
>
> Key informant, diabetes partnership

3. Got issue onto the table.

For an informant in the diabetes site, the MAHPET process enabled issues to be "put on the table", which meant that her concerns were no longer just her own "feelings", but rather network issues validated by the data about the network. This gave her strength to act:

> "MAHPET said it was not just me thinking this. It validated my feelings, my own observations I had made previously. That gave me some strength, some validity to start to address the issues ... It helped me to have input because it validated the concerns that I had. It opened up the conversation I think, it gave it a framework."
>
> Key informant, diabetes partnership

This impact did mean, however, that when the findings illustrated a negative aspect of the network, then this may have been confronting. While informants acknowledged this, they tended to accept that this was necessary for making partnership improvements:

> "If MAHPET had not come along it would have been a lot worse, because you would have had this division between the two teams, with one doing it the Aboriginal way and the other doing it the non-Aboriginal way. It didn't have the answers, it was up to the teams to work out what next."
>
> Key informant, diabetes partnership

We did seek to establish whether this confronting potential could have been damaging, either to individuals, sections of the partnership or to the partnership as a whole. While informants recognized this potential, their response provided quite a different explanation to this, in that the maps revealed issues and enabled subsequent discussion "without this getting personal". That is, the issues could be discussed in terms of the network characteristics rather than as a function of the characteristics of an individual. However, there was still some negative response as a Aboriginal manager observed:

> "The information that came out of it was valid and it may have ruffled a few feathers, but it was just the facts ... some people may have thought it was [that person's] problem, but it was just the way the network was."
>
> Key informant, diabetes partnership

The confronting aspect of some of the data and subsequent discussion was termed in one of the sites as "the difficult discussions that we had to have". This was then framed in an affirming way by these informants' observation that despite these difficulties, the partners continued to engage in these discussions, thereby signifying their commitment to working together and in wanting to make improvements.

Nevertheless, to be productive as action research, the MAHPET process needed to have a mechanism that led people in a constructive way towards dealing with the difficult discussions. We have described in earlier sections the workshops that were organized by the mental health partnership after the network survey was presented back to them. In the diabetes partnership a management group was formed to commence dealing with issues that the survey revealed. These were the means through which discussion could take place, and in that regard these "got people to the table". More importantly, however, the MAHPET process seemed to help the individuals in the partnership to take a reflective approach, because as one informant noted, there were always the researchers asking the partners, *"What do you find useful in this information, what would be a useful outcome for you?"*

4. Focus on client needs and improving accessibility in Aboriginal health and social and emotional wellbeing/clients' journey through services.

For one of the key informants from the mental health network, the information gained from the research was helpful in identifying barriers to Aboriginal clients in accessing services. They hoped that the research findings would lay out a way to deal these issues, such as the community visits mentioned above. Another key informant from the same network concurred:

> "There is a certain level of openness... A certain... debate that is happening in meetings, which was not there (before). There's been a voice added for Aboriginal workers to express themselves... Because of the open discussion and because of the enhanced appreciation of the other side's point of view, there's been a review of service delivery processes... where some flexibility has been introduced. Especially the area around home visits to clients and flexibility around the appointment system, which I understand was a very inhibiting factor in terms of making services accessible. There is a different way of looking at delivery of mental health services, in that there is an awareness that it's not the individual approach that matters, but the family approach.
> I also noticed from the mainstream health services, there is a keen desire to make a difference. There is a clear recognition of the fact that their service delivery might have had weaknesses in terms of really making them accessible to Aboriginal people. There is some introspection that is happening within the mainstream services that was not happening last year and the year before."
>
> Key informant, mental health partnership

This participant saw some clear improvements in accessibility of services as a result of the open discussion and subsequent taking on of different perspectives regarding service delivery.

> "There are a number of ideas that have come about as a result of the MAHPET project which could be used, especially at the agency level. Some of that is already happening at agency level, where we have had policies regarding service delivery around the area of home visits, provision of transport for clients and appointments with the flexibility I was talking about. One can see those policies that have really been very inhibitive, (are now) being slowly eroded or reviewed which I think is something positive."
>
> Key informant, mental health partnership

Another informant from the mental health partnership agrees that services have become more proactive, for example conducting home visits and follow-up on missed appointments:

> "Before it was so easy to say well if they don't want a service, close the case."
>
> Key informant, mental health partnership

5. Finding ways of sharing and ways to go forward together.

A number of informants found that the project was mostly helpful in allowing participants to have their voices heard.

> "There were always various forums for people to voice concerns. I felt comfortable and listened to. You could have phone calls or meet with the (local MAHPET) project worker on the ground. There were also the LRGs."
>
> Key informant, mental health partnership

Another participant from the same network felt the topics covered in the meetings were helpful.

> "These meetings addressed issues - how to address low morale (in the partnership), identified key success factors for partnerships to function well. Also the things that needed to be considered or (were) needed to support each other either within or across teams - to address one of the issues identified by the study: That supportive care or core care was week across the agencies."
>
> Key informant, mental health partnership

The project painted a picture that led to a better understanding of the roles of other partnership members and how they work together and also helped provide an insight into identifying potential future partner agencies to join the network.

Whilst some the maps helped to get the dialogue going, at the same time they brought key issues and tensions regarding partnership agencies and individual members to the surface, which was mentioned by quite a few informants. All of this reinforced to them, the need to continually build and work on partnerships. Through the workshops one participant felt that partners have come to understand each other better and learned about each others services. Open discussion occurred during the research between the partners and the individual staff within them about some of the difficult realities and roles, when to link and when not to. According to this key informant, however, this was a double edged sword:

> "But I guess its hard stuff to hear that you are not doing stuff right."
>
> Key informant, mental health partnership

Similarly, for a key informant from the diabetes partnership, whilst relationships were at times complex and uncomfortable, communication remained clear and open.

