CRCATH 1997-2002

Working towards change in Indigenous health research

Terry Dunbar, Allan Amott, Margaret Scrimgeour, John Henry, Lorna Murakami-Gold
First published in 2004 by the Cooperative Research Centre for Aboriginal Health (CRCAH), this report details research carried out under the Cooperative Research Centre for Aboriginal and Tropical Health which wound up in June 2003.

© Copyright Cooperative Research Centre for Aboriginal Health. This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced without prior written permission of the author.


The ideas and opinions presented in this report do not necessarily reflect the ideas and opinions of the Cooperative Research Centre for Aboriginal Health (CRCAH).

General inquiries about this publication should be directed to:

Cooperative Research Centre for Aboriginal Health
PO Box 41096
Casuarina
NT 0811

ISBN 1 920969 01 2

Design and layout by Sarah Walton, CRCAH

Edited by Jenny Brands, CRCAH
Table of contents

Acknowledgments .................................................................v
List of abbreviations..........................................................vi
Main Messages.....................................................................vii
Executive Summary............................................................ix

Part 1: Introduction ...........................................................1
• Background ...................................................................... 1
• Project context ............................................................... 2
• Target audiences............................................................ 6
• Project aims.................................................................... 7
• The research approach ................................................... 8

Part 2: Literature review ...................................................13
• The Indigenous Research Reform Agenda ....................... 13
• Organisational change .................................................... 14
• Institutional research capacity ......................................... 16
• Priority driven research .................................................. 16
• Research methodologies .................................................. 16
• Research ethics.......................................................... 17
• Research transfer and dissemination ............................... 18

Part 3: Data collection and analysis................................19
• Case studies of CRCATH research projects....................... 19
• Analysis of CRCATH research project Quarterly Reports .... 21

Part 4: Overview of Research findings..............................23
• Research planning and brokerage ................................. 23
• Collaborative research ................................................... 25
• Research management .................................................. 28
• Capacity exchange and professional development .......... 29
• Institutional research capacity ......................................... 32
• Research transfer and dissemination ............................... 32
• Research ethics.......................................................... 36
• Research methodology .................................................. 39
Part 5: Recommendations for organisational change ......43
Part 6: Project outcomes....................................................49
  • Research transfer strategies................................................. 49
  • Implementing research findings into practice....................... 50
  • Future directions............................................................... 51
Summary .................................................................53
References .................................................................57
Attachments.................................................................61
Acknowledgments

By supporting the development of the LINKS project as a strategic research initiative, the Board of the CRCATH has demonstrated a forward-thinking commitment to critical evaluation of its operations. The Board has been willing to expose the Centre’s processes associated with the management and conduct of Indigenous health research to scrutiny, and has provided the necessary encouragement for researchers to cooperate with the project research. The LINKS research team has relied on generous participation by many former CRCATH researchers and current members of the new CRCAH research community. Through their participation in semi-structured interviews and through detailed completion of Research Project Quarterly Reports, these individuals have reflected critically on their professional practice as researchers and as managers. These reflections have provided invaluable insights into the way CRCATH-sponsored Indigenous health research has been conducted and how the research agenda has been planned and executed over the past five years (1998 to 2002).

Critical reflection on practice is widely recognised as being underdeveloped in the field of Indigenous health research in Australia, and so the contribution of the CRCATH research community to this project is especially significant.

A special acknowledgment of the early efforts of Ms Sally Matthews and Dr Anthea Duquemin should be noted. Both played important roles in debates around shaping the project and thinking through to clarity the potential benefits of the research.

Finally, the task of editing work accumulated over a five year project is not a small venture. Ms Jenny Brands was invited to join the project for this editing task and undertook this role with enthusiasm and skill during the final twelve months.
## List of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AHURI</strong></td>
<td>Australian Housing and Urban Research Institute</td>
</tr>
<tr>
<td><strong>ARC</strong></td>
<td>Australian Research Council</td>
</tr>
<tr>
<td><strong>CTLDEC</strong></td>
<td>Centre for Teaching and Learning in Diverse Educational Contexts</td>
</tr>
<tr>
<td><strong>CRCATH</strong></td>
<td>Cooperative Research Centre for Aboriginal and Tropical Health</td>
</tr>
<tr>
<td><strong>CRCAH</strong></td>
<td>Cooperative Research Centre for Aboriginal Health</td>
</tr>
<tr>
<td><strong>FATSIS</strong></td>
<td>Faculty of Aboriginal and Torres Strait Islander Studies</td>
</tr>
<tr>
<td><strong>IRRA</strong></td>
<td>Indigenous Research Reform Agenda</td>
</tr>
<tr>
<td><strong>LINKS</strong></td>
<td>Action Research into Managing, Undertaking and Disseminating Aboriginal Health Research for Improved Health Outcomes Project</td>
</tr>
<tr>
<td><strong>MSHR</strong></td>
<td>Menzies School of Health Research</td>
</tr>
<tr>
<td><strong>NATSIHS</strong></td>
<td>National Aboriginal and Torres Strait Islander Health Strategy</td>
</tr>
<tr>
<td><strong>NACCHO</strong></td>
<td>National Aboriginal Community Controlled Health Organisations</td>
</tr>
<tr>
<td><strong>NCVER</strong></td>
<td>National Centre for Vocational and Educational Research</td>
</tr>
<tr>
<td><strong>NHMRC</strong></td>
<td>National Health and Medical Research Council</td>
</tr>
<tr>
<td><strong>NICS</strong></td>
<td>National Institute of Clinical Studies</td>
</tr>
<tr>
<td><strong>NPHP</strong></td>
<td>National Public Health Partnership</td>
</tr>
<tr>
<td><strong>PAR</strong></td>
<td>Participatory Action Research</td>
</tr>
<tr>
<td><strong>RAWG</strong></td>
<td>Aboriginal and Torres Strait Islander Research Agenda Working Group</td>
</tr>
<tr>
<td><strong>SME</strong></td>
<td>Small to Medium Enterprises</td>
</tr>
</tbody>
</table>
Main messages

The LINKS Project findings contain important evidence that there is room for improving the way the Cooperative Research Centre for Aboriginal and Tropical Health approaches the brokerage, management and conduct of Indigenous health research, and the dissemination of health research findings. The issues raised throughout the course of this project underline the problematic nature of research in Indigenous domains. The findings, therefore, are potentially important to a consideration of how the research community can co-operate to improve the quality of research involving ‘issues of interest’ to Indigenous peoples across a range of disciplines. The following observations may be of general significance to research organisations, researchers, Indigenous peoples, funding providers and service providers.

- Organisations involved in the management and conduct of research involving ‘issues of interest’ to Indigenous peoples have a primary responsibility for supporting reform initiatives which aim to ensure that outcomes from research deliver substantial benefit to Indigenous peoples.

- The adoption of a Priority-Driven model of research provides opportunities for instituting improved processes for research quality control, dissemination and transfer of findings and responsiveness to Indigenous community concerns.

- Prioritisation of the research effort must be guided by the expressed needs and interests of Indigenous community members. ‘Inclusive’ priority setting processes remain under-developed in a range of public health research settings. It is important, therefore, for organisations to record and report on trial interventions in this area to assist in the development of a co-ordinated and cross-disciplinary approach to research priority setting.

- When research questions are framed in isolation from Indigenous peoples then research findings are compromised and the potential usefulness of research is reduced. Professionally trained researchers are often ill-equipped to negotiate research problems in conjunction with Indigenous peoples. Organisational intervention to provide expert support at the ‘front end’ of research activity is therefore very important.

- Skills and knowledge exchange between Indigenous and non-Indigenous researchers is an essential aspect of effective collaborative research. This requires researchers to accept alternative perspectives and pay close attention to culturally-determined approaches to communication. Institutional support is required if skills and knowledge exchange is to become embedded within research project activity in cross-cultural contexts.

- Research projects should, particularly when they engage new Indigenous researchers, be viewed as learning projects in themselves. In other words, it is important to reflect on both the process activities in each project and also the professional development approaches required for the researchers within the project or research community.
• Collaborative research approaches (such as Participatory Action Research) represent a potential for incorporating ‘Indigenous ways of doing things’ into the research project.

• Institutional resource commitment for ongoing evaluative research is important to our developing understanding of how research involving ‘issues of interest’ to Indigenous peoples can be improved.

• Processes for disseminating research findings should be planned and budgeted for during the early conceptualisation and project planning stages. This planning should involve all relevant stakeholders.
Executive summary

As a research institution with a mandate for the brokerage and conduct of Indigenous health research, the CRCATH has an interest in defining the way forward for Indigenous health research in Australia, and in particular for promoting substantial changes to the way research involving ‘issues of interest’ to Indigenous peoples is conducted. In keeping with its positioning as a ‘reformist’ institution, the CRCATH maintains a commitment to ongoing evaluation and continual adjustment to its way of operating.

In June 2000, the CRCATH supported the development of the LINKS action research project to undertake an internal evaluation of the Centre’s operations. The project brief was to investigate the effectiveness of CRCATH procedures associated with undertaking research, managing research and disseminating research findings. The main objective was to provide the management and Board of the CRCATH with an insight into the extent of alignment between the strategic vision of the organisation and the research it sponsored.

The project findings were generated through the application of a Participatory Action Research (PAR) process. The research team comprised CRCATH researchers and managers and external researchers with backgrounds in educational research and PAR methodology. The makeup of the team provided opportunities for influencing organisational change at strategic points throughout the life of the project and for engaging with related investigation of Aboriginal health research issues occurring simultaneously at other sites.

A review of the literature revealed a long and well documented history of reform proposals aimed at improving the usefulness of health research to Indigenous peoples. At this point, the unresolved issues on the Indigenous health research reform agenda (identified by Humphery, 2000) are directly concerned with increasing the benefit of research to Indigenous peoples. Resolution of these issues is dependent upon:

- Indigenous control of the research agenda;
- Indigenous control of the research process;
- Improved processes for quality control;
- Improved processes for consultation and negotiation of research; and
- Improved processes for transferring research findings into policy and practice

The literature also revealed significant crossover between the movement within the social science disciplines for the reform of research involving ‘issues of interest’ to Indigenous peoples and the history of reform associated with Indigenous health research in Australia. The review provided few available examples of critical reflection on Indigenous health research practice and indicated that the role of institutions in promoting appropriate processes for the conduct of effective Indigenous health research was poorly defined.
Throughout the conduct of the LINKS Project research there was evidence of a high level of both management and researcher commitment to the fundamental principles of reform aimed at increasing the benefit to Indigenous peoples from research. Over the preceding five years, CRCATH-sponsored research has been characterised by a high level of ‘good intent’ on the part of researchers, good systems and increased levels of Indigenous community involvement.

The CRCATH has made substantial headway in breaking down many entrenched approaches to research that have historically positioned Indigenous peoples as passive ‘subjects’ of others’ enquiry. It is apparent, however, that there continue to be barriers to broad-based reform of Indigenous health research activity, among them:

- the power imbalance between Indigenous and non-Indigenous stakeholders in research;
- the entrenched privileging of Western research traditions;
- the under-valuing of Indigenous knowledge and perspectives; and
- the widespread influence of ‘investigator driven’ approaches to research.

There is also evidence of persistent problems associated with the negotiation of research questions in conjunction with Indigenous peoples and the incorporation of Indigenous perspectives, research approaches and world views in the design and conduct of research more generally.

The change process associated with the implementation of the LINKS Project recommendations has already begun. Key initiatives include a refinement of project approval processes, trialling of a revised research priority-setting process, the provision of more practical assistance to non-Indigenous researchers in their attempts to engage more directly with Indigenous peoples, implementation of a broader Professional Development program and refinement of processes for project monitoring and research reporting. These initiatives are aimed at increasing levels of Indigenous participation in all aspects of research, for better co-ordination of the research effort and for ensuring that the impact of future research on policy and practice is maximised through a planned approach to research reporting.

The CRCAH Business Plan (2002, p. 10), signals the intention of the CRCAH to support and promote ongoing evaluative research (similar to the Links project research). This type of research represents a capacity for promoting the development of a culture of critical reflection on research practice, for maintaining a focus on ways of achieving high quality research and for developing institutional research capacity in key areas.
The LINKS project research has led to the identification of some key areas requiring more detailed research:

- Investigate and broaden the Centre’s understanding of approaches to Aboriginal health research management with a health outcomes focus.

- Explore processes for community management and community involvement (steering committees, reference groups, community participation).

- Investigate a range of methodological approaches compatible with “Indigenous ways of approaching research”. In particular, provide technical and financial support for the incorporation of Indigenous research methodologies within CRCATH sponsored research.

- Further investigate processes for achieving improved levels of research transfer.

- Promote critical reflection on health research practice. In particular develop processes for the compilation of case-study reports on research projects that set out to incorporate Indigenous ways of investigating problems. The aim of this initiative is to promote an awareness of issues associated with the adoption of Indigenous research methodologies and collaborative research within the CRCATH research community and within the broader Public Health research community.

- Investigate ways of positioning Professional Development as integral to research project activity.

- Investigate cultural protocols compatible with the operation of health research in Indigenous community contexts.

- Investigate appropriate ethical protocols and processes for their implementation: In particular, consider effective ways of monitoring research activity in progress.

- Develop an appropriate evaluative framework for Indigenous health research activity (with reference to the LINKS Project, Case Study Framework, version 2).
Part 1: Introduction

This report provides background to the development of the LINKS Action Research Project and outlines key findings and recommendations. The first section provides an overview of the history underpinning the development of the research and describes the political and policy environment in which it operated. Following this is an outline of the key phases of the research activity and a summary analysis of the project findings. Project recommendations will then be outlined. The report closes with a summary account of the way in which the project findings are being translated into practice and an overview of identified areas for future research.

Protecting the identity of research participants represented a significant problem when constructing this research report. Deliberations involving members of the LINKS project team, senior CRCATH management representatives and key research participants resulted in a decision to reserve some documents as internal to the Project. This action was considered necessary to the maintenance of informant anonymity. (Internal Project documents include: five detailed project case studies, a Case Study Thematic Report and an Analysis of CRCATH Quarterly Reporting Data 1999-2002) Part four of this Report contains a thematic overview of key research findings with select reference to primary data.

Background

The Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) was established as a ‘public good’ CRC in July 1997. The Centre brings together a number of Aboriginal groups, service providers, educators and researchers to carry out cross cultural and multi-disciplinary research to improve Aboriginal health and the health of people living in tropical regions. The six Core Partners of this unincorporated venture included:

- Menzies School of Health Research (MSHR)
- Flinders University
- Charles Darwin University
- Danila Dilba Health Service
- Central Australian Aboriginal Congress
- Territory Health Services (which became the Department of Health and Community Services in 2002).

Since its inception, the CRCATH has expressed a commitment to challenge many of the approaches historically underpinning research into Aboriginal health and to facilitate the transfer of locally generated health research findings into changed policies and health service delivery practices. In an internal review of CRCATH processes (Kalucy, 1999), the challenges and complexity involved in attempts by the CRCATH to achieve its goals were outlined. Professor Kalucy’s report (CRCATH Internal Review, 1999) provided the following rationale for the development of an internal evaluative research project to track the implementation of the Centre’s strategic objectives into practice.
This CRC is a unique organisation in Australia. The internal review committee has not heard of an organisation like this anywhere in the world, addressing the problems of indigenous people’s health. Its uniqueness lies in the bringing together of relevant service organisations and education organisations, under a set of objectives with an absolute commitment to collaboration and to focus on health outcomes. The questions that will have to be addressed have frustrated both Indigenous Australian communities and health workers, and research health workers, for decades. … Every opportunity must be made to learn from experiences, whether these arrive from brilliant innovation or mistakes. There will be great virtue in establishing a project from now, whose function is to study the CRC itself, prospectively, rather than in ten years time retrospectively and historically. Learning from experience should be a very high priority for this CRC, and the things learnt should be regarded as of value throughout the nation and to other organisations around the world who are attempting to work within the area of indigenous peoples’ health (Kalucy, 1999).