> "Meetings got heated at times but they were held in a transparent way and they were respectful. I felt listened to and consulted and was paid professional respect.
>
> Key informant, diabetes partnership

6. Accessibility to research team, feedback and communication during the research project.

Key informants interviewed generally found there were a number of forums for communication with the researchers and other participants. These included the LRGs and associate investigator meetings. It was felt that partnership members were able to express themselves freely, and most key informants reported feeling included and satisfied that their voices had been heard. In one key informant's view, this created a platform from which previously unheard voices were able to speak up:

> I think the project did help all agencies to present their issues and claim their voice especially with regards to Aboriginal people. They were able to have their say to the extent that I think other services felt they could not say much for fear of saying the wrong thing. (Aboriginal and non-Aboriginal) agencies were provided with an opportunity to say what they thought and

> what they felt about the project and how things could be improved. This has helped to broaden understanding of issues... It's difficult to say how that got managed... what I could see (was) people felt they had something to say but they could not say it. The only way in which their participation could be encouraged is to ask them. But if they maintained their silence there is nothing one can do. But the good thing for me is, it (the Aboriginal voice) was a voice that needed to be heard, because it had not been heard.
>
> Key informant, diabetes partnership

The feedback and verification processes were found by one key informant in the mental health partnership to be very helpful in engaging partnership members. These methods were helpful in encouraging participants to progress the research and come up with next steps for the partnership to take.

> The participants were involved in all the processes, but not only that, they were involved in what to do with the information that they were given. I think that that was quite a good thing, in addition to the workshops providing the forum for good discussion.
>
> Key informant, mental health partnership

7. Suitability to this topic of the methodology, including cultural security and personal safety.

One key informant from the mental health partnership did have communication problems with the research team. They missed receiving emails with vital information about the project. Whilst the participant found the electronic communication to be a bit "all over the place" early on in the project, they found the local research officer really useful, in that they could refer to them and get a quick response. They believe the project would not have worked as well if the project officer was not a local, situated in the research setting and also "because of their approachable nature".

At least two key informants from the mental health partnership raised concerns about timelines for the project; however, the majority view was that the research processes had been well paced. Another key informant from the same partnership was generally satisfied with the methodology and the levels of personal and cultural safety built into the research. However, they clearly expressed frustration regarding the limitations of the project timeline and how this may have impacted on the ultimate usefulness of the research to the partnership. They felt strongly that it limited the full application of the methodology.

> "What I felt maybe we could have done better... I was expecting that we would have enough time to implement that action further in the research project, so that it would allow time for changes to be made and be observed. So that when one talks about what has changed as a result of the project, we would be talking about changes that would have happened after... working on the problem, (then) see through another study... what has changed as a result of that action... or as a result of implementing the identified solution to the problem... This is due to the fact that the project was running late from the word go so there was not enough time for that. It makes the impact of the project felt a bit more and you really get down to the bottom of things in terms of what has really changed as a result of dealing with this identified problem, which action research really should be doing. Flexibility... more time would have helped to identify some of those things. It would still be good if someone could come back to us, and see what has changed".
>
> Key informant, mental health partnership

Some participants considered one on one interviews more favourably than self-reporting forms; the involvement of participants in focusing the research was identified as a positive innovation.

Whilst displaying map (SNA) results on the board did not permit anonymity, key informants from the mental health partnership reported that they anticipated this after having been pre warned this would be the case even though names would not the used.

Another participant from the same partnership felt that allowing free and open discussion through the project methodology meant that crucial cultural issues were able to come out.

> It helped AHWs to have a voice and express themselves re how they felt about the partnership and how services should be delivered in a culturally appropriate way. From that came the realisation that there were a couple of paradigms involved in Aboriginal mental health - the medical model as well as the Aboriginal model - that each of the two does have it's own strengths and weaknesses. The MAHPET helped to make the services involved... aware of the existence of the paradigms, but not only that, for them to appreciate the importance of each of the two paradigms. Which it helped to have people look at things in a different way rather than look at one as the gold standard and that's the one that should be followed... People now feel that... there's no one service that is more important than each other and that each needs to support each other, especially around the client. There is an increased awareness that did not exist before - if there was, it was very little - people have started to regard each other in a different way.
> Key informant, mental health partnership

According to another participant from the same network, the learning from the cultural issues that came up should be taken up and used to strengthen the partnership.

8. Transferability/usefulness of research.

There was a mixed response from key informants regarding the influence of the project on policy.

> "None have changed but they could, particularly regarding AHWs being allowed to take a greater (clinical) role. AHWs currently have restriction on the clinical work they can do. AHWs in isolated areas would like to be skilled up in a clinical role so they can do things in their area like basic clinic assessments. This was an issue indirectly identified in the research. The AHWs weren't participating more in the (diabetes) clinics because of a lack of skill in clinical areas, because we're engaging all the specialists (instead). If we can influence human resources policy, communities wouldn't then just perceive AHWs as community transport."
>
> Key informant, diabetes partnership

However, a major use of the MAHPET information was to open up problem-solving communication. In both sites this communication was concerned with the purpose of the partnership and what were appropriate worker roles, which in one site led to an increased role of Aboriginal Health Workers in clinical duties.

> At the Aboriginal Medical Service we have now allowed the Aboriginal Health Workers to take on some of the clinical role ... the MAHPET data gave us information that the Aboriginal Health Workers wanted this, so that is happening now. The quality of things that [you] got was not just a wish list, but real things that people wanted to do and we have been able to act on that.
> Key informant, diabetes partnership

The clarification of roles in one part of a clinic also had an impact on the way that work was performed by others:

> We are refining how recording is being processed and how we are writing up our reports. The files are now written up on the day by health staff rather than all coming back and being written up by the coordinator later. This means that patients' GPs are getting reports back quicker which also means that follow up can happen in between clinics.
> Key informant, diabetes partnership

MAHPET enabled both partnerships to self examine; in the diabetes site to re-evaluate the purpose of the clinic and to consider which members of the community were being best served and in the mental health site to examine which partners benefited most and who were the partnership drivers.

The level of impact to date was identified at the local level, that is, within the clinical partnerships. Informants suggested that any wider policy impact might occur as an outcome of a final report.

The local policy impacts were described as the following:

- Formation of decision-making groups at both sites to consider and act on the findings

- Commitment at both sites to bring the MAHPET data into future planning

- A formal memorandum of understanding agreed upon at the diabetes site and a partnership agreement drafted at the mental health site

- The changed role of the Coordinator and Aboriginal Health Workers in the diabetes partnership.

- A commitment to the partnership to be included in the staff work plans at the diabetes site and a similar commitment is being considered at the mental health site

One informant held out hopes the MAHPET research can result in a paper or briefing to area health service management regarding furthering the clinical skills of AHWs, however they knew this would take commitment and a lot of work with support from clinicians, the project working party and the research team.

For a key informant from the mental health partnership, they felt uncertainty regarding the transferability of the research to policy level. They appeared to express frustration that the policies to help their network were in fact already in existence.

> "Because there is a lot of policy documents that deal with Aboriginal social and emotional wellbeing issues and in those documents you find the definition... the Aboriginal perception of mental health and how they feel mental health and social and emotional wellbeing should be addressed. It's all there on paper somewhere but it's not happening on the ground.
> Services are still operating using the one model: the medical model, without looking at this other model to see whether that can also be used to complement service delivery so that things really improve for the Aboriginal client who happens to sit between the two paradigms. What needs to happen for the partnership to act, whilst it might be difficult to operationalise, the objective should be to put Aboriginal people in charge of their own affairs. And I think some of the documentation does talk about deferring to Aboriginal people the lead role in providing services to their own people.
> In terms of partnerships built around Aboriginal mental health, it would be to ensure that Aboriginal people do have, right from the onset, ownership... in the real sense, of the partnership. And that any other people could only come in to support rather than take the lead role."
>
> Key informant, mental health partnership

At the network level at least, the key informant felt that the partnership should consider ways to implement the ideas generated from the research. The ideas could be implemented at three different levels:

1. Individual worker.
2. The agency or the service.
3. The level of the partnership.

They felt that whilst some findings from the research had already been considered and implemented, others needed to be captured in the partnership plan so they were followed through and not left on the shelf.

> "The key thing will be implementing things at the agency and individual level. This will be a challenge for the (mental health) partners to ensure that happens within their service. There is still room to implement so many ideas that were generated by the MAHPET project."
>
> Key informant, mental health partnership

However perhaps of most crucial importance to this key informant was the issue around what to do with the information that arose from the research regarding the ownership of the partnership objectives.

> The biggest challenge... if the partnership has to be a success and has to be sustainable, there needs to be a revisit and continually review the ownership of (the partnership) to ensure that at all stages, all parties buy into the objectives. That all parties are given the opportunity to talk about areas where they feel they are not happy about the objectives. (And) that process is inbuilt and is followed through. That factor alone will determine the success or failure of the partnership. That is the main and most critical area.
>
> Key informant, mental health partnership

The informant also strongly felt that for the partnership to survive, it should be able to justify its use to its target clientele:

> "...by providing services which are tangible or services which can be felt within the Aboriginal services as well as the Aboriginal community as providing an addition benefit to them. That has been the weakness - the visibility of (the mental health partnership) has not been that strong and I want to take the blame for that as well... the services... provided through the partnership are less evident to Aboriginal people... It's possible... It's only a matter of working how that could be done and... coming up with action plans which address some of the issues that are core to Aboriginal people, are relating to Aboriginal mental health. Because if those issues are core and Aboriginal people start seeing changes around those issues, then they will feel that the partnership is important. But if that cannot be seen then I think there will continue to be problems.
>
> Key informant, mental health partnership

4. KEY LEARNINGS

The findings from the key informant interviews do indicate that the MAHPET process had been of value in helping each partnership. However, this value was not in ways that had been anticipated either by the research team or by the partnership stakeholders. In this section we discuss what we have learnt from the process used in MAHPET.

4.1. Indicators of success

We had identified three broad indicator types that we had planned to use to determine whether the MAHPET process had been successful in relation to the research question. The question was the following:

Did the MAHPET process help to (1) strengthen Aboriginal-mainstream service partnerships and (2) promote the transfer of the evidence about the effectiveness of these partnerships into policy?

Three broad indicator types were proposed to determine whether these questions were answered:

1.   Resolution of the problem that each partnership wanted to work on.

Little progress was made on the resolution of each partnership problem. In the mental health site, the fundamental basis of the partnertship was challenged when the Aboriginal team questioned the benefit of it to them. Hence the very ownership and driver of the partnership became the issue more so than the need to improve team care. In the diabetes site, the roles of the coordinator and the Aboriginal staff became the issue more so than access to and use of diabetes medication, though indirectly both the coordinator role and the role of Aboriginal staff in clinic activities could be seen to play an important part in improving the ability of the clinic to improve access to and use of diabetes medication.

While the proposed problems were not resolved, a clear description of the strengths and weaknesses in the networks was identified. This meant that problems that did in fact exist (but were not made public) were now "put on the table" and so had to be dealt with. For our key informants this was seen to be progress towards a better understanding of the partnership issues and presentation of those issues with the clarity afforded by SNA, even though this made it seem as if the partnership had deteriorated rather than improved.

2.   Improved partnership function.

There were two reasons why we did not conduct a repeat survey of each partnership. First it took much longer than we had planned to set up and conduct the first survey, which left inadequate time for a second survey. Second, the fundamental challenges that each partnership faced meant that the context did not seem right nor were the issues sufficiently resolved for a second survey to be appropriate. Hence, we do not have a repeat measure of changed partnership function. However, the results from the key informant interviews suggest that the foundation for partnership change at both sites is present and that this is as a direct result of the research. At both sites, there has been the opportunity for frank and open discussion of the issues surrounding each partnership that may not have otherwise come to the surface and so have had a detrimental impact on the future of both partnerships.

Results from the network analysis and other data highlighted strengths and weaknesses in the partnerships. This information has been important to the future of both partnerships. For example, the lack of support for the clinic coordinator was identified as a potential weakness in the diabetes networks. The network data suggested that resignation or illness of the coordinator would be catastrophic for the partnership. Indeed, when the coordinator did resign during the course of the MAHPET project, outreach clinics were not conducted during the ensuing few months as a new coordinator was sought. A similar situation existed in the networks of the mental health partnership, where the "health" of a number of the networks depended upon the continued engagement of two key workers. When one worker suffered an extended period of illness and the other moved to a different position, the partnership, as predicted, suffered.