The LINKS action research project was subsequently developed by the CRCATH in response to the 1999 Review recommendation. The project was commissioned in June 2000 and set out to investigate the effectiveness of CRCATH procedures associated with undertaking research, managing research and disseminating research findings. In practical terms, the LINKS project brief was to provide the management and Board of the CRCATH with an insight into the extent of alignment between the strategic vision of the organisation and the research it sponsored. The project was positioned as an ongoing internal evaluation of the way the reform agenda of the organisation was being translated into practice within the management of research and at the level of project-based research activity.

**Project context**

Central to the strategic vision of the CRCATH is the position that research approaches that are collaborative and that involve active Indigenous community participation are more likely to generate findings that can lead to sustainable change and improved Aboriginal health outcomes. In her inaugural address as Chairperson of the CRCATH, Professor Lowitja O’Donoghue outlined her perspective on the conduct of Indigenous health research as follows:

... until very recently... scientific research has been a very top down approach. For Aboriginal people, this has meant we have been amongst the most studied and researched group in the world... few if any tangible benefits have flowed to our people, as the research papers and the academic accolades have stacked up. Researchers have, by and large, defined the problems and sought solutions that they have seen as the correct, "scientific" way to go (CRCATH Strategic Plan 1999-2004).
This positioning had significant implications for the research community. Entrenched approaches to the setting of the Indigenous health research agenda were being challenged and researchers were being asked to rethink the way they engaged with Indigenous peoples within the context of research activity. Non-Indigenous researchers and managers of research were being confronted with the proposition that a significant reappraisal of their role in the research process was necessary.

In the Centre's 1999-2004 Strategic Plan some critical success factors for the conduct of Indigenous health research were outlined. These 'best practice' principles suggested that effective research in this area should:

- involve collaboration in the design, management, evaluation and dissemination phases of the research;
- result in changes in policy, service delivery and people's behaviour;
- include a focus on communicating research findings in cross-cultural and non-academic contexts;
- strengthen Aboriginal research capacity;
- encourage multi-disciplinary and cross-cultural skills and perspectives; and
- seek to address problems through evaluation of health interventions and practices, rather than further demonstrating the nature and scale of problems. (CRCATH 1999, Strategic Plan)

Since the development of the CRCATH’s Strategic Plan in 1999, the Centre has been positively reviewed by a range of external observers. In 2000, a Commonwealth Government commissioned review of health and medical research in Australia concluded that:

The CRCATH provides a model for the type of collaboration envisaged for other general health fields....Based in Darwin, the Centre has developed links with a wide range of Aboriginal Health Centres and services as well as federal and state government bodies, universities and other CRC’s (Commonwealth of Australia, 2000, p. D15).

In 2000, The Health for Life Report of the House of Representatives Standing Committee on Family and Community Affairs, Inquiry into Indigenous Health (HoRSC, 2000) reported that it was impressed by the approach to research taken by the Menzies School of Health Research and the CRCATH.

The CRCATH ... has brought together a number of research institutions and community controlled health services to provide a cross-cultural framework for strategic research, is a very positive step in the Indigenous health research area (HoRSC, 2000 p. 125).

The HoRSC Report also argued that both these organisations should receive greater support in the allocation of research funds but that mainstream research institutions also had an important role to play in the Indigenous health research field. Recommendation 35 of the report proposes that for the next five years, the Commonwealth should ensure that the NHMRC allocates at least five per cent of total annual research funding for Indigenous health research (2000, p. 120).
In 2000, the draft National Aboriginal and Torres Strait Islander Health Strategy (NATSIHS) was released for comment. Within this strategy the CRCATH was cited as an example of an organisation that:

... provides a new vehicle for developing co-operative research relationships, with control given to Aboriginal people, while ensuring that there is access to a broad range of expert advice (NATSIHC, 2000, p. 88).

In 2002, an external review of CRCATH operations was convened by the Commonwealth Government. The review panel concluded that:

... the CRCATH’s research performance in relation to the strategic direction set for it five years ago has been outstanding in every respect. It is no exaggeration to state that the CRCATH has now successfully positioned itself as the cutting edge organisation in the field of applied multi disciplinary research in Aboriginal health in Australia (CRCATH, 2002, 5th Year Review Report, stage 1, p. 3)

In 2002, the CRCATH submitted a formal application for renewed funding to continue its operations for a further seven-year period. The CRCATH was successful in attracting funding for a second round between 2003 and 2010. After July 2003, the CRCATH will be known as the Cooperative Research Centre for Aboriginal Health (CRCAH) (reflecting a shift to a primary emphasis on Aboriginal health issues). In describing the direction of the new CRC, the Chairperson of the CRCATH, Professor Lowitja O’Donoghue stated that:

The CRCAH will build on the very substantial achievements of the CRCATH. Its initiatives will be underpinned by the same philosophical, social and cultural beliefs and the same commitment to making a real difference by doing research differently (O’Donoghue, 2003).

Despite the positive feedback about the CRCATH’s achievements in facilitating collaborative and multi-disciplinary research, and the plans for the CRCAH to continue the work of the CRCATH for another seven year period, there remains ongoing and generalised scepticism about the capacity of the research community to impact positively on the health status of Indigenous peoples. In particular, there is widespread concern that the long established agenda for reform of Indigenous health research is not being actively supported and translated into practice. This concern is not new and has grown out of a well-documented history of exploitative and ineffective Indigenous health research in Australia. In a commentary on Aboriginal health research in Australia, Houston and Legge (1992) problematised the issue by suggesting:

If medical and public health research is to contribute toward redressing the health disadvantages of Aboriginal Australians it must recognise itself as being part of the problem, before it can claim to be part of the solution (Houston and Legge, 1992 p.115).

This call for recognition of the research project as ‘part of the problem’ associated with Indigenous disadvantage and marginalisation has implications for key stakeholders within the research community. Researchers, research organisations,
the academy and higher education institutions are being called upon to justify their involvement in Indigenous health research by detailing how their research activity is expected to impact positively on the health status of Indigenous peoples. When considering the issue, Angus and Lea (1998) argued that it is important to consider who has the most to lose from current proposals for the reform of a range of interventions aimed at achieving better health outcomes for Indigenous peoples in Australia.

Everywhere today there is talk of collaboration, partnership agreements, evidence-based research, strategic planning, consultation, advisory groups and the like. They all operate on the understanding that programs cannot function alone. In the development of the best practice model you must investigate who has a stake in the program or partnership - including those with a role to advise, consult or plan strategically- and who has the most to lose as a result of change. This model differs from past practices and we suspect that it is far too threatening for most non-Indigenous Australians to accept (Angus and Lea, 1998, p. 636).

Justification for participation by Aboriginal community controlled health organisations in a collaborative research enterprise with mainstream institutions was recently revisited by Ms Pat Anderson (Chairperson of the CRCAH and former national chairperson of NACCHO) in the following address to a combined meeting of proposed CRCAH researchers:

It was the Aboriginal health leadership that had the vision to eventually throw in our lot with Professor John Mathews all those years ago to join the CRC for Aboriginal and Tropical Health. We recognised that research as a tool could be used to assist us to answer the hard questions we are confronted with each day at the service delivery level. We recognised that providing the best quality comprehensive primary health services to our communities was not enough in itself. We were brave enough to publicly, not only admit this by joining Professor Mathews, but now to also examine closely our practice - what we do, and how we do it in the delivery of the health service in the Aboriginal health service sector. Given the issues confronting contemporary Aboriginal societies, I ask the question - Are we doing the very best we can? We needed to engage constructively with the research community, but also as equals. Historically, our experience within the research field has not always been good (CRCAH, 2003, Mini-Convocation Management Report).

In addition to explaining why community controlled Aboriginal health services decided to cooperate in the project to develop more effective ways of doing research, Ms Anderson also made it clear to the research community that the terms of engagement in this collaborative endeavour must include recognition of the ‘equal’ status of participating Aboriginal peoples. The unresolved issues of power sharing, insufficient evidence of positive health outcomes deriving from research activity and the reality of the ongoing poor health status of Indigenous peoples apparently remain as key issues underlying the project to reform Aboriginal health research activity.
Some recent initiatives aimed at renegotiating the terms of engagement between the research community and Aboriginal peoples in Australia include:

- The development of the National Health and Medical Research Council Road Map, a strategic framework for improving Aboriginal and Torres Strait Islander health through research. (NHMRC, 2002),

- Revision of the NHMRC interim 1991 Aboriginal and Torres Strait Islander Health Research Guidelines. During the 2000- 2003 triennium, the NHMRC Aboriginal Health Ethics Committee undertook to revise the 1991 interim guidelines on Ethical matters in Aboriginal and Torres Strait Islander Health Research. This process has involved a high degree of Indigenous community participation in national consultations.

- The release of the consultation draft of the National Aboriginal and Torres Strait Islander Health Strategy (NATSIHC, 2000) and input by key stakeholders into the development of a definitive strategy.

Participation by the NHMRC Research Agenda Working Group (RAWG), members of the Aboriginal Community Controlled Health Network and other Aboriginal members of the research community in these initiatives resulted in a re-assertion of some long standing reform proposals and opened up some difficult issues for debate. This politically charged and rapidly changing policy environment provided the LINKS Project team with opportunities to learn from, and participate in, national debates about the reform of Indigenous health research. The issues of Indigenous community representation, control of the research agenda, the role of research organisations in supporting Indigenous community involvement in research and power sharing within the research process were of particular significance when considering the LINKS Project problem.

The action research methodology adopted by the project team proved an effective mechanism for capitalising on opportunities for integrating findings into practice and for responding to issues as they were being raised in other forums. The LINKS Project team comprised representatives from the management and education and training sections of the CRCATH, a university-based action research consultant, and research associates with experience in the fields of Indigenous education research and the dissemination of research findings. This blend of organisational representatives (including three Indigenous employees) and associated researchers represented a purposeful attempt to ensure a multi-disciplinary approach to the research problem that was informed by the perspectives of Indigenous peoples. It is significant to note that an Indigenous member of the LINKS research team also participated in the development of the NHMRC Road Map and is a member of the NHMRC’s Aboriginal Ethics Research project team. Her concurrent involvement in both these national initiatives, her role as a senior manager within the CRCATH and her position on the LINKS project team provided opportunities for two-way exchange of knowledge and perspectives throughout.

**Target audiences**

The LINKS project team operated from the premise that a combination of social, cultural and political factors influence the construction of research activity. In addition, the research team adopted the position that in order to maximise health outcomes from research, the CRCATH must influence the various and complex systems involved in the translation of research outputs, as new knowledge, into health delivery practice and uptake by health consumers.
In the scoping phase of the project, potential target audiences for CRCATH sponsored research were identified. These same interest groups were also considered as having a potential interest in the LINKS Project findings. These groups include:

- Government bureaucracies and Indigenous-controlled agencies providing health services;
- Health professionals;
- Academic institutions preparing the next generation of health service practitioners whether these be doctors, nurses, health workers, public health professionals, primary care givers, etc;
- Indigenous peoples seeking to overcome particular problems in their communities and family groups and individuals who may benefit from changes to their own health-related behaviour;
- Government policy and decision makers at all levels;
- The media, including opinion leaders, in order to support more informed public debate; and
- The national and international health research communities in order to ensure that new knowledge is incorporated into future research.

**Project aims**

In the lead-up to the project field research, a workshop was co-facilitated by Associate Professor John Henry from Deakin University and Sally Matthews, who at the time was the Deputy Director of the CRCATH (November, 1999, Darwin). This workshop involved participation by LINKS Project team members and other Core partner representatives from Territory Health Services and the Menzies School of Health Research. The workshop aim was to consider the research problem and to investigate the applicability of an action research methodology. The workshop participants undertook a reconnaissance phase of mapping management processes and actions and research projects and actions relevant to the research problem (Links Project Memo, 9/01/01). The following broad research objectives were developed by the workshop participants;

- to expose the whole process of the conduct of a research project to scrutiny, in order to recognise the issues, perspectives and actions that may influence the likelihood of the research resulting in positive changes to Aboriginal health outcomes;
- to make explicit our assumptions about the factors, within the control of the research community, that influence the likelihood that research conducted within the CRCATH will result in positive health outcomes and to increase our understanding of the relevance (or irrelevance) of these factors;
- to promote increased awareness within the broader CRCATH community of the factors, within the control of the research community, that have potential to influence the likelihood of research resulting in health outcomes, and to develop shared learnings from the range of projects and experiences within the CRCATH; and
• to identify some critical factors, within the control of the research community, that would increase the likelihood that any research project will result in positive health outcomes.

The research approach

An action research methodology was adopted as the principal way of addressing the research problem. Throughout the life of the project the research team participated in identified cycles of action, reflection and problem reformulation and this provided the basis for research activity that was both responsive to the changing needs of the CRCATH and integrated with related research being conducted at other sites throughout Australia.

A ‘Generalising from Case Studies’ (GCS) approach was implemented as the main process for collection and analysis of data. It was agreed that this approach represented potential for producing general findings of the type that could inform the development of the CRCATH’s policies and research management procedures. A Case Study Framework was developed as the main tool for investigating research project activity. This Framework was based on a series of critical success factors for the conduct of research (nominated by the CRCATH as being key elements of research practice and management that would lead ultimately to the achievement of positive change to Indigenous health status) and key aspects of the cross disciplinary agenda for the reform of Indigenous research. Ongoing evaluation of project activity was undertaken at LINKS Project team meetings and involved:

• detailed critiques of two trial Case Study frameworks;
• informal assessment of project direction and reframing of planned research activities; and
• consideration and incorporation of feedback from public seminars and subsequent reframing of research direction

The project evolved in five main phases.

Phase 1: Scoping the research problem

This phase involved extended consideration of an appropriate methodological approach and refinement of the research problem. This included initial consideration of a range of parallel and previous CRCATH research activities including:

• the Yarning About Research workshop (CRCATH, 2001), which explored the conceptions of research held by Indigenous and non-Indigenous stakeholders in research. The findings relating to Indigenous research methodologies, research transfer and dissemination and capacity exchange significantly informed the positioning of the LINKS research team.
• a CRCATH sponsored community development study circle, which included a small group of researchers who met to consider issues relating to community development through research in Indigenous community contexts. A ‘capacity building’ framework was subsequently developed and its potential for application by the LINKS project team was considered.
• previous CRCATH commissioned research relating to processes for the dissemination and transfer of research findings.
Based on identified gaps in previous CRCATH research, a plan to conduct an extended review of the health research transfer and dissemination literature was developed. The review was undertaken and reported in CRCATH, 2002, LINKS Monograph Series: 4. Indigenous Research Reform Agenda: Promoting the use of health research.

At this point, there was discussion within the research team about the limited potential of conventional research approaches (which separate the domain of research from that of practice) to address the LINKS research problem. Concern was raised that a primary focus on ‘capacity building’, ‘research transfer and dissemination’ or ‘culturally appropriate research methodologies’ represented a limited potential for influencing change, both at the level of the CRCATH and the many broader systems associated with the conduct of Indigenous health research in Australia. In an unpublished discussion paper developed during this time (From RD&D to a Networked research approach’ LINKS Project discussion document, 2001), Associate Professor John Henry suggested a rationale for moving from a traditional Research Development and Dissemination (RD&D) model to a networked research approach when addressing the LINKS Project problem. He argued that:

... there needs to be a coming together of knowledge derived from scientific research with that derived from more sociological-based research. And clearly, these forms of knowledge will all be rigorously tested by the discipline of their own epistemologies. It will be the combined and mutually reinforcing high standards of research as defined within each methodology’s tradition that will enhance quality health outcomes from these networked research projects (LINKS Project discussion document, 2001 From RD&D to a Networked research approach).