Additionally, there is direct evidence that MAHPET has helped to establish the environment in which the identified partnerships can grow into the future. At the diabetes site, management from both the Area Health Service and the Aboriginal Medical Service are discussing the partnership. There is also evidence that the Aboriginal Health Workers are taking a greater clinical role in the outreach clinics. At the mental health site, discussion has been enabled on issues of collaborative service delivery and the role of the SEWB team in the partnership. In addition, other partners have been invited, and have indeed accepted the invitation, to participate in the partnership.

3.   Lessons learnt and influence of the partnerships on service processes and policy.

The policy impact is documented in the previous section and the key lessons learnt are the basis of this whole section 4.

4.   Capacity Development.

At both sites, research capacity in the communities of interest was enhanced. At the diabetes site, Aboriginal project officers were trained in research processes. Project officers at both sites attended the initial training in SNA, made significant contributions to the development of the survey and were trained in focus group techniques and thematic analysis of qualitative data. They played important roles in the delivery of these aspects of the study. At both sites, those who participated in the action research through LRGs and subsequent meetings were exposed to the action research process and findings from this process.

4.2. Time required to use SNA with a PAR approach

MAHPET ran for two years. It was funded in July 2006 and the baseline survey was completed twelve months later in July 2007. The project was originally planned for completion in December 2007 but was extended for six months so that the issues revealed through the SNA survey could be adequately "put on the table" with some problem-solving activity. The originally planned repeat survey was not conducted.

While there were numerous particular factors that caused specific delays, many of these factors were unrelated and occurred across both sites. Hence the reason for the much longer time may relate simply to the period that is required in general to establish and maintain a cross-cultural action research study that involves collaborative problem identification and change.

Establishment

The project establishment stage took twelve months, which included the following:

- Consultation with local Aboriginal communities. Although this occurred prior to the submission of the proposal for funding, on-going consultation was required when specific issues needed to be dealt with, such as staff recruitment, the adaptation of the research tools and decision about local research group membership,

- Approval from the four ethics committees took eleven months.

- Development and administration of the survey instrument.

Data analysis and presentation

The analysis and presentation of the results of the survey and then discussion about the implications of the findings took another 12 months. Working through complex issues and processes required a patient and iterative approach. This approach necessitated appropriate timeframes to enable adequate and meaningful further consultation with key stakeholders, so that discussions and decisions could proceed on an informed and culturally secure basis.

Unanticipated events

In addition to the time required for such ongoing consultation, there were a number of unanticipated events which delayed activity. These events were:

- In one of the projects a significant team withdrew support for the partnership in its current form.

- In the diabetes site the coordinator of the partnership resigned and was not replaced until right towards the completion of the research project.

- In the diabetes case study, illness and resignation of our Aboriginal project officers meant that staffing changed four times.

4.3. Preconditions for an action research process using social network mapping

Capacity to partner

Why was it that the partners in these two programs did not get very far on working on their identified problems? The resignation of the coordinator in the diabetes program is one obvious explanation in that site. The reason for the expressed unwillingness of one of the teams to remain in the mental health partnership because of workload and lack of perceived benefit also provides insight about this. The value of the MAHPET process was most likely diminished in this situation where there was not the work capacity or motivation to use the information to make partnership improvements. To be in a partnership, a team would need so see the benefit of partnering in order to make the effort worthwhile, as well have a level of staffing and resourcing to put into partnership activities.

Engagement in the participatory research process

Underpinning a participatory action research process is the extent to which the stakeholders are engaged in the process. Hence, the question to ask here is how well engaged were the stakeholders, both in the LRG meetings and other activities? These stakeholders were the staff and managers of the partner services, relevant community members and also health policy makers.

In the mental health program, more so than in the diabetes program, we were able to initiate and sustain engagement with service staff and managers and also to some extent with the relevant health policy makers in the state health department. This may have been because of the following:

- Our half-time research officer in the mental health project was also a half-time project officer with the mental health partnership. Hence we had a participant researcher embedded in the mental health program who already had developed rapport and trust. We did not have this in the diabetes program.

- The mental health partnership had a well-established management structure through which the research could be negotiated.

- The problem that the mental health program chose to work on was a network problem and so the research data more naturally fed into this.

By contrast, in the diabetes program, there was not an operational management structure at the start of the research. Additionally, the program coordinator then resigned, which left the program "in limbo" for some months. The identified problem was not as clearly a network problem and so it took longer for the stakeholders at this site to see the relevence and engage with the network analysis. Despite these factors, which led to a slower engagement, by the end of the research the Aboriginal and mainstream service manager at the diabetes site were actively using the MAHPET findings to make changes to this program. There also appears to be some qualitative evidence of improved AHW/AHEO engagement. This is likely to improve the cultural appropriateness of delivered services, thereby increasing the palatability of the clinic to Aboriginal clients with diabetes, making communication with

clients more culturally appropriate, and over the long-term producing improvements in health outcomes.

Local key people can play a very important role as champions or as blocks in the continued engagement of sites in the participatory action research process. A number of these key people were identified and at least one at each site provided a challenge to the engagement of others. This was because their goals and/or beliefs were in some way in conflict with the partnership ideal or the direction that was taking shape as a result of the research. For example, one key person clearly stated that they did not think that partnerships were an appropriate method to deal with the issues identified in the community. Engagement with the service for which this key person worked was hampered throughout the life of the project because of this underlying belief.

4.4. Putting information about the partnership "on the table"

It does appear that the MAHPET process brought network problems to the surface and if so it would be expected that the partnership might feel worse (the problems were made obvious) before it would feel better.

There are questions, then, about whether there was adequate provision in the MAHPET process for these surfaced problems to be dealt with constructively. In the mental health program MAHPET did sponsor a partnership planning workshop for the teams to work out how to use the research findings to strengthen collaborative care. In the diabetes program a special group of Aboriginal and mainstream service managers was formed to deal with the network problems that were identified identified.

Regardless of the time and problem-solving supports required, it may be that the MAHPET approach was not appropriate for the nature of the problem. The PAR approach assumed that if the partners were provided with information about their network strengths and weaknesses, then they would use this as the basis from which to make improvements. If the problem was so much about where the partnership was weak or strong, but rather uncertain commitment amongst the partners as to its value, then this information would not be expected to help.