A proposal to adopt a networked research approach based on interaction between the LINKS team and operational CRCATH research projects was developed. (Unpublished project discussion document: First proposed action phase: April 2001). The rationale for this approach was outlined as follows:

The group came to the conclusion that a case study of a particular project could provide a focus for individual and organisational learning. These learnings could then be built into other projects and management processes over time. The case study would allow us to identify the critical success factors necessary to maximize health outcomes from research and to put our various perspectives and expertise into real life problems or issues (LINKS Project discussion document: First proposed action phase: April, 2001).

The plan to develop case studies based on operational CRCATH research projects was eventually abandoned and substituted by a proposal to conduct retrospective case studies of ten CRCATH sponsored research projects. A networked research approach was, however, instituted through a planned approach to dissemination that involved a process for engagement with the broader health research community at strategic points throughout the life of the project. Instead of aiming to achieve active engagement at the level of operational CRCATH projects, the LINKS team proposed to engage with a broad range of Indigenous health stakeholders through a two way process of knowledge exchange.
This approach coincided with the regular cycles of problem identification, action and reflection, which guide the action research process. After each action cycle, the plan was to critique interim research findings at internal research team meetings and to present interim findings to external audiences. Feedback from these processes would then be used to guide the process for refining the research question and to assist in the development of the next action phase of the research.

The initial review of the literature relating to Research Transfer and Dissemination provided a useful, if somewhat limited background to the research problem and so a more extended review of the literature was proposed and undertaken. This second phase Literature Review focused on the development of Indigenous health research in Australia and the historical and policy underpinnings of the movement to reform research activity in this field. (CRCATH, 2003, The Indigenous Health Research Reform Agenda: A Review of the Literature). Of particular interest to the research team was the identification of issues and trends with a potential to impact upon the future development of research and management practices both within the organisation of the CRCATH, and within other institutions involved in Indigenous health research in Australia. An overriding issue of interest was the extent of alignment between nationally constructed Indigenous health research reform proposals and institutional practices and processes currently in place within the organisation of the CRCATH. The literature review effectively broadened the scope of the research problem and brought into focus a broad range of issues impacting on the achievement of effective outcomes in the field of Indigenous Health Research. Of significance was the literature relating to the inter-disciplinary agenda for the reform of Indigenous research practices (referred to in Project documents as the Indigenous Research Reform Agenda), the history of reform associated with Indigenous health research in Australia, policy developments in the Indigenous health research field over the past twenty years, priority driven models of research (particularly models adopted by the Australian Housing and Urban Research Institute and the National Centre for Vocational and Educational Research), the emergent commentary on Indigenous approaches to research and the role of institutions in promoting changed research practices.

Phase 2: Engaging with the health research community - seminar series and monograph development

The Project team conducted a series of four seminars to disseminate the findings from the comprehensive LINKS Project Literature Review. During this seminar series it became apparent that researchers and organisational representatives were keenly interested in the problem of how to effect collaborative partnerships between Indigenous and non-Indigenous researchers. The commentary on the movement to reform Indigenous research activity also proved to be an effective springboard for discussion about issues of immediate concern to both researchers and managers. As a result of the interactions at these seminars the project team decided to condense the main findings from the LINKS Project Literature Review into four monographs that addressed key issues contained within the cross-disciplinary Indigenous Research Reform Agenda (CRCATH 2002, Monographs 1-4). An important aim of these publications was to provide an opportunity to promote discussion within the research community about issues associated with achieving fundamental changes to the way Indigenous health research is initiated, undertaken, managed and its findings disseminated. A related aim was to promote an understanding of the purpose for reform initiatives that aim to change the positioning of non-Indigenous researchers from that of ‘experts’ to ‘partners’ with Indigenous community members.
A series of meetings to launch the monograph series and to report on the interim findings of the LINKS Project research provided another opportunity to engage with a broader audience and gain feedback from the research community. Critical feedback from this process highlighted the need to complement the LINKS Monograph series with a more practical style of written publication that was less academically oriented. During this period, Project team members also presented key findings from the literature and interim findings from the field research at forums including conferences, presentations to NHMRC meetings and student workshops. Feedback from these meetings was reported back to the research team and adjustments to the research process and analysis of findings were made.

**Phase 3: Development of a Framework for investigation of research activity.**

Analysis of findings from the LINKS Literature review (Parts 1 and 2) and findings from associated CRCATH research activities involving reflections on research practice, assisted in the development of an evaluation framework. The Framework was applied as the primary tool for data generation within the project field research including the development of Case Studies of CRCATH sponsored research activity and analysis of CRCATH quarterly reporting data. The overriding aim was to critique the alignment between CRCATH sponsored research activities, the CRCATH nominated critical success factors for the conduct of Indigenous health research and unresolved issues from the Indigenous Research Reform Agenda.

Construction of the Framework (LINKS Case Study Framework - Versions 1 & 2) was the first step in the Generalising from Case Studies approach adopted by the research team (outlined in section 3 of this Report).

**Phase 4: Field research**

This phase included the main field research component of the project and involved the compilation of five detailed Case Studies of CRCATH sponsored research, and the analysis of CRCATH quarterly reporting data. Findings and analysis from this research were subsequently reported in the following unpublished internal documents:

**LINKS Action Research Project. Five Case Studies of CRCATH sponsored research projects**

This report includes the perspectives of twenty semi-structured interviews with researchers and managers combined with archive material to provide the database for the construction of five Case Studies.

**LINKS Action Research Project. Case Study Thematic Report: CRCATH Sponsored Research Projects.**

This report draws on the five detailed Case Studies to provide a thematic analysis of key issues.

**LINKS Action Research Project. Analysis of CRCATH Research Project Quarterly Reporting Data 1999-2002.**

This report provides a thematic analysis of key issues arising from investigation of data within 66 CRCATH Quarterly Research Project Reports involving 42 sponsored research projects from across the Centre’s five main research program areas.
Phase 5: Transfer into practice

The action research process provided a vehicle for implementing interim findings and new knowledge into the thinking and practice of participant researchers. This in turn led to ongoing development of CRCATH research management processes and systems throughout the course of the Project.

In response to interim findings from phase 4 of the Project, management interventions aimed at increasing the extent of alignment between CRCATH sponsored research activity and key elements of the Indigenous Research Reform Agenda were proposed by the LINKS Project team. Interventions involving re-organisation of the Centre’s funding application process, reporting process and plans for dissemination of research findings were subsequently trialled by the CRCATH. Proposals for change were also supported into practice through participation by LINKS Project team members in internal and external activities including presentation to expert panels, presentations to the research community and preparation of documents for reporting back to the Board of the CRCATH. Recommendations relating to increasing the level of support for researchers to engage more effectively with Indigenous peoples and for improving processes for Aboriginal community involvement in research priority setting are currently being implemented with support from the newly created Development Division within the CRCATH.
Part 2: Literature review

The purpose of the Literature Review (parts one and two) was to provide an historical background to the research question and to highlight current trends and policy developments against which the performance of the CRCATH could be measured. Issues identified from the literature influenced the subsequent direction of research activity and contributed significantly to the development of the LINKS Project Case Study Framework. Following is an outline of some key issues emerging from the literature that were identified as being relevant to a consideration of the LINKS research problem. (These issues are represented in detail within CRCATH, 2003 Indigenous Research Reform Agenda: a review of the literature and CRCATH, 2002, LINKS Monograph Series: 4. Indigenous Research Reform Agenda: Promoting the use of health research).

The Indigenous Research Reform Agenda

The movement to reform Indigenous health research activity has foreshadowed the formalisation of a more recent and broad-based Indigenous research reform agenda in Australia. This agenda has strong Indigenous community support and is currently being theorized and promoted by Indigenous representatives across a range of disciplines within higher education institutions and research organizations throughout Australia. An important focus of the Indigenous research reform agenda is the formalisation of Indigenist research philosophies, principles and practices. The project to identify and promote research methodologies deemed compatible with the goals of the emerging agenda for research reform is underpinned by an overriding commitment to decolonize existing Western research traditions. (Rigney, 1999, Tuhiwai Smith, 1999)

The current positioning of reform proponents includes a commitment to:

- rejecting institutionalized research approaches which have historically marginalized the knowledge, perspectives and values of Indigenous peoples;
- adopting research approaches which represent a capacity for sustainable community development;
- adopting research approaches which are more respectful of Indigenous values and inclusive of Indigenous knowledge and world views; and
- supporting the development of Indigenous research capacity and the development of systems to ensure that the management of research is under Indigenous community control.

The emergent formalisation of a cross-disciplinary Indigenous agenda for the reform of research in Australia has very positive implications for those involved in the effort to reform Indigenous health research activity. There is obvious alignment between these two agendas and it is possible that broadening of the support base for reform of Indigenous research activity will increase the momentum for change within universities and other mainstream research institutions involved in research of interest to Indigenous peoples.
The unresolved issues on the Indigenous Health Research Reform Agenda (identified by Humphery, 2000) are directly concerned with increasing the benefit of research to Indigenous peoples. The resolution of these issues is dependent upon:

- Indigenous control of the research agenda;
- Indigenous control of the research process;
- Improved processes for quality control;
- Improved processes for consultation and negotiation of research; and
- Improved processes for transferring research findings into policy and practice.

In his analysis, Humphery (2000) outlined a range of unresolved issues that he argued fall within the realm of institutional responsibility and which are critical to the advancement of the Indigenous health research reform agenda. These issues include:

- involvement by Aboriginal communities in the design, execution and evaluation of research;
- co-ordinating roles of Aboriginal community controlled organisations;
- consultation and negotiation is ongoing and open to scrutiny;
- mechanisms for Indigenous control and transformation of research;
- mechanisms for ongoing surveillance of research projects;
- questions of research priorities and benefit;
- what ethical processes in terms of consultation and negotiation might actually be in practice;
- evidence of transformation of research practices from ‘investigator-driven’ to a re-assertion of control by Indigenous community controlled organisations over the research project;
- linkage between research and community development and social change;
- development of mechanisms to support the successful transfer and dissemination of research findings;
- adoption of a needs-based approach to research; and
- the training of Indigenous researchers.

**Organisational change**

A barrier to the achievement of a co-ordinated approach to institutional reform in the field of Indigenous health research in Australia is the widespread dispersal of research activity. Research is spread across a range of jurisdictions and is conducted through interventions directed by non-government organisations, industry, universities and government funding agencies. To inform and support this broad range of organisations and institutions to bring about a transformation of Indigenous health research activity is a difficult undertaking. There is evidence of
increasing support for the position that it is time to move beyond the rhetoric of reform to a situation where institutional responsibilities for the actualisation of the Indigenous health research reform agenda are clarified. Humphery (2000) argued that progress toward achieving improved outcomes from research is dependent upon mainstream research and policy establishments adopting ‘a much more forward-looking exploration of what Indigenous health research as a field might look like in ten or twenty years time both in terms of institutional arrangements and working practices’ (2000, p. 24). A consideration of institutional reform in the area of Indigenous health research must take into account the broader commentary surrounding Indigenous self-determination. Anderson and Saunders (1996b) argued that Aboriginal self-determination in health should not be read as an opportunity for governmental disengagement. Aboriginal people’s efforts need to be supported by appropriate resources and expertise but this support must be provided in ways that respect Aboriginal people and organisations as full partners in the process.

Aboriginal participation and priorities need to be seriously and concertedly addressed. This, it appears to us, is the crucial challenge in linking Aboriginal health and institutional reform within Australian federalism, linking Aboriginal self-determination with widespread responsibility sharing (Anderson and Saunders 1996b, p. 24).

Anderson and Saunders argue that the crucial challenge associated with promoting Aboriginal self-determination in the field of health is dependent on responsibility sharing involving appropriate support, funding and expertise. It is also crucial that institutional reform in the area of Indigenous health research is framed on the basis of widespread responsibility sharing and that this process respects Indigenous peoples and organizations as full partners.

The achievement of reform proposals aimed at improving the effectiveness of Indigenous health research activity is dependent upon substantial institutional intervention and the co-operation of Public Health researchers. Specific institutional action is required to:

• support the adoption of cross-disciplinary research approaches;
• support the adoption of collaborative and participatory methodologies;
• support the development of research priority setting processes that substantially reflect the positioning of Indigenous community controlled organizations;
• support the development of professional development and training approaches that address the training needs of all Indigenous participants in research activity;
• support community development objectives through research activity;
• improve processes for quality control;
• improve processes for the transfer and dissemination of research findings;
• support Public Health researchers in their newly defined roles as mentors trainers and participants in the community development process; and
• support the brokerage of research between Indigenous communities and researchers.
Institutional research capacity

While the problem of insufficient numbers of adequately trained Public Health researchers is identified as a major obstacle to the achievement of broad-based methodological reform in the Public Health research area, there is no evidence of a national plan of action to address this issue. Proposals for change aimed at increasing levels of individual Indigenous and community research capacity rely substantially on the achievement of methodological reform, which in turn relies on the expert intervention of trained Public Health researchers.

Institutional processes for strengthening Indigenous research capacity are apparently under-developed. Traditional approaches involving Professional Development and training programs have failed to address the training needs of non-professional Indigenous participants in the research process. Increasingly, it is being proposed that research capacity strengthening can be achieved through mentoring and training within the context of research activity and through the development of methodological approaches that adopt a community development focus. Achieving substantial improvement to current levels of institutional research capacity or workforce capacity looms as a major challenge for institutions involved in Indigenous health research.

Priority driven research

Priority driven research is represented in the literature as an effective mechanism for ensuring institutional responsiveness to community identified issues of importance and as an important way of achieving broad-based rationalization of research resources. (NPHP, 1998a; NH&MRC, 2000; Smith, 2001). Those who argue that the historical prevalence of ‘investigator-driven’ research has resulted in insubstantial improvement to Indigenous health outcomes also apparently support priority-driven models of research as a way of redressing this problem (PHA, 1996). It is also argued that the adoption of a priority driven approach to research increases the potential for inserting improved institutional processes for quality control and for the effective transfer and dissemination of research findings (Smith, 2001).

Within the Public Health research field in Australia, processes for the setting of research priorities are generally recognized as being under-developed (Baum, 1998; NPHP, 1998a). The development of appropriate processes for priority setting and for the evaluation and monitoring of research activity are regarded as key areas requiring institutional attention. Reform proponents argue strongly that the establishment of Indigenous health research priorities should be located within the control of the community based Indigenous health sector. In this way, it is argued that a closer alignment between the interests of researchers and the interests of Indigenous peoples may be achieved (Anderson et. al. 2001).

Research methodologies

The adoption of methodological approaches with a demonstrated capacity for incorporating Indigenous community members as key participants in the research process is important to the achievement of useful research outcomes. Collaborative and participatory research methodologies are generally identified as being compatible with the goals of the emerging agenda for reform of research involving Indigenous peoples in Australia and internationally. (CRCATH, 2002, LINKS Monograph series: 2). The potential for combining research, education and social action
through participatory research activities such as Action Research (AR) and Participatory Action Research (PAR) is regularly emphasised. PAR is also cited as being well suited to the philosophies and theories underpinning community-based health education and health promotion. (Anne George et al. 1998; Daniel & Greene, 1999). According to Williams (1996),

The goal of participatory research is to make every effort to ensure that methods complement rather than supplant local forms of expression, communication, discussion and decision-making (Williams, 1996, p. 1).

Increasingly, Participatory Action Research (PAR) is being employed as a research approach in the Indigenous health research field but as Henry and McTaggart (1998) point out, Action Research remains a diverse and still evolving field. Williams (1996) also emphasises that the variations on participatory research methods and techniques used to gather and share information are endless. Activist Participatory Research is closely related to PAR and Chambers (1992) proposes that it is important that Activist Participatory Research is used to refer to:

... a family of approaches and methods which use dialogue and participatory research to enhance people’s awareness and confidence, and to empower their action. Activist participatory research in this sense owes much to the work and inspiration of Paulo Freire and to the practice and experience of conscientization in Latin America (Chambers, 1992, p. 2).

In the Public Health research field there has been a shift over the past decade away from epidemiological research, to research involving a range of social science disciplines. Multi-disciplinary research requires the adoption of different methodological approaches and it is generally recognized that this transition has been difficult for researchers. According to Baum (1990), the ‘New Public Health’ imposes on institutions a responsibility for ensuring that adequate capacity for the achievement of methodological reform is realized.