4.5. Need for robust discussion and problem-solving process

Responses to the survey data verified that the SNA mapping and the other tools adequately described the networks, identified their strengths and weaknesses and also the problems to work on. In both cases, however, the progress in working on the problem did not advance to the point where these problems were resolved. In fact progress on problem solving did not get that far beyond the problem identification stage. While MAHPET did facilitate considerable discussion through the action research groups (LRGs) and the problem-solving meetings in both programs, these did not seem to be enough to make significant problem-solving gains by the time of project completion. Significant team members, service managers and policy makers were not consistently engaged in attendance at these meetings. In the case of the mental health program, which did have management and decision-making processes, these LRG meetings were seperate from these processes. Hence, to optimise the value of the tools in helping partnership problem solving, as much attention needs to be given to strategies beyond the problem identification stage and this would require considerable resources, an iterative approach and considerable time.

4.6. Setting up an LRG

In both programs, we established local research groups that were in addition to any group structures that already existed. In the diabetes program where there was no existing planning group, it was necessary to do this. In the mental health program, however, there were existing planning groups, one at the level of the senior service managers and the other at the level of team leaders and staff. These planning groups were the meetings where stakeholder decisions were made about the partnership and so it may have been wise to have used these existing groups through which to run

the participatory action research process. In this way, the research could have then engaged with the program as it existed, rather than seeking to have the program staff engage with the research. Having the research embedded within the existing planning groups would have placed the research more centrally where the decision making was going on.

The benefit in setting up a separate LRG, however, was the inclusion of other representatives to provide a different perspective or new information (available through the involvement of the policy officers and other service managers) and to give the local community a 'voice' in the research.

5. CONCLUSION

The MAHPET research project has demonstrated that network analysis and role clarification processes can be used in Aboriginal-mainstream health service partnerships to make service improvements. However, the process was not straightforward. The method of collecting network data was not all that acceptable to Aboriginal staff, although all participants did find the network maps informative and also empowering. Both Aboriginal and non-Aboriginal participants wanted to add narraitive contextual information.

We found the real power of the process was that it "put the issues on the table", but this was also a feature to be cautious. This power of the data could also be confronting when the findings were negative. Hence as researchers we needed to take care that participants were fully informed and guided through the whole process, including in the "difficult discussions" that invariably had to occur.

A major conclusion for us, was around the considerable time required to undertake this MAHPET process in an Aboriginal-mainstream service partnership and also the amount of regular communication that was required at all levels.

Almost all participants in the MAHPET project found that they had gained a better understanding of the strengths and weaknesses of their partnership and that at least at the local level, this understanding has influenced local policy about how mental health and diabetes care were provided at these two sites.

APPENDICES

SOCIAL NETWORK ANALYSIS FOR THE DIABETES CLINIC – CORE MEMBERS

Listed on the scoring sheet are workers involved in some way in the provision, management or support of services for improving Aboriginal people's access to and use of medication for diabetes in the Diabetes Clinic catchment. We would like to know whether you are involved with these workers in relation to the access to and use of diabetes medication by Aboriginal people in the Diabetes Clinic catchment in one or more of the following ways.

A. CLINICAL INFORMATION EXCHANGE

For the purposes of the following questions, *clinical information* refers to information about the client's condition/illness and the treatment and care of that condition.

A1. If you give clinical information related to client care, tick each worker that you give clinical information to.

For each of the workers that you have ticked

A2. In general, how often do you give clinical information to this worker (*choose the most frequent*)?

daily	5
weekly	4
fortnightly	3
monthly	2
less than monthly	1

A3. In general, how would you rate the effectiveness of your communication of clinical information to this worker?

very effective	5
effective	4
adequate	3
ineffective	2
very ineffective	1

A4. If you receive clinical information related to client care, tick each worker that you receive clinical information from.

For each of the workers or that you have ticked

A5. In general, how often do you receive clinical information from this worker (*choose the most frequent*)?

daily	5
weekly	4
fortnightly	3
monthly	2
less than monthly	1

A6. In general, how would you rate the effectiveness of this worker's communication of clinical information to you?

very effective	5
effective	4
adequate	3
ineffective	2
very ineffective	1

B. CULTURAL INFORMATION EXCHANGE

For the purposes of the following questions, *cultural information* refers to information about the customs (beliefs, values and behaviours) of people that they have in common with others in their group

B1. If you give cultural information related to client care, tick each worker that you give cultural information to.

For each of the workers that you have ticked

B2. In general, how often do you give cultural information to this worker (*choose the most frequent*)?

daily	5
weekly	4
fortnightly	3
monthly	2
less than monthly	1

B3. In general, how would you rate the effectiveness of your communication of cultural information to this worker?

very effective	5
effective	4
adequate	3
ineffective	2
very ineffective	1

B4. If you receive cultural information related to client care, tick each worker that you receive cultural information from.

For each of the workers that you have ticked

B5. In general, how often do you receive cultural information from this worker (*choose the most frequent*)?

daily	5
weekly	4
fortnightly	3
monthly	2
less than monthly	1

B6. In general, how would you rate the effectiveness of this worker's communication of cultural information to you?

very effective	5
effective	4
adequate	3
ineffective	2
very ineffective	1

C. TEAM CARE

C1. If you join with other workers or agencies to provide health care to Aboriginal adults in the Diabetes Clinic catchment in order to increase their access to and use of diabetes medications, tick each worker that you jointly provide this care with.

For each of the workers or agencies that you have ticked

C2. In general, how often do you and this worker join together to provide this health care (*choose the most frequent*)

daily	5
weekly	4
fortnightly	3
monthly	2
less than monthly	1

C3. In general, how would you rate how well you and this worker join together to provide this health care

very good	5
good	4
adequate	3
poor	2
very poor	1

D. LEADERSHIP

For the purposes of the following question, *management and planning of mental health services* refers to the organization of current and future resources (human and material) and the development of strategies so that services can achieve their goals.

D1. If you manage or plan services related to increasing the access to and use of diabetes medication for Aboriginal adults in the Diabetes Clinic catchment, tick each worker with which you undertake this management or planning.