**Research ethics**

Over the past two decades ethical guidelines for the conduct of Indigenous health research have been formulated and implemented in Australia. Extended debate about the adequacy of these guidelines and questions about the level of institutional and researcher commitment to them, continue to dominate in the literature. Maori representatives in New Zealand have been advocating for substantially different ways of framing research, and this has included extended discussion about the ethics of research across a range of disciplines. According to Tuhiwai Smith (1999), a Maori academic, an outcome of this has been a move toward research which is ’...more ethical, and concerned with outcomes as well as processes. It has also meant that those who choose to research with Maori people have more opportunities to think more carefully about what this undertaking may mean.’ (p. 177). This concern with research ‘process’ as well as research outcomes is increasingly a focus of consideration for those engaging in Indigenous health research in Australia. This focus has led to varying interpretations of ethics guidelines and ongoing renegotiation of the role of ethics committees. Evidence from the literature suggests that there is a persistent and high level of uncertainty about the rights and responsibilities of researchers, ethics committee members and research participants who are currently operating in a changing research environment.
Guidelines and monitoring

All institutions engaging in research of interest to Indigenous peoples in Australia have adopted formal guidelines and protocols to guide researchers. Current commentary, however, indicates impatience with the proposition that the formalisation of guidelines for the ethical conduct of Indigenous health research has been enough to ensure that the rights and interests of Indigenous participants in research activity are adequately represented. There is evidence to suggest that these guidelines do not mandate for substantial changes to the way researchers operate and that currently, inadequate institutional mechanisms are in place to monitor the activity of researchers once formal institutional approval for research has been granted.

Research transfer and dissemination

The achievement of successful transfer of research findings into policy and practice is required if the full benefit of research is to be realised. Increasingly, it is being proposed that institutions should play a more pro-active role in the achievement of improved research dissemination and transfer processes. A commonly expressed concern is that research findings are not presented to Indigenous communities in an accessible form, and that delays in feedback of research findings reduce their potential usefulness (Kimberley Aboriginal Health Workers 1992; Miller and Rainow, 1997; Hunter 1992; ARC 1999). Hunter (1992) argued that problems occur when the users of research are not directly communicated with, and when a range of methods for feedback to communities are not utilized. He also suggested that ‘the same scientific rigor that is applied to the research process itself should be encouraged in disseminating findings to the subjects of the research (p. 21)’.

Ongoing dissemination of research findings throughout the life of a research project is an identified way of maximising the benefit of research findings to research participants (Anderson, 2000). Ongoing dissemination of research findings also provides opportunities for more active engagement by research participants in the research process and creates opportunities to promote ‘user buy-in’ to the research process.

By instituting processes for ongoing dissemination of research findings and maximising opportunities for participant feedback, it is likely that research activity will become a more integrated intervention. In these circumstances there is increased potential that research outputs will be more relevant and more likely to contribute toward sustainable change.
Part 3: Processes for data collection and analysis

Case Studies of CRCATH sponsored research projects

Generalising from Case study approach

A ‘Generalising from Case Studies’ (GCS) approach was adopted as the main process for collection and analysis of data by the LINKS project team. It was agreed that this approach represented potential for producing general findings of the type that could inform the development of the CRCATH’S policies and research management procedures. In a paper outlining the rationale and protocol for implementation of a GCS methodology, Smith and Henry (1999) suggested that:

The problem of providing research outcomes that are to be both context specific accounts of selected program implementation sites, and the identification of meta-issues associated with these programs in general is addressed by identifying, as a commencing step in GCS projects, an initial list of research issues to guide the case study research process. The intention is to develop from the initial list of research issues a ‘case study reporting framework’. This framework becomes the central instrument to the GCS approach to research and development as it is the case study reporting framework that will maximise the comparability of the case study research component of projects while not imposing undue limitations on the breadth or depth of individual case studies (Smith and Henry, 1999).

Following is a summary outline of the GCS approach adopted within the project (This approach was adapted from the research protocol described by Smith and Henry, 1999, Case Studies in New Learning Technologies: a research approach for investigating the application of new learning technologies – Final Report (Appendix 1).

1. The research team considered a range of CRCATH sponsored research projects across the Centre’s five main program areas. An initial set of ten projects was selected for closer scrutiny and archival material from each of the projects was reviewed.

2. The research team developed an initial set of key issues to guide investigation of Case Study projects.

3. From the initial list of key issues and with reference to the CRCATH Management documents and the Review of the literature, the research team produced an expanded research issues framework as the reference document for the case study research.

4. Subsequent fieldwork was based on the archival material/document sweep and other information. The Case Study framework document guided the organisation of data and provided the basis for the semi-structured interviews conducted with informants.
5. Transcripts of interviews were checked and cleared by informants and drafts of the Case Studies were assembled.

6. The research team interrogated the case studies for ‘across-case study themes.’ The evidentiary base for these themes was in the narrative of the cases. The outcome of this meta-analysis was the Case Study thematic report that contained a justification for generalisable issues.

Development of a Case Study Framework

The Project team developed a Case Study Framework, which incorporated critical success factors nominated by the CRCATH as being essential characteristics of Aboriginal health research and key elements from the Indigenous Research Reform Agenda (IRRA). (This Agenda was drawn from the literature and is outlined within CRCATH, 2002 LINKS Monograph Series: 2 Indigenous Research Reform Agenda: Rethinking research methodologies. Darwin).

The framework operated as the main template for generation of data throughout the project and was organised in thematic areas including:

- Project conception
- Collaboration
- Research management
- Research transfer and dissemination
- Capacity exchange and professional development
- Research application.

Development of Case Studies

Two trial Case Studies of CRCATH sponsored research projects were undertaken using version one of the LINKS Case Study framework. The Case Studies were structured to provide an opportunity for identifying recurrent themes across a range of CRCATH research program areas. It was intended that consideration of these general issues would support the development of specific recommendations for change at the organisational and research project level within the CRCATH.

Following the conduct of eight semi-structured interviews with informants including researchers and managers, two comprehensive Case Studies were developed and the first critique of the LINKS Case Study Framework was undertaken. Adjustments to version one of the Framework were made on the basis of detailed consideration of the data generated from the first eight interviews, and the two draft Case Studies compiled by the research team (a detailed record of this critique process is contained within LINKS Research Project Critique One document, August 2002). At this point a decision was taken to reduce the number of detailed case studies from ten to five. The reason for this was the richness of data generated and the length of time it took to transcribe and analyse the data. Version two of the LINKS Case Study Framework was then developed and applied to the generation of data within a further three Case Studies. These three Case Studies were then assembled and a second critique of the framework was undertaken by the Project team. (LINKS Research Project: Framework Critique Two document, October 2002).
The research team then collectively considered the data contained within the five detailed Case Studies. Through this process, eleven key issues of importance were nominated for more detailed analysis and reporting. These nominated issues correlated generally (but not exactly) to the thematic areas contained within the LINKS Case Study Framework and were subsequently reported within LINKS Project: Case Study Thematic Report (December 2002).

**CRCATH research project Quarterly Reports**

It is a requirement of the CRCATH that project leaders submit Quarterly Reports on project progress. The quarterly reporting process represents an important mechanism for monitoring the progress of project activity against agreed objectives, as well as providing the basis for a developing culture of reflexivity within the CRCATH research community. Over the past five years, the format for this reporting has undergone adjustment in line with changing CRCATH strategic research objectives and management practices. Recently, the quarterly report format has been adjusted to include the nomination of specific learnings from project activity to date. The purpose for this intervention is explained on the CRCATH quarterly report proforma as follows:

**Learnings:** the philosophies and directions in the CRCATH Strategic Plan implicitly encourage researchers to reflect on their research practices in order to facilitate health outcomes from the research. As project leader, you are particularly encouraged to honestly reflect on, learn from, and list:

- any obvious mistakes in methodology and process;
- things which have helped or hindered effective Aboriginal-non Aboriginal research partnerships;
- efforts to communicate with different target audiences;
- efforts to engage various target audiences during research.

(CRCATH Quarterly Report proforma, 2002)

Nominated learnings outlined within the research project quarterly reports provide the CRCATH management and the Research Quality Committee with a useful indicator of problematic issues arising from research activity, which may require institutional intervention. In addition, nominated learnings that describe successful interventions provide a focus for broad-based adjustments to managerial and methodological processes within future research activity.

**Process for data collection and analysis of CRCATH Research Project Quarterly reports**

Analysis of a random selection of CRCATH research project Quarterly Reports was undertaken by the Project team and subsequently reported in LINKS Project: Analysis of CRCATH Quarterly Reporting data 1999-2002. (Unpublished LINKS project report, Analysis of CRCATH Research Project Quarterly Reporting Data 1999-2002). Analysis of this data set was organised around identified common themes or issues of concern raised within the Quarterly Reports. The report of findings did not identify specific projects but trends relating to the conduct of research in nominated Program Areas were indicated. The Quarterly Reports were unevenly spread across the CRCATH’s five main program areas: Biomedical, Health Information and Technology, Health Services, Indigenous Health and Education, Public Health and the Fourth Pathway.
This uneven pattern of distribution and variations in reporting format over the previous four years made it difficult to directly compare issues across program areas. Mandatory completion of Quarterly Project reports has only been an organisational requirement since 2000. Prior to this, reporting of project progress was undertaken by researchers in a range of formats, and so the tracking of trends associated with research processes proved difficult. Analysis of the Quarterly reporting data included a particular focus on research issues within the sphere of institutional influence and was primarily concerned with highlighting ‘Learnings’ or critical reflection on research practice by members of the CRCATH research community.

The data was drawn from 66 Research Project Quarterly Reports relating to 42 research projects. These reports were submitted by project leaders between 1999 and 2002, and included issues arising from completed and ongoing projects. The breakdown of research projects under program areas is as follows:

1) Biomedical - 7
2) Health Information and Technology - 2
3) Health Services - 15
4) Indigenous Health and Education - 5
5) Public Health - 12
6) Fourth pathway - 1.
Part 4: Overview of research findings

Key issues emerging from the analysis of CRCATH Project Case Studies and Quarterly Report data have been combined in the following section. Issues of significance are represented under thematic areas including:

- Research planning/ brokerage
- Collaborative research
- Research management
- Research transfer and dissemination
- Capacity exchange and professional development
- Institutional research capacity
- Research application
- Research ethics
- Research methodology.

These themes focus attention on key issues relating to the current and cross-disciplinary agenda for reform of Indigenous health research and the strategic objectives of the CRCATH.

Research planning and brokerage

The CRCATH’s structure, with a majority Indigenous Board, and a commitment to collaboration and implementation of the Indigenous Research Reform Agenda, provides an ideal opportunity to encourage involvement by Indigenous stakeholders in research planning and, ultimately, Indigenous control over the setting of research priorities. Research brokerage processes involve complex negotiations and detailed planning and yet these processes generally remain invisible within research project documentation. Within Quarterly Project Reports, for example, issues associated with brokerage of research were not emphasized but related problems involving the maintenance of collaborative research partnerships and the implementation of collaborative and participatory research methodologies were regularly highlighted as problematic. The extent to which researchers are making the link between effective initial brokerage processes and the achievement of successful research outcomes remains unclear. The Australian Research Council (1999) report on Indigenous research makes the point that:

... negotiation is the key concept for research with or about Indigenous people. The research itself, if it is to succeed, must be relational. This is true, whatever the topic, and requires that all research projects be socially situated while maintaining the highest academic standards (ARC, 1999, p. 115).
Recognition of the importance of extensive negotiations with Indigenous peoples in the initial stages of research project design, and the importance of ensuring that research is ‘socially situated’, is critical. It is possible that many problematic issues reported by CRCATH researchers could potentially be avoided if more emphasis were placed on effective brokerage involving extended negotiation with Indigenous peoples at the outset. There is evidence that when this process is effective, then ensuing decisions relating to the conduct of the research are likely to be mediated through relationships developed during the Project negotiation phase. In this circumstance, it is likely that decisions involving ethics, methodology, collaborative processes, capacity building and dissemination of findings will be guided by the realities of the circumstances of Indigenous people at local sites. The following statement by a researcher in a CRCATH research project Quarterly Report effectively sums up this position.

Successful community based programs need to be founded both in a high level of systematically developed professional expertise, theoretically grounded to meet local social and cultural circumstances; and on a high level of cultural competence in program delivery through collaborative work between Indigenous community members acting as practitioners in conjunction with non-(Indigenous) professionals and program personnel.


Investigation of CRCATH sponsored research projects reveals little evidence to suggest that researchers are engaging directly with Indigenous peoples until well after research projects have been conceptualised or formal proposals for funding have been submitted. It is apparent that many academically trained researchers maintain a dominant role in the conceptualisation and design of research by failing to negotiate appropriate research questions in conjunction with Indigenous peoples and other stakeholders. Within three case study projects, the research questions were proposed, projects were designed and methodologies were decided by professional researchers and other stakeholders in isolation from prospective Indigenous community members. Identified barriers to the achievement of successful pre-project negotiations reportedly include lack of institutional support to provide adequate travel funding and lack of researcher expertise to negotiate language and cultural differences.

The Case Studies also indicate that some researchers are experiencing difficulty identifying ‘communities of interest’ for the purposes of conducting research and for negotiating agreement with Indigenous peoples about the exact nature of ‘problems’ to be investigated. In one Case Study project, significant change to the direction of a community based research initiative was negotiated after the field researcher identified that the concerns of the community were very different to the concerns expressed by the initiator of the project and the locally based non-Indigenous health service providers. According to the health service providers, the focus of the research should have been the poor growth rates of young children. The local Indigenous community apparently adopted a more holistic view of child development that extended to a consideration of the social and physical needs of primary school aged children. A revised project focus was eventually negotiated but the field researcher was then confronted with the problem of identifying key individuals from within the local community who had the requisite authority to initi-
ate and support proposals for change. The long-term nature of this project and the residency of the main researcher in the community for a one year period apparently provided the necessary time and opportunity for the initially proposed research proposal to be adjusted and for key Indigenous community members to become involved in research activity.

In another Case Study the identification of a ‘community of interest’ for the purpose of gaining local input to a proposed research project was achieved through direct linkage between the research team and an existing community-based advocacy group. This advocacy group represented the key Indigenous and non-Indigenous stakeholders associated with the health issue in question, and the concerns of this group directly influenced the development of the research problem and, ultimately, the positive outcomes that were achieved.

The CRCATH intervened in two Case Study projects to ensure that the level of Indigenous community input into the design of projects was increased. One project proposal was supported in principle by the CRCATH Board but a request was made for the research team to include a senior Indigenous researcher. An Indigenous researcher was engaged as the project manager, the project was subsequently funded and very useful research outcomes were achieved. In another project, CRCATH management intervention resulted in significant adjustment to an initially proposed project application. This intervention took the form of direct negotiation between a CRCATH management representative, a senior CRCATH researcher and a locally convened committee that represented a key community based stakeholder group. This committee had been formed to advocate for improved health services in an isolated town and the CRCATH offer included a proposal to provide resources to investigate the feasibility of specific health treatment options and to establish a longer-term collaboration in research to support community-based initiatives involving the prevention of specific health conditions. Through direct negotiation between the established local committee and CRCATH management representatives, the research project was well placed to respond to issues of local concern and substantial changes to health service delivery structures were ultimately achieved.

Collaborative research

The LINKS Project research indicates that while the development of collaborative research partnerships is supported in principle by the CRCATH research community - and some good work has been done in this area - there remain persistent problems associated with achieving a shift in the balance of power between academically trained researchers and Indigenous community researchers and research participants. Investigation of funded research indicates that currently, the collaborative arrangements adopted within CRCATH funded research projects demonstrate varying levels of success in actualising research partnerships where power and control over research processes is shared, and where Indigenous community commitment to research and its outcomes is established and maintained.

While the term ‘collaboration’ is generally applied by researchers to describe processes for involving Indigenous peoples in research activity, it remains poorly defined as an inclusive practice within the CRCATH and therefore open to misuse. Collaborative arrangements are inadequately documented by research project teams and in some extreme cases, token interpretation of ‘collaboration’ extends only to the employment of Indigenous peoples without any associated attempt at inclusion of their particular skills and perspectives.
In reflecting on a completed project, and in particular on the role of Indigenous researchers, a non-Indigenous researcher noted that it was important to negotiate methodological issues at the outset of the project:

... you have to do it early and cooperatively and sort of work those things through so you encourage people to say we need you to say in your experience, in your judgement will this work or will it not work and why. I think for all (X) experience and confidence she didn’t have the confidence to sort of pull the process up really, to say look actually ... that’s not going to work very well.

When designing the project methodology, the formally trained researchers excluded the perspectives of the Indigenous researchers who had no formal research training but who had cultural and linguistic backgrounds in common with proposed research participants. These researchers were also highly qualified and experienced in the professional fields of nursing, education and organisational management. As such, the two Indigenous researchers were in a strong position to provide input into discussions about the methodological design of the proposed project and the explanation for 'non-input' at the outset is likely to be more complex than 'a lack of confidence' on the part of these researchers. While information on the symmetry of the communications in the project design discussions was unavailable, a focus on how the structuring of these discourse events can effectively silence some participants while at the same time facilitate the easy expression of others’ viewpoints may provide a more generative basis for understanding why the Indigenous members of the research team did not ‘sort of pull the process up really’. When Indigenous people are excluded from active engagement in project design in this way, then it is likely that ongoing control over the conduct of the research and associated decision-making, will be maintained by researchers trained in particular western research methodologies. Within this project the Indigenous researchers were not included in the analytical, interpretive and synthesis tasks after the fieldwork had been completed. The intellectual knowledge-generating phase of the project became the province of non-Indigenous researchers on the team.

A requirement for CRCATH Project proposals to outline the actual roles and responsibilities for all research team members is one way of providing a harder edge to the notion of ‘collaboration’ and for providing a basis for ongoing organisational monitoring of research team member positioning: an aim being to ensure that Western and academic perspectives do not dominate within the development of research activity. Within one Case Study, a non-Indigenous researcher described his perspective on the nature of collaboration within the in the following way:

... I think the focus of collaboration was on inter-disciplinary collaboration. I mean what was new about this project was that it was going to be a combination of medical and health professionals with social science, that was the collaboration and maybe we didn't really think of it as being community collaboration, we thought of it as inter-disciplinary professional collaboration and I suppose that was as far as our thinking had got at that time. It would probably be different now, I'm sure it would be.
This research project, as it was designed and conducted, involved minimal direct collaboration with Indigenous peoples. The researcher’s reference to the fact that if the project were being conducted now, ‘it would probably be different’ reflects the increasingly accepted view that the development of collaborative research partnerships with Indigenous peoples is an important element of good research practice. The extent to which successful collaborations between Indigenous peoples, health service providers and researchers can add value to research outcomes is mentioned in a number of Project reports. A project Quarterly Report noted that:

The evaluation would have been enhanced by having an Aboriginal woman with local knowledge and networks employed to work on the project. Among other things, this would have allowed the possibility of consulting with a greater variety of community groups (eg. Town camps) and may have improved the quality of information obtained in client feedback interviews.

Input from an Indigenous Reference Group to advise research project teams is a recommended element of research project design and yet the formation and operation of these groups remains problematic. A number of researchers reported problems associated with reference group formation. A key concern centred on the problem of securing the participation of suitably experienced Indigenous peoples. It was regularly suggested by researchers that these individuals were not positioned to commit adequate time to participate effectively in Project Reference Groups. Three of the Case Study projects proceeded without input from an Indigenous Reference Group and this led to a range of problems including inappropriate decision-making with regard to Indigenous participation, research team composition, research methodology and research focus.

A researcher explained that although her research team realised that a Reference Group was important to the operation of the project, it proved impossible to get one together in the early stages. In the end it was agreed that the project should proceed without a Project Reference Group because according to the project leader, not to do so would have been a waste of project money. Another researcher suggested that it came down to an issue of accountability:

…it’s always a balance between the time you’ve got and the money you’ve got.

In hindsight the researcher agreed that to proceed without an Indigenous Reference Group (alternatively referred to in this context as a Client Reference Group) was probably a mistake and she elaborated on the pressures associated with time and funding constraints that were experienced by herself and another senior non-Indigenous researcher:

...when we hit a problem we wanted to get past the problem as quickly as possible. So we’d try and keep the project going forward and neither of us were comfortable with just letting things drift, so we drove the project forward. So if there wasn't that client reference group we just kept going anyway and with the best intention...

The problem of time constraints was a common theme raised by researchers in relation to the conduct of collaborative research. It was apparent that the sometimes competing demands of effective collaboration and the achievement of proposed research outputs developed into an ‘either/or’ situation.
Research management

The area of research management encompasses processes associated with the implementation of research and involves the integration of organisational processes with research processes. Given the increasing emphasis on research that is multi-disciplinary and representative of the positioning of diverse stakeholder groups, effective project leadership and project co-ordination emerges as a key element of successful research practice. Recognition of the specialised role of project leaders and the importance of refining processes for effective communication and co-ordination within project teams is important.

The LINKS Project research findings indicate that the achievement of projected research outcomes is dependent on skilled project co-ordination, flexibility of resourcing and the application of management approaches that take account of the specific problems associated with conducting research in geographically dispersed and cross-cultural settings. Identified shortfalls in current research management processes incorporate issues both internal and external to the operation of the organisation of the CRC ATH.

A common problem evident across the five Case Study projects was the setting of unrealistic project objectives. In most cases the objectives were scaled down when it was realised that the project time frame was inadequate. Within two projects, some initially proposed project objectives were carried forward to a second research proposal. While this situation isn’t unusual, it is evident that if project objectives were more realistically framed at the outset, then organisational planning involving human and physical research resource allocation may have been more effective. In particular, the problem of researcher and project manager attrition at key points in research activity may be alleviated if projects were broken down into component parts earlier rather than later.

Evidence indicates a high rate of reported researcher dissatisfaction about the general level of support provided by project managers. Changes to project leadership during the course of research projects was raised as an issue of concern within five project Quarterly Reports and within two of the Case Studies. Reported outcomes of leadership changes included long delays in project completion, delays in producing final project reports and confusion over project management responsibilities. Some researchers observed that the credibility of field researchers was compromised when negotiations between Indigenous community organisations and health service providers were interrupted by changes to project team membership and that replacement managers sometimes lacked commitment to project objectives.

Payment systems for contract or part-time Indigenous researchers and research participants were raised as a problematic issue across all program areas. While it is accepted that payment systems must conform to official guidelines, researchers regularly report difficulties in negotiating processes for payments at the local community level. There was generalised agreement that payment systems for part-time Indigenous researchers, research participants and interpreters are unduly complex and difficult to administer.

A failed attempt at instituting an incentive and task-related system for payment was one intervention trialled by a research team. The resolution of this issue is of particular significance to those researchers who are committed to involving Indigenous people in research. If unresolved, this issue has the potential to seriously compromise future attempts to gain Indigenous community support for, and involvement in, research activity.
Participatory and collaborative research projects often experience uneven rates of project activity. For this reason a number of researchers argued for the adoption of more flexible funding arrangements.

Effective data collection processes, research methodologies, negotiating processes and dissemination of research findings in cross-cultural contexts are often time-consuming and expensive. Underestimating the costs involved in implementing these processes effectively is a commonly reported cause of blowouts to Project budgets. This problem presents as a serious impediment to the achievement of ethical research.

**Capacity exchange and professional development**

The development of Indigenous research capacity is regularly nominated as an important way of achieving Indigenous control over the research process and so is important to a consideration of an organisation’s commitment to research reform.

The CRCATH supports both the formal and informal training of Indigenous researchers within the context of research project activity but some problematic issues associated with implementing this objective are evident. Project leaders have indicated that they feel ill equipped to provide informal training within the context of research activity. A commonly expressed concern relates to the lack of guidance available to researchers in their roles as mentors and supervisors for Indigenous research trainees. One researcher expressed this concern in the following extract from a Case Study interview:

> There were no real models available to show me how to be a mentor or to train and although I have experience in teaching at Universities and so on, I’m not an educationalist, I don’t have training in training ... there was room for improvement in terms of the practises of both researchers involved in the projects but also the CRC and other institutions involved in training Aboriginal people in research. There was just a need for much more knowledge and freely available information to researchers, to research fellows and so on about what training was and what kind of opportunities you could open up for people and what kind of training programs and Institutes there were that people could go to and so on
> (LINKS Action Research Project, 2002, Case Study A)

At the community level (with some notable exceptions), the task of researchers was not generally focussed towards engaging community members in some form of research capacity exchange or formal professional development activity. In one project, four Indigenous community members were employed as mentors and co-researchers to work alongside the main non-Indigenous researcher. This intervention proved successful but required ongoing renegotiation of team member roles. When the Indigenous co-researchers eventually combined with other community members to form a project advisory committee, their effectiveness as researchers improved. It seems that the co-workers were uncomfortable in their
initially prescribed roles involving individual decision-making and the requirement that they approach other community members to elicit information. Membership of a more representative group of community members apparently provided the necessary level of support to complete their project related tasks. Commenting on the changed arrangement for involvement by Indigenous co-researchers, the non-Indigenous field researcher noted that:

... then they were really prepared to take on much more of a role... what we should do next and how we should do things you know. They were all older community members so that worked really well and again the advisor on her own wasn’t prepared to say ok what we need to do now is this... but as part of the group on the committee she was prepared to say ok we should move on and start the decision making now so that worked, having members of the group who were happy to do that with her.

This situation demonstrates the complexities associated with involvement by community members of research teams, particularly as this relates to the issue of authority and status. The positive outcomes of this project however, provide evidence that the model of collaboration adopted in this instance was effective.

Several CRCATH Quarterly Project reports and Case Study data refer to the success of research interventions that involved local (and untrained) Indigenous people as primary researchers. In many cases the Indigenous person was bilingual and able to provide invaluable interpretation of data and cultural mores. Within isolated communities, the small pool of Indigenous peoples with requisite levels of numeracy and literacy for participation in research activity, was cited as a problem. The following comment by a project leader nominates some factors contributing to the relatively small pool of Indigenous people who are able and willing to undertake roles within research teams:

Difficulties in conduct of randomised controlled trials in remote area disadvantaged populations where capacity to participate in research is limited by poor infrastructure, low priorities for health, poor literacy and numeracy and thus limited opportunities for employment by persons other than those fully employed.

Quarterly Project reports refer to the importance of relationships between Indigenous and non-Indigenous researchers and the association with Indigenous research skills development. The following comments made by project leaders provide examples of this trend:

The partnership of Indigenous and non-Indigenous researcher was effective.

The development of a strong and mutually supported relationship between the (Indigenous) Health co-ordinator and project leader has been central to the implementation of the evaluation.

The Case Study and Quarterly Report data indicate that Indigenous researchers are often expected to reconcile differences between Western and Indigenous perspectives on health and wellbeing. The interests of the research team, research funding provider or employing agency sometimes conflict with the community obligations of Indigenous researchers. Evidence suggests that the pressure on Indigenous
researchers is greatest when they are excluded from research planning and yet are expected to provide solutions when the research activity is deemed inappropriate or unworkable at the level of implementation within local communities.

Within one Case Study Project, the involvement of a senior non-Indigenous researcher and an Indigenous research trainee, provided significant opportunities for the development of co-operative working partnerships between Indigenous and non-Indigenous researchers. Research team members referred to the development of mutual trust and friendship and exchange of knowledge, as being the key to the development of successful relationships within the team. The partnerships between the Indigenous and non-Indigenous researchers were not, however, without problems. A non-Indigenous researcher suggested that lack of definition of the research project team as a ‘group’, and the lack of regular project-team meetings was problematic. The cohesiveness of the group suffered as a result of this inattention to ‘inclusiveness’ and opportunities for presenting differing perspectives on the direction of the project may have been missed.

Within two of the Case Study project, regular team meetings provided opportunities for building inclusiveness through sharing of complex technical problems, discussing proposed direction of the research, for identifying different cultural perspectives and for sharing grievances and concerns. When regular meetings were not held, it was apparent that opportunities for developing group cohesion and for achieving the input of Indigenous perspectives were missed.

A model of project management including parallel meetings for Indigenous and non-Indigenous team members was trialed effectively within one Case Study project. A key role of the project co-ordinator was to participate in the separate team meetings involving Indigenous and non-Indigenous team members and to communicate findings between the two groups. Continual communication and interaction between research team members supported the development of a range of research skills and provided opportunities for the professional development of Indigenous and non-Indigenous research team members. The success of this intervention relied on the adoption of processes for relaying information between the two groups of researchers. Interpretation of data and commentary on project design and methodology by Indigenous and non-Indigenous research team members were routinely incorporated as part of the ongoing development of research design.

Key issues and observations emerging from the data include the following:

- Professional development and capacity exchange were not generally planned prior to the research project being undertaken. Where this planning did occur it was not documented in Project records.

- Informants noted that the most useful outcomes from some research projects are often unintended. For example, important learnings from critical reflection on research practice can feed directly into professional development for both Indigenous and non-Indigenous researchers.

- Where there is involvement by Indigenous community mentors as members of research teams, there is evidence to show that this can have a positive effect on outcomes for non-Indigenous research team members.
• In a small number of projects, two-way exchange of approaches to data collection between Indigenous and non-Indigenous research team members assisted in the development of a potentially more effective and inclusive methodological design.

• The development of strong research partnerships within research teams provides naturally occurring opportunities for skills and knowledge exchange.

**Institutional research capacity**

Developing institutional research capacity is identified as a priority area for action within the Public Health research field in Australia (Wills 1999). It is argued that without the development of a critical mass of adequately trained researchers, opportunities for implementing the proposed multi-disciplinary and collaborative approaches to Public Health research will be limited. This situation has important implications for institutions and organizations involved in Indigenous health research because current proposals for reform rely on expert intervention by appropriately trained researchers. In particular, Indigenous health research demands cross-cultural research skills, a capacity to work in multi-disciplinary teams and experience with collaborative and participatory research methodologies. The LINKS Project research indicates that within the context of CRCATH sponsored research activity, there are particular problems that can be related to the skills base of researchers.

Currently proposed capacity building initiatives involving Indigenous researchers and communities rely on mentoring and collaborative support from expert Public Health researchers. CRCATH researchers, however, have reported that they lack the requisite skills to provide mentoring and collaborative support to Indigenous research participants. In this situation, any intention to transfer control from the Indigenous to the non-Indigenous sector is compromised.

Proposals for change aimed at increasing the research capacity of Indigenous individuals and communities rely substantially on the application of methodologies that are both collaborative and participatory. Evidence suggests that many CRCATH researchers are not operating collaboratively with Indigenous stakeholders. Those researchers who are adopting collaborative approaches are reporting difficulties putting the principles of collaboration and community participation into practice. Researchers indicated that increased levels of institutional support and guidance in this area is required.

**Research transfer and dissemination**

The CRCATH specifically aims to promote research, which has ‘a focus on communicating research findings in cross-cultural and non-academic contexts’, and which results in ‘changes in policy, service delivery and people’s behaviour’ (CRCATH 2000, Question and Answer Guide, p.5). Research transfer is a relatively new area of focus for researchers and research organisations and is not generally embedded as an important aspect of research activity. Survey of the recent literature reveals that research reporting rarely includes reference to research transfer initiatives or outcomes.