For each of the workers or agencies that you have ticked

D2. In general, how often do you and this worker work together to manage or plan these services for Aboriginal adults (*choose the most frequent*)?

daily	5
weekly	4
fortnightly	3
monthly	2
less than monthly	1

D3. In general, how would you rate how well you and this worker work together to manage or plan these services for Aboriginal adults?

very good	5
good	4
adequate	3
poor	2
very poor	1

For the following questions, *policy development* refers to negotiating and preparing statements at local, regional and statewide level that establish government response and service directions on particular issues.

D4. If you develop local, regional or statewide policies related to increasing access to and use of diabetes medications that are relevant to Aboriginal adults in the Diabetes Clinic catchment, tick each worker with which you undertake this policy development.

For each of the workers or agencies that you have ticked

D5. In general, how often do you and this worker work together to develop such policies? (please circle the number that applies)

<div align="center">

a lot   4   3   2   1   a little

</div>

D6. In general, how would you rate how well you and this worker work together to develop such policies?

very good	5
good	4
adequate	3
poor	2
very poor	1

Baseline Questionnaire for the Diabetes Clinic

A. TEAM CLIMATE

This set of questions contains a range of items concerning your views about how the DIABETES CLINIC members work as a team. Some items are presented as questions and others are statements. Please try to answer ALL questions.

For the first set of questions, please circle the number from 1 to 7 that best describes what you think about the DIABETES CLINIC.

	VISION	1 not at all	2	3	4	5	6	7 completely
1	How clear are you about what the DIABETES CLINIC goals are?	1	2	3	4	5	6	7
2	To what extent do you think they are useful and appropriate goals?	1	2	3	4	5	6	7
3	To what extent do you agree with these goals?	1	2	3	4	5	6	7
4	To what extent do you think other DIABETES CLINIC members agree with these goals?	1	2	3	4	5	6	7
5	To what extent do you think the DIABETES CLINIC goals are clearly understood by other members of the DIABETES CLINIC?	1	2	3	4	5	6	7
6	To what extent do you think the DIABETES CLINIC goals can actually be achieved?	1	2	3	4	5	6	7
7	How worthwhile do you think these goals are to you?	1	2	3	4	5	6	7
8	How worthwhile do you think these goals are to the DIABETES CLINIC?	1	2	3	4	5	6	7
9	How worthwhile do you think these goals are to the Aboriginal community?	1	2	3	4	5	6	7
10	To what extent do you think these goals are realistic and achievable?	1	2	3	4	5	6	7
11	To what extent do you think members of the DIABETES CLINIC team are committed to these goals?	1	2	3	4	5	6	7

For the next two sections, please circle the number that best describes how much you agree or disagree about the DIABETES CLINIC program.

	PARTICIPATIVE SAFETY	1 Strongly disagree	2 Disagree	3 Neither	4 Agree	5 Strongly disagree
12	We share information in the DIABETES CLINIC team rather than keeping it to ourselves	1	2	3	4	5
13	In the DIABETES CLINIC team everyone has a 'we are in it together' attitude	1	2	3	4	5
14	In the DIABETES CLINIC team we all improve and learn from working with each other	1	2	3	4	5
15	People keep each other informed about work-related issues in the DIABETES CLINIC team	1	2	3	4	5
16	People in the DIABETES CLINIC team feel understood and accepted by each other	1	2	3	4	5
17	Everyone's view in the DIABETES CLINIC is listened to by others in the team	1	2	3	4	5
18	There are real attempts within the DIABETES CLINIC team to share information with each other	1	2	3	4	5
19	There is a lot of give and take within the DIABETES CLINIC team	1	2	3	4	5

	SUPPORT FOR INNOVATION	1 Strongly disagree	2 Disagree	3 Neither	4 Agree	5 Strongly disagree
20	The DIABETES CLINIC program is always moving toward developing new solutions for Aboriginal people	1	2	3	4	5
21	Assistance in developing new ideas within the DIABETES CLINIC team is readily available	1	2	3	4	5
22	The DIABETES CLINIC team is open and responsive to change	1	2	3	4	5
23	People in the DIABETES CLINIC are always searching for fresh, new ways of looking at diabetes-related issues	1	2	3	4	5
24	In the DIABETES CLINIC team, we take the time needed to develop new ideas	1	2	3	4	5
25	People in the DIABETES CLINIC work with each other to develop and apply new ideas	1	2	3	4	5
26	People in the DIABETES CLINIC provide and share resources to help apply new ideas	1	2	3	4	5
27	People in the DIABETES CLINIC provide hands-on support to develop and apply new ideas	1	2	3	4	5

For the next set of questions, please circle the number from 1 to 7 that best describes your perception about the DIABETES CLINIC.

	TASK ORIENTATION	1 not at all	2	3	4	5	6	7 completely
28	Do your DIABETES CLINIC colleagues provide useful ideas and practical help to enable you to do the job to the best of your ability?	1	2	3	4	5	6	7
29	Do you and your DIABETES CLINIC colleagues observe and provide feedback to each other so as to maintain a higher standard of work?	1	2	3	4	5	6	7
30	Are DIABETES CLINIC colleagues prepared to ask questions about what you are doing?	1	2	3	4	5	6	7
31	Does the DIABETES CLINIC team evaluate potential weaknesses in what it is doing to achieve the best possible outcome?	1	2	3	4	5	6	7
32	Do members of the DIABETES CLINIC team build on each other's ideas to achieve the best possible outcome?	1	2	3	4	5	6	7
33	Is there a real concern among the team that the DIABETES CLINIC should achieve the highest standards of performance?	1	2	3	4	5	6	7
34	Does the DIABETES CLINIC have clear goals for members to achieve excellence as a team?	1	2	3	4	5	6	7

For the next section, please circle the number that best describes your level of agreement with each statement.