The LINKS Project Case Studies and analysis of Quarterly Report data confirm that there has been a lag between the implementation of a new organisational approach to research transfer and dissemination that positions these aspects of
research at the ‘front end’ or development stage of projects. The LINKS Project data derives from projects that were commenced prior to the institution of specific CRCATH proposals to improve the level of transfer from research to practice, and this may account for the observation that issues relating to the transfer of research findings are not positioned as a priority area of concern by researchers. The development of detailed research dissemination plans is now an institutional requirement and CRCATH Quarterly Reports demonstrate increasing levels of researcher support for this intervention. The CRCATH facilitates the editing and publication of findings in a range of formats. While these interventions have proven successful in more recently completed projects, a common concern of researchers is the slow turnaround of draft project reports within the CRCATH. Long periods between the submission and clearance for publication of reports has meant that opportunities for dissemination of findings have been missed and proposals for ongoing funding have been compromised.

The experience of CRCATH funded research projects supports the notion that the extent of ‘user buy-in’ is an important indicator of ultimate transfer of findings into practice. This was especially the case when Core Partner organisations and other key stakeholders participated in project design, research activity and the associated evolution of ideas and proposals for change. While evidence of the extent of research transfer remains largely anecdotal, the Case Studies indicate that contested interests and political realities can impede progress in this area. One case in particular illustrated this point. The CRCATH was placed in a difficult situation when a Core Partner organisation would not act on key findings from a research project, despite having been involved as a key stakeholder. It is generally agreed that this lack of action is likely to fuel Indigenous community scepticism about research. Ironically, in this same case, the community involved in the research eventually got what it wanted – through a change of government.

Commenting on the importance of involving health practitioners as active members of a research project, one project leader suggested that:

Research emanating from the ground up engages practitioners because it is addressing what they perceive to be their real needs.

While recognizing the importance of including health service providers as active participants in research activity, one project leader nominated some obstacles to the achievement of this aim:

Lack of time and competing priorities have limited the extent to which staff, particularly those directly involved in client care, have been able to participate in this evaluation project. Flexibility about arrangements, and maintaining an informal and opportunistic approach have been important, because for most people evaluation activities come on top of an already overloaded schedule of both work and other responsibilities and commitments.

In another case study, involvement by senior management of a key stakeholder organisation in the development of a research report resulted in a heightened level of understanding of the issues and support for the timely implementation of the research project recommendations.
The most common form of research dissemination formats adopted within the Case Study projects was the publication of technical project reports and journal articles. More recent projects included the production of plain-English versions of interim project findings and videos to report on research processes and the main project findings. Reported problems with approaches involving transcription, translation and videotaping and analysis relate mainly to their costly and time-consuming nature. The videotaping of interactions between health practitioners and Indigenous patients was the main method of data generation within one project. The data was subsequently translated and analysed by Indigenous and non-Indigenous observers. The project leader reported that:

Videotape analysis involving both participants in the interactions and members of the research team is extremely time consuming although it is essential for illuminating precise areas of miscommunication from different perspectives.

The project leader involved in the videotape analysis also commented on the importance of reflecting on ‘learnings’ from each iteration of the research process before proceeding to the next stage. This practice reflects a concern with providing immediate feedback to participants as well as ensuring ongoing refinement of data collection processes and is consistent with an Action Research approach.

Within one project, the conduct of a series of workshops to report on key findings proved a very successful intervention and resulted in the generation of feedback about the research problem that was subsequently incorporated in the final project report. A researcher suggested that these forums proved to be an effective mechanism for generating a second round of feedback from participants.

... for me they contributed almost as much as the interviews themselves because it was feeding back the result and then getting a second round of feedback which I found invaluable.

A CRCATH representative involved in the dissemination phase of this project explained that the workshops were promoted as a way of ensuring that the ‘dense’ nature of the analysis contained within an early draft of the Project report could be accessed by health service providers working in the field. The representative was concerned that the CRCATH was actively promoting ‘applied’ research but that the outcome from the Project was essentially ‘theoretical’. The workshop was proposed as a way of promoting and further investigating the health service implications of the Project findings.

Another successful reporting process included the conduct of community based meetings where the findings were presented in the local Indigenous language and a non-Indigenous medical expert was on hand to answer specific questions put forward through an interpreter.

Three of the Case Study projects involved direct participation by Indigenous peoples who were ESL speakers and yet none of the project reports was translated into local Indigenous languages. The cost of transcription and production of project reports in local Indigenous languages was cited by researchers as the reason for this situation.
A contradiction between the positioning of an Indigenous and non-Indigenous researcher on the purpose for ‘reporting back’ of findings to Indigenous research participants highlights the problem of deciding the purpose and format for dissemination of research findings. When questioned about the processes in place for the feedback of information to project participants, a non-Indigenous researcher took the view that the information gleaned from the research project was probably of little interest to the participants anyway:

I mean what would we feed back? The findings were that in general the materials needed more work or different kinds of work perhaps and that the method needed some attention.

Another member of the research team, however, pointed out that the Indigenous researchers had been engaged in a substantial amount of informal feedback to community members who would ask them about the progress of the research. In this respondents view, this feedback was:

... a consequence of (x) relation to the participants, and a consequence of (x) being a permanent resident in the community that (x) is available and that people saw (x) after and asked (x) about that.

An Indigenous researcher referred to in the preceding extract expressed frustration that he was not supported in reporting back the findings from the research to the local community in a more formal way. He stated that:

We did the second interview and that was like the end of the job.

This researcher suggested that as a member of the local community there was pressure on him to provide informal feedback to people interested in the outcomes. It was the researcher’s understanding that a more formal process for feedback had been planned, but that the project had been ‘cut short.’

In two Case Study projects that adopted an action research methodology, ongoing dissemination of research findings and subsequent changes to the research question were inbuilt into the research process. The action research process apparently provided regular opportunities for two-way exchange of information between research teams, community members and other key stakeholders. In one project, the dissemination of findings to the community involved the development of a plain English version of an interim Project Report and the production of a video to record key aspects of the research process and an outline of ongoing community development interventions. Both these interventions represented a commitment to ensuring that local community members were kept informed of the research progress and were encouraged to participate in future community development initiatives. In another action research project, clinical interactions between health practitioners and Indigenous patients were analysed by a team of Indigenous and non-Indigenous research team members. The findings from these analyses were immediately reported back to the participants and used as the basis for ongoing refinement of the data collection processes. This immediate feedback of findings impacted directly on the nature of the research and on the clinical practices of health care practitioners.
Within one project a study tour apparently provided a useful vehicle for canvassing alternative health treatment options and for local Indigenous community members to assess the cultural suitability of these options. The subsequent community based information sharing process involved a power point presentation and a broad based community discussion of the alternative models of health service delivery. Through participation in the study tour, key members of the local community were well positioned to influence the recommendations arising from the research project and the information sharing session ensured that a broad range of community members were informed and involved in the discussions surrounding proposals for future action.

Key issues and observations emerging from the data include the following:

• While the CRCATH has made significant improvement to research transfer and dissemination processes, the current mechanisms are not sufficient to ensure research transfer actually takes place. This is particularly true in relation to planning for research transfer issues from the early stages of project development. Of the five case studies, only one involved specific research transfer plans in the project proposal.

• The most common form of research transfer activity continues to be the publication of reports and journal articles, though a broadening of activity to include workshops and video production is evident (CRCATH 2002a, Annual Report 2001-2002).

• Transfer processes are often more effective when health service practitioners are directly involved in the conduct of the research.

• The reporting of research transfer planning and activity was minimal within project documentation.

• Participatory action research projects are more likely to encourage effective and ongoing communication with Indigenous participants and communities.

• Research transfer activities are hindered by slow turnaround of submitted draft project reports.

Research ethics

A concern with research ‘process’ as well as research outcomes is increasingly a focus of consideration for those engaging in Indigenous health research in Australia. This focus has led to varying interpretations of Ethics Guidelines and ongoing renegotiation of the positioning of researchers and research participants. Evidence from the LINKS Project research suggests that there is a persistent and high level of uncertainty about the rights and responsibilities of researchers who are currently operating in this changing research environment.

Reported concerns by CRCATH project leaders about the Ethics clearance process relate primarily to Intellectual Property (IP) issues and to the more general problem of long delays associated with gaining Ethics committee approval for research. One Biomedical, one Health Services and two Public Health research projects reported problems with the negotiation of Intellectual Property rights. IP issues in the
biomedical research area include complex negotiation of product patents whereas in other fields IP issues relate more generally to ownership of knowledge and data. To overcome this problem, researchers suggested that a workshop on Intellectual Property issues should be conducted and regular in-servicing be carried out.

A project leader suggested that difficulties in mediating IP clauses in the CRCATH Research Contract resulted in a long delay before the contract was eventually signed. It was also reported that the negotiation of IP issues resulted in significant delays in reaching agreement over a patent for a research product. One project leader suggested that:

  Intellectual property issues have emerged as complex and important, and require ongoing negotiation with CRC.

Long delays in gaining Ethics Committee approval for research was a commonly reported issue of concern. Six project leaders reported this as a specific problem and cited this delay as being responsible for a readjustment of the proposed project timeline. The problem of long delays in gaining approval to conduct research was reported across all program areas and consequences of these delays are reported as including expensive extensions to research project timelines, attrition of research project managers and researchers and loss of momentum in research project activity at the local community level. Infrequent Ethics Committee meetings were cited as a problem by one Project leader who reported on her experience with the NTU HREC:

  The delay there was of course only related to the times when that committee met. They only met once a month on an average in first semester after March until June then they don’t meet again until after the second semester, which is August, and that creates problems.

A link between delayed Ethics Committee approval and long-term project management problems is suggested in the following comment:

  The project is very far behind the time line, as there were delays in obtaining ethics approval, and the original project leader left Darwin before the commencement of field work.

One project leader attributed the delay in gaining ethics committee approval to the fact that a student researcher was required to obtain ethics approval from two separate ethics committees (TEHREC and NTU HREC). The requirement for dual applications was the reported reason for delays within two other projects.

While reporting that the ethics clearance process took much longer than expected, one project leader suggested that this delay had positive consequences for the project outcomes. In this case the delay meant that the project team spent more time planning the project and as a result a more efficient and achievable research plan was developed.

Some researchers identified differences in approach adopted by Ethics Committees. A project leader reported that it was important to lodge concise Ethics applications, and that this was particularly the case when dealing with the Central Australian Human Research Ethics Committee (CAHREC). A respondent suggested that researchers required specific training in the completion of Research Ethics applications. It was also noted that submissions to CAHREC should specifically address the issues of Indigenous Community support, consent and data quality.
The same project leader described the process surrounding representation of this support:

For this project it has involved approaching peak Indigenous organisations. This was necessary as it is impractical to gain community support from all Indigenous communities in the Northern Territory. Additionally, the issue of public good outweighing the need to gain community consent was argued for in place of individual consent.

The issue of ‘public good’ outweighing the need to gain individual consent, was expanded on by the same Project leader in the following extract:

Furthermore, consent was not from an individual level or one or a few communities, as the project is attempting to gain data for all communities across the Northern Territory using routinely collected data sets. That is, consent was obtained from data custodians and the broader Indigenous community through peak Indigenous bodies, such as the Northern Territory Aboriginal Health Forum, the Land Councils, and Health Boards etc.

There is significant evidence to suggest that CRCATH researchers are concerned with research outcomes as well as the implementation of appropriate research ‘processes’ in Indigenous community contexts. A persistent theme raised by researchers relates to a lack of time and resources to negotiate effectively with Indigenous peoples, to implement culturally appropriate processes for data gathering, to implement inclusive research methodologies and to report research findings in effective ways. The following comment by a researcher is indicative of the tension between available resources, time and implementing appropriate processes for engaging with Indigenous peoples in a research context:

Process for information gathering with Aboriginal people is far more intricate and subtle than I ever imagined. Availability of translators does not negate the issue.

Other Quarterly reports made general reference to the importance of allowing adequate time for data collection and research related interventions when undertaking research in Indigenous communities. The effectiveness of consultations with community members was commented on by a project leader in the following way:

The method of research and consultations with grassroots communities was very effective.

In this instance, a process for detailed and time-consuming consultations with Indigenous community members was undertaken. In reporting on the ongoing progress of the project, the Project leader made specific mention of the effectiveness of this approach. In another project, it was reported that although effective and of long-term benefit, initial consultation with Indigenous stakeholders took a long time:

A great deal of our attention has spent been building relationships to support our long-term involvement with participating sites. This takes considerable time but will pay off in the “reality” basis of the data and outputs.

The ethical implications of the problems outlined by researchers are of significance. If researchers are correct in their assertion that lack of time and resources is impacting negatively on the way they negotiate and conduct research then this problem should be seen as a serious obstacle to the achievement of current ethical
guidelines. To be inclusive and effective, Indigenous health research project activity needs to be adequately and flexibly funded and realistic expectations about research time frames need to be adopted.

**Research methodology**

Detailed commentary relating to research methodology is contained within many of the research project Quarterly Reports. Of all the areas under consideration, it is at the level of implementing collaborative and participatory methodologies that researchers are reporting the most difficulty. Far from questioning the suitability of these approaches, comments made by project leaders demonstrate commitment to the principles of research involving high levels of participation and collaboration with a wide range of stakeholders, including Indigenous people. Operationalising these principles within the context of research at the institutional and Indigenous community level is clearly not easy. Two research projects incorporated workshops that brought together research stakeholders to consider the processes involved in Action Research methodology. In particular, the opportunity to develop a shared language to address nominated research problems and a shared understanding of the Action research process were regarded as important outcomes.

The Case Studies revealed that research framed in response to Indigenous Community nominated priorities, is more likely to produce outcomes that can be applied to promote changes to health service delivery programmes. Projects that were framed mainly by investigator driven concerns and that were proposed in isolation from substantial levels of Indigenous community input, appeared to confront a range of similar problems associated with inadequate levels of co-operation and participation at the level of local communities, application of culturally inappropriate research methods, the setting of unrealistic time frames for the completion of research and limited research transfer outcomes.

Quarterly Project Reports reveal a growing tendency for researchers to propose methodological approaches that involve collaboration involving Indigenous peoples and other stakeholder groups. In particular, proposals involving active participation by Indigenous peoples in research activity appears to be increasing. Project reports indicate however, that broad-based collaboration and consultation processes are not always straightforward. A research project that adopted a PAR approach in an isolated Indigenous community encountered difficulties in achieving community consensus about the nature of the specific problem to be addressed, and once identified, the action required to address this problem. In reporting these difficulties the Project leader suggested that:

> Participatory action research is extremely difficult to implement. For this to be effective community members need to be involved in all stages. The funding body needs to be extremely flexible.

In the case of the previously mentioned PAR project, extended consultation with key community members and health service providers revealed a wide variation in the conceptualisation of the ‘problem’ associated with the health of a nominated target group and an associated wide variation in the suggested actions deemed necessary to address the ‘problem.’ Through careful negotiation and a core concern with privileging the voice of Indigenous community members, the researcher succeeded in implementing a research intervention that opened up the possibility for Indigenous community members to maintain control over the precise nature of the
research question and the associated interventions designed to address the question. In reporting on project progress the researcher clearly indicated the difficulties associated with implementing PAR principles.

The following extract from a Project Quarterly Report illustrates the gap between ‘good intent’ on the part of researchers and the realities associated with implementing collaborative and participative research approaches in Indigenous community contexts.

... the methodology has been progressively downscaled from a participative one to one which now could only best be described as a co-operative inquiry (and that is being a very generous description). This downgrading does not reflect any problem with the methodology, but rather how reality has shaped and modified the methodology used. Ethically, the researcher is committed to a collaborative approach to the research topic. Practical outcomes, be they the acquisition of knowledge, new behaviours, service procedures etc can only be of relevance if they result from a true collaborative research methodology. This has not been the reality. This is in part due to the research topic, health being seen as someone else’s responsibility and not pertaining to the individual.

Some specific problems nominated by researchers in relation to implementing participatory and collaborative research approaches included:

• identifying key and appropriate stakeholders;
• identifying ‘community’ and mobilizing ‘communities of interest’ for the purpose of research;
• engendering Indigenous community ‘ownership’ of the research problem;
• negotiating the identification of ‘shared concerns’, which will ultimately lead to the framing of a specific research problem and the development of an appropriate research approach;
• competing time demands on health professionals and Indigenous community members; and
• under-developed research skills base at the level of institutions and Indigenous communities.

While recognizing that PAR was difficult to implement in Indigenous community contexts, a researcher suggested that effective research can be facilitated using this research approach if community members are involved in all stages of the research and if funding bodies are prepared to adopt a flexible approach. The issue of funding flexibility is important when considering the range of issues that can cause delays in research project activity. The Quarterly Reports indicate that delays experienced within projects relate to:

• the long time it sometimes takes to gain ethics committee approval;
• the unexpected loss of key project team members;
• cultural and community issues that temporarily stall research progress;
• availability of key Indigenous people;
• competing professional commitments of health service providers and part-time research consultants;
• extended time necessary to effect negotiated agreements with key Indigenous community members; and
• the time it takes to develop effective relationships between researchers and Indigenous peoples.

In some cases these delays may require an increase in project budget; in other circumstances an extension to the timeline for delivery of project outcomes is all that is required.

Awareness of the complexities associated with data gathering in cross-cultural and Indigenous community contexts was indicated within a number of quarterly reports submitted for research projects involving social science perspectives. In addition to reporting that processes adopted for data collection within collaborative and participatory research were complex and time consuming, Project leaders also reported a high level of researcher commitment to trialling innovative methods of data collection that may improve the reliability and usefulness of data. The time consuming nature of data collection was the most commonly reported issue. When researchers involved Indigenous interpreters (trained and untrained) in research processes, very good research outcomes were reported and the skills of the Indigenous participants were favourably commented on. The adoption of appropriate and effective data collection processes in cross-cultural contexts is obviously an important issue. Opportunities for researchers to share positive and negative experiences in this regard and the intervention of appropriately trained cross-cultural researchers may be warranted.

In the construction of CRCATH research over the past five years, the application of collaborative and participatory research approaches has steadily increased. The LINKS Project research suggests that although this trend has resulted in the generation of useful research outcomes, some problematic issues still confront the research community. These issues include:

• Indigenous researchers are routinely excluded from the processes associated with methodological design. If their input was sought at the outset then methodological problems associated with cross-cultural communication and cultural factors inhibiting active engagement of participants could be minimised or averted.

• Assumptions are made about the value of including the perspectives of people who are not formally trained in Western discipline based knowledge systems. This does not recognise the valuable cultural and local knowledge of Indigenous researchers.

• Researchers are reporting problems identifying ‘communities of interest’ for the purpose of conducting research in Indigenous domains and reaching agreement on the exact nature of the research problem to be investigated.
• Effective consultation with Indigenous peoples about appropriate data collection processes is not a routine aspect of research practice. Experience of some CRCATH research projects indicates that Indigenous community members are often well placed to assist in the development of data collection processes that are both culturally sensitive and likely to lead to the generation of useful data.
Part 5: Recommendations for organisational change

The following recommendations for organisational change were proposed within the LINKS Project, Report to the Board of the CRCATH, February 2003. It is intended that these recommendations will result in significantly increased levels of Indigenous community involvement in the research process and improve levels of transfer from research findings into practice.

These recommendations were accepted without significant amendment and processes for their implementation are currently being developed in preparation for operationalising the new Cooperative Research Centre for Aboriginal Health (CRCAH).

1. The project development process

Project approval pathway

There should be four pathways for project approval, including:

1.1 A pathway that encourages Aboriginal researchers, communities, or organisations (CRCAH 2002 p. 8). This could be approved through the Director’s Discretionary Funding, with assistance provided through the SME Forum and facilitated by the Knowledge Broking Manager.

1.2 A pathway for scoping projects (in line with AHURI and NCVER) that require extended time for development and negotiation to reach their potential. This will provide opportunities for building partnerships with Indigenous and other stakeholders. These types of proposals could be funded along with the open category pathway described below, with monitoring and assistance from the Research Working Group network.

1.3 A CRCAH commissioned research pathway, where the CRCAH develops commissioned briefs for research based on the research priorities identified through the annual convocation process. (This could be an internal process guided by approved specifications from the Board or an external process through advertised specifications). Identified research priorities are developed through the Annual Convocation process that is informed by the previous year’s monitoring by the Research Working Group, advice from the Strategic Research Advisory Group and the CRCAH Board (perhaps adopting a staged approach to research and reporting based on a modified AHURI model). The SME Group is recognised as an important grassroots stakeholder forum and must also play a key role in setting these priorities. The SME Group should be supported to meet twice yearly with the second meeting to coincide with the annual convocation. In this way their input into the setting of the research agenda would be substantially increased.

1.4 Approval of In-kind projects from Core Partner organisations which are assessed against the CRCAH health research outcomes program and that have research processes and practices that support the principles of the reform agenda. The Research Working Group should manage this process.
2. **Project development principles**

2.1 Information for project development groups is required so that they are aware of the intent of research within the CRCAH and the project approval pathways. A plain English document which includes a diagram of the project approval pathways and submission processes needs to be developed. This tool would be important for in servicing of new CRCAH research teams. A second document (possibly integrated with the first) including a set of protocols to act as guiding principles for the CRCAH research community needs to be developed.

3. **Project submission process**

3.1 The project submission processes require simplification. A review of the current application form, that simplifies and provides focus on the emphasised IRRA elements (such as consultation/negotiation, capacity exchange, transfer and professional development), should be carried out immediately. A flowchart showing the approval processes for each of the project pathways should be developed and this could be employed as an in-servicing tool.

3.2 Where appropriate provide researcher teams with a service that supports them in developing submissions. This service would particularly target such issues as community negotiation, participative research methodologies, professional development, transfer and budgeting, and could be facilitated by the monthly Research Working Group forums.

4. **The project management process**

**Supporting collaboration**

4.1 Where there are Indigenous members of the research team who are new to such roles, the research team (with support from the Development Division if required) should negotiate/workshop the roles of these and other members of the team and the partnership approach to be taken (this would be documented in the Statement of Researcher Responsibilities).

4.2 Reference groups to form a part of all CRCAH research projects. These reference groups would be majority Indigenous and where appropriate have Indigenous membership from any community being researched. Institutionally convened reference groups with responsibility for overseeing a number of projects may be one way of achieving a more effective and co-ordinated approach to ongoing and timely Indigenous input into project development.

**Supporting the research team process**

4.3 Promote critical reflection on research practice. In particular, support research teams to self-monitor their projects as a focus for capacity exchange and professional development. This process would also become an aspect of the monitoring and evaluation process outlined below. Develop a tool for researchers on methods, and principles of critical reflection to use as an internal evaluation process of their research project.
Supporting participative methodologies

4.4 In line with the IRRA principles, promote research methodologies that allow for full engagement with Indigenous peoples. Provide support to Indigenous researchers investigating or adopting Indigenous research methodologies within CRCATH sponsored research.

5. The research transfer process

Research transfer to community

5.1 The Development Division to further develop systems, procedures and means of supporting research teams to provide effective feedback to Indigenous participants and communities.

Transfer as an ongoing process

5.2 The Research and Development divisions to work together to produce a detailed strategy to ensure research transfer is more successfully incorporated at the priority setting and project development stages of research planning, and throughout project activity.

5.3 The transfer process be incorporated into the monitoring and evaluation process of the CRCAH allow for a flexible and opportunistic approach to transfer activities.

Transfer in pre-project thinking

5.4 The CRCATH already runs workshops to build research transfer and dissemination awareness among Core Partner researchers. This program should be continued within a planned program to develop improved research transfer awareness and capacity amongst not only researchers and identified key user groups.

5.5 As a part of the strategy to broaden research transfer planning, implementation and reporting, and as part of its restructuring, the CRCAH to implement measures to ensure planned research transfer and timely implementation takes place. This includes the identification of appropriate knowledge broking strategies for direct targeting of specific user groups and contexts, and improved reporting of research transfer activity.

6. Monitoring and evaluation processes

Monitoring processes

6.1 Monitoring processes should be flexible enough to take into account fluctuations in research project activity, and provide an environment of support through learning circles or contact with other researchers.

6.2 Currently quarterly reporting is used to monitor CRCATH projects. The monitoring process would remain as a quarterly activity, or more frequently, as agreed to by the research team and CRCAH management. In this way those projects that require further support (such as scoping projects) would be able to receive it.
6.3 The format of the quarterly reporting framework to be reworked in the light of the increased emphasis on issues pertaining to the priority driven approach to research and the IRRA principles.

Evaluation processes

6.4 The adoption of the Draft Interim Evaluation Plan put forward by the current Development Division is accepted in principle by the CRCATH for further workshopping to refine and develop the evaluation tools.

7. Capacity exchange and professional development processes

Developing an awareness of capacity exchange and professional development as an integrated aspect of research in the CRCAH

7.1 Opportunities for professional development and Indigenous research capacity exchange processes be recognised and documented both during the research submission phase and during the monitoring of research projects phase. As such, capacity exchange and professional development costs need to be outlined in the project submission and project planning.

Professional development

7.2 Significant institutional support is required to increase the skill level of researchers to mentor Indigenous researchers. This would take the form of in-service short courses and/or the development of a support service from Development Division personnel to facilitate reflective Professional Development programs particularly within research projects where new Indigenous researchers are involved. Similarly, the Development Division should develop a ‘toolkit’ for Professional Development/evaluation, which, for example, establishes mechanisms to encourage reflective practice within research project teams, hints on participatory action research on working collaboratively, and other areas of identified need.

Indigenous Centred Professional Development

7.3 Where there are both Indigenous and non-Indigenous researchers in the research team then Indigenous researchers must be engaged in all phases and discussions regarding the research and the research planning. As such, this aspect of the professional development and capacity exchange of research teams would be acknowledge and reported in the monitoring process.

7.4 A service utilising Development Division personnel to facilitate reflective Professional Development programs particularly within research projects where new Indigenous researchers are involved.
Institutional Research Capacity

7.5 The achievement of methodological reform relies on the expert intervention of appropriately trained researchers. Institutional research capacity in the areas of collaborative and participatory research is currently insufficient. With new core partners joining the CRCAH, an initial audit of institutional capacity should be conducted to establish resources and expertise in professional development and capacity exchange, working collaboratively, research transfer and dissemination, and participative research. The audit data can then form the basis of a brokering process to link research teams with the necessary expertise.
Part 6: Project outcomes

Identifying specific outcomes from the LINKS research project activity is a complex undertaking. Organisational change strategies implemented by the CRCATH as a direct result of Project recommendations represent one set of outcomes. Other outcomes are, however, more embedded and less obviously associated with the Project research. Over the life of the project, LINKS Project team membership has included a total of seven CRCATH employees, one contract researcher and one research consultant. This level of involvement by CRCATH employees created a permeable boundary between research activity and practice and so the extent of influence of the project findings in terms of changed attitudes and practices is difficult to track. Ongoing reporting of research findings over a period of two years has also resulted in a situation where opportunistic transfer of research findings into practice may have taken place, but the source of new knowledge has not been attributed to LINKS Project activity.

The following section outlines some identified ways in which the LINKS Project findings were transferred into practice. This is followed by an outline of some key organisational strategies adopted by the CRCATH to implement LINKS Project recommendations.

Research transfer strategies

Some examples of the way in which project findings influenced change within the CRCATH research community include:

- Incorporation of interim findings from the LINKS project research in the framing of the CRCATH presentation to the Commonwealth-convened 5th Year Review of CRCATH operations (July-December 2002). Four LINKS project team members (who are also institutional employees in the management, training and education, research transfer and dissemination functions of the CRCATH) were extensively involved in the 5th Year Review process. This involvement extended from preparation of supporting documentation to participation in Review interviews before an expert panel.

- Incorporation of key LINKS Project recommendations for change in the CRCAH Business Plan (2002). This Business Plan and associated presentations to an expert panel formed the basis of the successful re-funding bid for the CRCATH to continue its operations under the banner of the CRCAH until 2011.

- Reporting of LINKS Project research findings to the Board of the CRCATH and the subsequent ratification of key proposals for organisational change. (LINKS Project Report to the Board of the CRCATH, February, 2003).

- Official launch of the LINKS Monograph series 1-4, (Darwin, February 2002, Flinders University, March 2002). These publications drew on key elements of the Indigenous Research Reform Agenda and the official launch provided a forum for outlining the reform agenda of the CRCATH to a broader health research audience.
Presentation of LINKS Project findings and associated outline of the Indigenous Health Research Reform Agenda (IRRA) at conferences (CRC Conference, Cairns, 2002, Centre for Teaching and Learning in Diverse Educational Contexts Conference NTU, 2002) and other health research forums. (Australian Medical Association NT, MSHR and NTU).

Involvement by LINKS team members in the presentation of a series of CRCATH workshops for core partner organisations at multiple sites throughout Australia. (June-July, 2003) This workshop series was planned and delivered by the CRCATH Development Division and focussed on providing information to intending researchers about the organisational processes and strategic objectives of the newly formed CRCAH. This presentation drew substantially on LINKS Project reports and associated recommendations for organisational change aimed at increasing the level of participation by Indigenous peoples in health research activity.

Concurrent participation by a member of the LINKS project team in national initiatives relating to the development of alternative approaches to Aboriginal health research. (NHMRC Road map for Aboriginal health research and the NHMRC project to review the 1991 interim guidelines for ethical research).

Implementing research findings into practice

In a report to the Board of the CRCATH (Links Action Research Project, 2003: Report to the CRCATH Board, February), some recommendations for organisational change were proposed. Interventions arising from these recommendations have subsequently been developed by the CRCATH. These interventions include:

- the establishment of a new organisational function, the Development Division, to focus the processes for education and training, research transfer and dissemination, and knowledge broking in a co-ordinated way;
- changes to the research project application form to include increased focus on critical reflection on research practice and planning for dissemination of research findings;
- substantial reorganisation of the research transfer and communications function leading to greater emphasis on pre-project planning;
- the development of four separate project approval pathways;
- facilitation of the first annual CRCAH Convocation meeting (Darwin, April, 2003), which was convened by the CRCATH and brought together 120 key stakeholders from proposed CRCAH core partners. This meeting marked the first step in a proposed annual research priority setting process and provided opportunities for the CRCAH to advocate for changed approaches to Aboriginal health research by participating core partners; and
- the adoption by the CRCAH of six theme areas to guide approval of research (these theme areas accord with those recommended in the NHMRC Road Map for Aboriginal health research).
Future directions

It is recognised that the change process associated with implementing proposed reforms will be an ongoing project for the newly formed CRC A H. The LINKS Project research findings have generated broad-based discussion in the research community and are currently being used as the basis for promoting improved management processes and research practices within the organisation of the CRC A H and the associated research community. The CRC A H Business Plan (2002, p. 10) signals the intention of the CRC A H to support and promote ongoing evaluative research (similar to the LINKS Project research). This type of research represents a capacity for promoting the development of a culture of critical reflection on research practice, for maintaining a focus on ways of achieving high quality research and for developing institutional research capacity in key areas. The LINKS Project research has led to the identification of some key areas requiring more detailed research:

• investigate and broaden the Centre's understanding of approaches to Aboriginal health research management with a health outcomes focus;
• explore processes for community management and community involvement (steering committees, reference groups, community participation);
• investigate a range of methodological approaches compatible with "Indigenous ways of approaching research" (including PAR and Networked research) and, in particular, provide technical and financial support for the incorporation of Indigenous research methodologies within CRC A H sponsored research;
• further investigate processes for achieving increased levels of research transfer (currently being undertaken through the NICS collaboration);
• promote critical reflection on health research practice and in particular develop processes for the compilation of case-study reports on research projects incorporating Indigenous research methodologies( The aim of this initiative is to promote an awareness of issues associated with the adoption of Indigenous Research methodologies within the CRC A H research community and within the broader Public Health research community);
• investigate ways of positioning Professional Development as integral to research project activity;
• investigate cultural protocols compatible with the operation of health research in Indigenous community contexts; and
• investigate appropriate ethical protocols and processes for their implementation and, in particular, consider effective ways of monitoring research activity in progress.