	INTERACTION FREQUENCY	1 Strongly disagree	2 Disagree	3 Neither	4 Agree	5 Strongly disagree
35	Members of the DIABETES CLINIC team keep in regular contact with each other	1	2	3	4	5
36	Members of the DIABETES CLINIC team have frequent formal meetings	1	2	3	4	5
37	Members of the DIABETES CLINIC team often meet informally to talk about the program	1	2	3	4	5
38	Members of the DIABETES CLINIC team interact frequently	1	2	3	4	5

B. WORK PRACTICE

This set of questions contain a range of items about your views on responding to diabetes related issues for Aboriginal clients, both for you individually and also amongst the members of the DIABETES CLINIC.

Please try to answer ALL questions.

Please circle the number which best describes your level of agreement with each statement in the questionnaire. For example, if you really like jazz music – you would circle number 4.

	Disagree	Tend to disagree	Tend to agree	Agree
I really like jazz music.	1	2	3	4

INDIVIDUAL

		Disagree	Tend to disagree	Tend to agree	Agree
i.1.	In my work I have responded to a wide range of diabetes related issues for Aboriginal clients.	1	2	3	4
i.2.	I am confident in my ability to respond to diabetes related issues for Aboriginal clients.	1	2	3	4
i.3.	I have the necessary knowledge to support Aboriginal clients with diabetes related issues.	1	2	3	4
i.4.	I do not have many of the skills necessary to respond to diabetes related issues for Aboriginal clients.	1	2	3	4
i.5.	I have a genuine role to play in responding to diabetes related issues for Aboriginal clients.	1	2	3	4
i.6.	I am uncertain of my role in responding to diabetes related issues for Aboriginal clients.	1	2	3	4
i.7.	I believe that responding to diabetes-related issues for Aboriginal clients is important.	1	2	3	4
i.8.	On the whole I am satisfied with the way I work with Aboriginal clients who have diabetes related issues.	1	2	3	4

DIABETES CLINIC

		Disagree	Tend to disagree	Tend to agree	Agree
t.1.	Responses provided by the DIABETES CLINIC team to diabetes related issues are of good quality.	1	2	3	4
t.2.	The skills of the DIABETES CLINIC team mean that we are well equipped to respond to diabetes related issues for Aboriginal clients.	1	2	3	4
t.3	There is good communication among members of the DIABETES CLINIC team.	1	2	3	4
t.4	There is good team spirit amongst the DIABETES CLINIC team.	1	2	3	4
t.5	Morale is high among the DIABETES CLINIC team.	1	2	3	4
t.6	Encouragement and support is often provided by members of the DIABETES CLINIC team.	1	2	3	4
t.7	In general I have a good relationship with other staff in the DIABETES CLINIC team	1	2	3	4
t.8	I feel comfortable to ask for help or support from my colleagues on the DIABETES CLINIC team.	1	2	3	4

C. PERSONAL AND ORGANISATIONAL DEMOGRAPHICS

TYPE OF ORGANISATION

1. What type of organisation do you work for? Please choose only ONE option.

Diabetes specialist service	01
Community health centre	02
Hospital	03
Pharmacy – community or hospital	04
Accident and emergency service	05
Private practice	06
Aboriginal Community Controlled Organisation	07
Other health agency	08
Social or welfare agency	09
Other (please specify) …………………………………………	10

2. Is the organisation you work for…

Government	01
Non-government	02
Private	03
Other (please specify) ………………………………………………	04

YOUR CURRENT POSITION AND OTHER DETAILS

3. What is your age in years?   Years ………..

4. What is your gender?

1	Male	01
2	Female	02

5. What is your cultural background?

1	Aboriginal and/or Torres Strait Islander	01
2	Non-Aboriginal	02

6. Which of the following best describes your current position in the workplace? Please choose only ONE option

Director of organisation	01
Manager of department or unit	02
Team leader	03
Team member	04
Staff member (work in organisation but not as part of team)	05
Independent staff (work solo e.g. rural worker, GP practice)	06
Self-employed	07
Other (please specify) ………………………………………………	08

7. How long have you been involved in the DIABETES CLINIC partnership? Please be as accurate as possible.

Years .... Months ....

8. In your entire working life, how much experience have you had responding to diabetes related issues for Aboriginal clients?

Years .... Months ....

9. Approximately what percentage of your working time do you currently spend responding to diabetes related issues for Aboriginal clients?

1-20%	01
21-40%	02
41-60%	03
61-80%	04
81-100%	05

10. What is your occupation? (e.g., Aboriginal health worker, nurse, GP, social worker, policy officer)

My occupation is: ....

11. Please circle your PRINCIPAL AREAS OF PRACTICE. You can circle up to TWO areas of practice

Administration	01
Service management and/or program and service development	02
Policy officer/ area portfolio manager	03
Direct health treatment and intervention in primary health care settings (e.g. community health, general practice, Aboriginal health)	04
Direct health treatment and intervention in acute health service (e.g., hospital inpatient)	05
Health promotion/prevention work	06
Social/welfare work (e.g. community development/work, social work, advocacy, housing)	07
Other (please specify)	08

References

1 Mackean T,, Adams M, Goold S, Bourke S, Calma T (2008) Partnerships in action: addressing the health challenge for Aboriginal and Torres Strait Islander peoples. Med J Aust 188(10): 554-555.

2 Ring IT, Firman D (1998). Reducing Indigenous mortality in Australia: lessons from overseas. Med J Aust; 169: 528-533

3 National Aboriginal Community Controlled Health Organizations and Oxfam Australia (2007). Close the Gap: Solutions to the Indigenous health crisis facing Australia. Fitzroy, Victoria: Oxfam Australia.

4 National Aboriginal and Torres Strait Islander Health Council (2004) National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003-2013. Canberra, Commonwealth of Australia.

5 Council of Australian Governments Communique 25 June 2004.

6 Dwyer J et al (2004) National Strategies for Improving Indigenous Health and Health Care. Aboriginal and Torres Strait Islander Primary Health Care Review: Consultant Report No 1. Australian Government Department of Health and Ageing, Canberra.

7 National Health Priority Action Council (NHPAC) (2006), National Chronic Disease Strategy, Australian Government Department of Health and Ageing, Canberra.

8 National Health Priority Action Council (NHPAC) (2006), National Service Improvement Framework for Diabetes, Australian Government Department of Health and Ageing, Canberra.