In developing a research project to continue in some fashion the foundations and directions established by the LINKS Project, it would be appropriate to consider the methodological lessons learnt by the current LINKS project. Consideration could be given to a multi-methodological approach while maintaining monitoring and development through an action research team. Such an approach could include:
bullet carrying out a literature review focusing on particular IRRA elements such as those mentioned above;

bullet adopting a critical ethnographic or action research approach to the priority driven research development pathway (in this situation, individual members of the project are placed in the research development teams to both promote the uptake of the IRRA and to register/report in a supportive way on the issues involved.);

bullet reviewing the Community/Indigenous initiated research pathway at two year and five-year points.

bullet reviewing scoping studies through selecting case studies to document the processes and issues that emerge.

bullet continuing the Quarterly Reporting review, which was a very useful approach;

bullet developing a range of longitudinal studies, for example, a review of a number of completed projects over time (This project would have the joint aims of providing information of benefit and outcome of projects over a period of years and would also help develop a framework integrating a triple bottom line approach to establish benefit and health outcomes over time.); and

bullet ensuring that the professional development and transfer and dissemination aspects of the project mirrored good IRRA practice.
Summary

The strategic vision of the CRCATH includes a primary focus on achieving significantly increased levels of Aboriginal community control over all aspects of the research process. The LINKS Project research findings indicate that if this vision is to be realised, then changes to both CRCATH management structures and researcher practices are necessary. This situation presents as a major challenge to the CRCAH as it moves to build on the reform agenda of the CRCATH.

Promoting change as a collective enterprise involving all members of the Indigenous health research community is an important way of moving the Indigenous research reform agenda forward. With a membership including 12 Core Partner organisations, the newly formed CRCAH now represents the highest concentration of Indigenous health researchers in Australia. It is imperative therefore, that critical reflection on research practice becomes entrenched within the organisation as a key element of practice. Engagement with national debate about identified barriers to reform of Indigenous health research and the sharing of attempts to effect change emerges as an important responsibility for the CRCAH research community into the future.

Throughout the conduct of the LINKS Project research there was evidence of a high level of both management and researcher commitment to the fundamental principles of reform aimed at increasing the benefit from research to Indigenous peoples. The research findings provide evidence that the CRCATH has made substantial headway in breaking down many entrenched approaches to research that have historically positioned Indigenous peoples as passive ‘subjects’ of others’ enquiry. A particular achievement has been the bringing together of stakeholders with disparate interests to co-operate in collaborative and multi-disciplinary research. It is apparent, however, that there are still barriers to broad-based reform of CRCATH sponsored Aboriginal health research activity, including:

- the power imbalance between Indigenous and non-Indigenous research participants;
- the entrenched privileging of Western research traditions;
- the under-valuing of Indigenous knowledge and perspectives; and
- the widespread influence of ‘investigator driven’ approaches to research.

The recommendations for change proposed by the LINKS project team aim to focus the attention of the research community on key elements of practice associated with redressing the historic power imbalance between Indigenous and non-Indigenous peoples within the context of research activity. The recommendations generally represent proposals for refinement or further development of existing research practices and CRCATH management structures. Two exceptions are the recommendations to substantially restructure processes for research priority setting and for providing organisational support to researchers in their attempts to collaborate more effectively with Indigenous peoples. Both these interventions require significant change to existing processes and increased resource input.
Of all the areas under consideration, it is at the level of implementing collaborative and participatory methodologies that researchers are reporting the most difficulty. Far from questioning the suitability of these approaches, comments made by researchers indicate a commitment to the principles of research involving high levels of participation and collaboration with a range of stakeholders, including Indigenous peoples. Operationalising these principles within the context of research at the Indigenous community level is clearly not easy.

Researchers nominated the following issues as being especially problematic:

- identifying key and appropriate stakeholders;
- identifying ‘community’ and mobilizing ‘communities of interest’ for the purpose of research;
- engendering Indigenous community ‘ownership’ of the research problem;
- negotiating the identification of ‘shared concerns’, which will ultimately lead to the framing of a specific research problem and the development of an appropriate research approach;
- reconciling competing time demands on health professionals and Indigenous community members; and
- dealing with an under-developed research skills base within the CRCATH and at the Indigenous community level.

Recognition of the importance of extensive negotiations with Indigenous peoples in the initial stages of research project design, and the importance of ensuring that research is ‘socially situated’ is critical. It is possible that many problematic issues reported by CRCATH researchers could potentially be avoided if more emphasis were placed on effective brokerage involving negotiation with Indigenous peoples at the outset. Evidence from successful research projects suggests that when initial negotiations are effectively undertaken, then ensuing decisions relating to the conduct of the research are likely to be mediated through relationships developed during the negotiation phase. In this circumstance, it is likely that decisions involving ethics, methodology, collaborative research processes, capacity building and dissemination of findings will be guided by the realities of the circumstances of Indigenous people at local sites. Project documentation investigated by the LINKS research team was characterised by a general lack of information relating to planning processes leading up to the formal proposal of projects for funding. If the CRCATH is to be able to gauge the effectiveness of processes for research brokerage, then more detailed reporting of these processes needs to be embedded in official documentation.

It is predicted that the adoption of a more prescriptive priority driven research model (including more transparent processes for Aboriginal community input into research priority setting), will provide the opportunity for greater input and control of the CRCATH research agenda by Indigenous community representatives. In particular, representation by grass roots Indigenous health stakeholders such as Small to Medium Enterprises and the National Aboriginal Community Controlled Health Organisation network is considered essential.
While the CRCATH supports both the formal and informal training of Indigenous researchers within the context of research project activity, it is clear that operationalising this aim is sometimes problematic. Project leaders have indicated that informal training of Indigenous researchers within the context of research activity and within the context of research in remote communities presents as a particular challenge. A commonly expressed concern relates to the lack of guidance available to researchers in their roles as mentors and supervisors for Indigenous research trainees.

The change process associated with the implementation of the LINKS Project recommendations has already begun. Key elements of the Indigenous Research Reform Agenda (outlined within CRCATH, 2002 LINKS Monograph series) underpin current development of the CRCAH’s strategic research plan. A summary version of the LINKS Project findings was submitted for consideration by the CRCATH Board in February 2003, and all the proposed strategies for organisational change were accepted. Strategies for change flowing from these recommendations are currently being developed for implementation within the new CRCAH. These strategies focus on increasing the level of Indigenous participation in all aspects of research. They include:

- refining project approval processes through formalisation of four separate project approval pathways;
- giving more attention to ensuring that the research question is supported by an appropriate methodology and developed with support from appropriate disciplinary area(s) (‘user involvement’ in research activity must be outlined and there must be a demonstrable effort by researchers to elicit opinions from Indigenous leaders or representatives about the nominated research gap.);
- trialling of a revised research priority-setting process based on six nominated theme areas. This process was initiated at an initial convocation meeting (Darwin, April 2003) and involved participation by 120 CRCAH stakeholders.
- providing more practical assistance to non-Indigenous researchers in their attempts to engage more directly with Indigenous peoples (the Knowledge Brokering function within the newly formed Development Division is spearheading this initiative);
- implementing a broader and more supported education and training program;
- refining of processes for project monitoring and research reporting;
- implementing closer monitoring of ethics committee requirements; and
- ensuring that the impact of CRCAH sponsored research on policy and practice is maximised through adequate organisational support for planning and execution of dissemination activities.
Substantial reform of Indigenous health research activity in Australia is dependent on ongoing and strategically supported evaluative research (similar to that proposed by Kalucy, 1999). The incoming CRCAH Board is committed to supporting the development of a culture of critical reflection on research practice within the organisation. While it is recognised that organisational commitment in this regard is important, it is also important that the role of researchers as key agents of change is emphasised. Evidence from the LINKS Project research suggests that researcher resistance to change presents as a major challenge to the cross-disciplinary agenda for reform of Indigenous research activity in Australia.
References


Anne George, M., Daniel, M. & Green L. (1998) 'Appraising and funding participatory research in health promotion' International Quarterly of Community Health Education, Vol 18(2) (pp. 181- 197)


Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) Strategic Plan (1999-2004). Darwin.

Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) (2000) Question and Answer Guide.


Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) 1999, Strategic Plan 1999-2004, CRCATH, Darwin.

Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) 2000, Question and Answer Guide, CRCATH, Darwin.


Cooperative Research Centre for Aboriginal Health (CRCAH) 2002, Business Plan for a Cooperative Research Centre for Aboriginal Health, CRCATH, Darwin.

Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) (2002) Links Monograph Series: 1 Indigenous Research Reform Agenda: Positioning the CRCATH. Darwin
Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) (2002)

Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) (2002)

Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) (2002)

Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) (2003)

Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) (2002)
Thinking Beyond the Project Series:
1. ‘Promoting the Use of Research’.
2. ‘Budgeting for Research Transfer and Dissemination’.
3. ‘Writing for health policy makers, planners and managers’.

Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) (2003)


Kimberley Aboriginal Health Workers 1992, ‘The importance of Aboriginal research feedback: why and how it should be given back’, Aboriginal and Islander Health Worker Journal vol.16 no. 2, Mar-April (pp. 4-6).


National Health and Medical Health Research Council (NHMRC) (2003) Road Map: a strategic framework for improving Aboriginal and Torres Strait Islander health through research.

National Public Health Partnership (NPHP) (1998b) Background paper to the health and medical research strategic review. June.


**Unpublished LINKS Project Reports**

Links Action Research Project (2002) Case Study A

Links Action Research Project (2002) Case Study B

Links Action Research Project (2002) Case Study C

Links Action Research Project (2002) Case Study D

Links Action Research Project (2002) Case Study E


**Unpublished LINKS Project documents**


Links Action Research Project (2001) Case Study Framework (Version one 31/08/01)

Links Action Research Project (2002) Case Study Framework (Version two 22/08/02)


LINKS Project - INTERVIEW with Chris Robinson, Managing Director NCVER, with Terry Dunbar and Margaret Scrimgeour (Adelaide, 30/10/01)

LINKS Project MEMO, Up-date on LINKS Project Issues for Discussion 9/01/01
Attachments

Appendix 1

The Research Approach: GENERALISATIONS FROM CASE STUDIES

John Henry and Peter Smith. Extract from:

Appendix 1

The Research Approach: GENERALISATIONS FROM CASE STUDIES
John Henry and Peter Smith

Extract from

1. Generalisations from Case Studies

Generalising from case studies is an approach to applied research that addresses what are often seen to be conflicting demands on research and development funding agencies. These are the requirement to support research projects that will produce general findings of the type that can inform policy development, and the requirement to fund projects that provide detailed localised information of the type that informs the professional development needs of practitioners in the field. The research approach - generalisations from case studies (GCS) - adopts a set of procedures or research protocol that addresses both the need for recommendations based on broadly based data and the need for accessible context specific accounts of innovative programs in action.

This research approach builds from case study research to generalisations about the focus of the overall project. Research projects incorporating the GCS approach typically involve teams of researchers with individual team members usually undertaking case study research at selected but separate sites. The methodological problem for these research teams is that of undertaking case study research involving different researchers researching different sites in such a way that the resultant case studies are compatible to the synthesis of generalisable issues and themes: issues and themes supported through clear referencing back to data within the case studies.

2. The Concept of a Case Study Reporting Framework

The problem of providing research outcomes that are to be both context specific accounts of selected program implementation sites, and the identification of meta-issues associated with these programs in general is addressed by identifying, as a commencing step in GCS projects, an initial list of research issues to guide the case study research process. The intention is to develop from the initial list of research issues a ‘case study reporting framework’. This framework becomes the central instrument to the GCS approach to research and development as it is the case study reporting framework which will maximise the comparability of the case study research component of projects while not imposing undue limitations on the breadth or depth of individual case studies.

This initial issues list can be developed from a review of recent research reports relevant to the focus of the research project. The outcome at this point in establishing the research project is a framework of key issues identified from prior research relevant to the field and the focus of the research project. This framework of key issues becomes the set of reference issues to be researched through each of the case studies. Case study researchers take the framework of issues as a set of lenses through which they then structure their case study research. In this way, the initial framework of key issues informs each case study researcher and becomes, over the course of the project, a case study reporting framework.
This framework can be added to and refined as the research project gets underway and as researchers and the project management group review progress. The case study reporting framework is not a rigid document of fixed issues at the outset but it evolves as the research project itself evolves. The important methodological point is that by the time each case study in the project is commenced, the case study researchers participating in the project will be ‘testing’ the same set of key issues within the context of their case study sites and reporting through the genre of case study research but each addressing, where relevant to their case, the same set of research issues.

3. A Research Protocol for Generalising from Case Studies

A protocol of procedures for the GSC research approach utilising a case study reporting framework is included below. This procedural protocol is included to provide an action-oriented explication of the approach and of the role of the case study reporting framework within this approach.

In general terms the research approach involves the following sequence of events:

7. The funding agency sets up a project reference group to develop the initial list of key research issues to guide the research for the GSC project.

8. The funding agency, perhaps through its project reference group, begins to identify potential case study sites according to the complex of factors believed to be relevant to the identified research issues of the project. The agency identifies possible case study sites that represent, through the specific combination of factors within each site, a cross-section of relevant factors and mix of factors. The list of possible sites may be fine-tuned through consultation and advice from stakeholders.

9. The researchers commissioned to undertake the GSC research project meet with the funding agency’s project officer to discuss the case study sites and the research issues. The intent at this stage is to familiarise the research team with the initial list of research issues and to refine the research issues into a comprehensive set of research questions.

10. The research team accesses available archival material on each of the identified case study sites or, alternatively, undertakes an initial ‘document sweep’ relevant to each case study site drawing on the document sources available.

11. From the initial list of key issues and the analysis of case study site documents the research team produces an expanded research issues framework as an integrated statement of researchable and detailed questions for the GSC project and as the reference document for the case study research. This is an internal document from which each researcher will monitor his/her own case study field work. The document will form a ‘template’ for the case studies and, in fact each case study can be written from the translation of the issues/questions in the framework document to the associated practices on the case study site identified by the researchers as resolutions of or responses to specific issues; that is, as practical answers to the issues-related questions listed in the reference framework. The case studies therefore, while providing individual accounts, will be addressing shared issues and providing answers
to shared questions. The approach is also open-ended in the sense that significant issues arising from a particular case study site but not included in the issues framework prior to the case study fieldwork, can still be identified by researchers in the field and included.

12. Field work proceeds based on contacts drawn from the archival material/document sweep and other information and focused by the research issues framework document.

13. Individual members of the research team write first drafts of their case studies addressing the research issues and questions as appropriate. Informants check and clear these drafts. The research team assemble the final versions of all the case studies for the GCS project.

14. The research team interrogates the case studies for across-case study themes. The evidentiary base for these themes is in the narrative of the cases which can now be brought forward selectively to support the analysis and synthesis at this meta level of the project. The outcome of this meta analysis is a thematic report containing a justification for generalisable issues relevant to the focus of the research project. The plausibility of this report and the strength of its arguments supporting each general theme and issue rests on the quality of the case study research and of the analysis therefrom.

15. The thematic report and its accompanying set of case studies constitute a coherent research product in a research and publishing sense. Consumers of this research product have the opportunity to read the meta-analysis and broad recommendations included in the thematic report while having access to the supporting case study narratives of particular interest to them.

Within this research procedural protocol the significant features are:

- locating the research project in the relevant field of issues arising from contemporary prior research;
- orienting the project so that it is informed by and builds from this prior research work;
- accessing a limited but representative number of sites likely to reveal data highly relevant to the research scope and focus of the project;
- structuring the case studies so that these provide an evidentiary empirical base for meta-analysis and synthesis of generalisations informing policy development while, at the same time, providing accessible accounts of practice ('ways of doing things') for practitioners in the field.
- producing a research product that has components informing both the policy debates associated with the focus of the research and the professional development of practitioners working in similar contexts to those researched.