9 Australian Health Ministers (2003) National Mental Health Plan 2003-2008. Canberra, Australian Government.

10 Australian Health Ministers Advisory Council (2004) Social and Emotional Well Being Framework: a national strategic framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Well Being (2004-2009). Canberra, Australian Government.

11 NSW Department of Health (2005), NSW Aboriginal Chronic Conditions Area Health Service Standards, NSW Department of Health, Sydney.

12 National Institute of Clinical Studies (2003) Factors supporting high performance in health care organisations. Prepared by the Health Management Group at LaTrobe University, NICS, Melbourne.

13 Johnson P et al (2003) Interagency and interprofessional collaboration in community care. The interdependence of structure and values. J Interprofessional Care, 17(1): 69-83.

14 Fuller J (1995) Challenging old notions of professionalism: How can nurses work with paraprofessional ethic health workers? J Advanced Nursing, 22: 465-72.

15 Wilkinson et al (2002) The New Rural Health. Oxford University Press, Melbourne.

16 Villeneau L et al (2001) Establishing process indicators for joint working in mental health; rationale and results from a national survey. J Interprofessional Care, 16(2): 139-47.

17 Fuller, J. Martinez, L. Muyambi, K. Verran, K. Ryan, B and Klee, R. (2005) Sustaining an Aboriginal mental health service partnership. Medical Journal of Australia. 183(10):S69-S72.

18 Sibthorpe B et al (2005) Emergent themes in the sustainability of primary health care innovation. MJA 183(10)s77-s80

19 Houston S and D Legge (1992) Aboriginal health research and the National Aboriginal Health Strategy. Australian Journal of Public Health. 16(2):114-5.

20 Dobson S (1991) Transcultural Nursing. Scutari Press, London.

21 DeSantis L (1994) Making anthropology culturally relevant to nursing care. Journal of Advanced Nursing 20: 707-15.

22 Fuller J (1995) Ethnic health workers in primary health care. Australian Journal of Public Health 19 (2): 198-205.

23 Couzos S and Murray R (2006) Aboriginal Primary Health Care: An Evidence-Based Approach. Oxford University Press, Melbourne.

24 Katon M and Kleiman A (1980) Doctor-patient negotiation and other social science strategies in health care. In L Eisenberg and A Kleinman. The relevance of social science for medicine. D Reidel Publishing Company, Dordrecht, Holland.

25 Fuller J (2003) Intercultural health care as reflective negotiated practice. Western Journal of Nursing Research 25(7): 781-797.

26 Lorig K and Holman H (2003) Self management education: history, definition, outcomes and mechanisms. Annals of Behavioral Medicine 26(1): 1-7.

27 Fuller J, Harvey P and Misan G (2004) Is client-centred care planning for chronic disease sustainable? Experience from rural South Australia. Health and Social Care in the Community 12 (4): 318-326.

28 Human Rights and Equal Opportunity Commission. Bringing them home. Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families. Canberra: AGPS, 1997

29 Kirmayer L , Lemelson R. and Barad M eds (2007). Understanding Trauma: Integrating Biological, Clinical and Cultural Perspectives. Cambridge University Press.

30 National Public Health Partnership (1998) Background paper to health and medical research strategic review. June. http://www.dhs.vic.gov.au/nphp/wills.htm.

31 Walter I et al (2003) Increasing research impact through partnerships: evidence from outside health care. Health Serv Res Policy, 8(2 supp)58-61.

32 Lomas J (1997) Improving research dissemination and uptake in the health sector. Beyond the sound of one hand clapping. McMaster University Centre for Health Economics and Policy. Analysis Policy Commentary C97-1.

33 Si D, Bailie R, Tongi S, d'Abbes P and Robinson G (2007) Aboriginal health workers and diabetes care in remote community health centres: a mixed method analysis. Medical Journal of Australia 185(1): 40-5.

34 Mignore B and Boone M (2002) Realizing potential: improving interdisciplinary professional/ paraprofessional health care teams in Canada's northern aboriginal communities through education. Journal of Interprofessional Care 16(2): 139-47.

35 Hamrosi, Taylor, and Aslani (2006). Issues with prescribed medication in Aboriginal communities: Aboriginal Health Workers' perspectives. Rural and Remote Health, 6, 557 (online).

36 Greenlagh T et al (2004) Diffusion of innovations in service organizations: systematic review and recommendations. Millbank Quartely, 82: 581-629.

37 Provan K et al (2005) The use of network analysis to strengthen community partnerships. Pub Admin Rev 65(5): 803-13.

38 Fried B et al (1998) An empirical assessment of rural support networks for individuals with severe mental disorders. Community Mental Health Journal, 34(1):39-56.

39 Peck E and I Norman (1999) Working together in adult community mental health services: Exploring inter-professional role relations. J Mental Health, 8(3):231-42.

40 Addey D et al (2004) Handbook for the Work Practice Questionnaire (WPQ): a training evaluation measurement tool for the alcohol and other drugs field. Canberra, Australian Government Department of Health and Ageing.

41 Anderson N and M West (1998) Measuring climate for work innovation: development and validation of the team climate inventory. J Organiz Behav, 19: 235-258.

42 Aboriginal and Torres Strait Islander Research Agenda Working Group (2002) The NHMRC Road Map: A strategic framework for improving Aboriginal and Torres Strait Islander Health through research. Canberra, Australian Government.

43 Stillitoe P (1998) The development of indigenous knowledge: a new applied anthropology. Current Anthropology, 39(2): 223-30.

44 Sanson-Fisher R, Campbell E, Perkins J, et al. Indigenous health research: a critical review of outputs over time. Med J Aust 2006; 184: 502-505.

45 Henry C and R McTaggart R (1998) The Action Research Reader. 4th ed. Deakin University, Geelong.

46 Anderson I (1996) Ethics and health research in Aboriginal communities. In Daly J (ed) Ethical Intersections. Allen and Unwin, Sydney. (pp 153-65) .

47 Tsey K (2001) Making research more relevant to the needs and aspirations of Indigenous Australians: the importance of research capacity development. Aboriginal and Islander Health Worker Journal, 5 (1):19,24.

48 Borgatti S et al (2002) Ucinet 6 for Windows: Software for Social Network Analysis. Harvard, MA: Analytic Technologies