Evaluation Report on the first year of Bringing Child and Adolescent Mental Health Services to rural communities 1998-1999

A Rural Health Support, Education and Training Program (RHSET) funded Project

Grant No. 394

John Mitchell

John Mitchell & Associates

June 1999
TABLE OF CONTENTS

Executive Summary ........................................................................................................... 4
Chapter 1: Project and Evaluation Methodology ............................................................ 8
Chapter 2: Concepts from the Literature ........................................................................ 11
Chapter 3: Analysis of RHSET Telehealth Diary ............................................................. 17
Chapter 4: Analysis of Initial Perceptions ...................................................................... 20
Chapter 5: Analysis of Interviews with Participants ......................................................... 28
Chapter 6: Analysis of Project Management .................................................................. 34
Chapter 7: Action Research Theme: the Use of the Expert ............................................. 39
Chapter 8. Themes for Further Investigation .................................................................. 42
Bibliography ..................................................................................................................... 43
Appendix: Interview Questions, December 1998 ............................................................ 44
Executive Summary

This is the first annual evaluation report of the Rural Health Support, Education and Training Program (RHSET) Telehealth Project being undertaken from 1998-2000 by the Division of Mental Health, Child and Adolescent Health Services (CAMHS) at the Women's and Children's Hospital (WCH), Adelaide, South Australia. The title of the project is “Bringing Child and Adolescent Mental Health Services to rural communities”. The project involves the provision of professional development for mental health staff in rural and remote sites such as Darwin, Alice Springs, Roxby Downs and Coober Pedy.

The three aims of the project are to improve accessibility to services, to establish telehealth networks and to evaluate the effectiveness of telehealth.

These services are delivered using telehealth technologies: videoconferencing in particular, as well as the Internet, printed materials and videotapes.

Figure 1: Map of Project Sites
Evaluation Methodology

The objectives of the evaluation necessitated a methodological approach incorporating the use both quantitative and qualitative techniques. Therefore, care was taken in the design of evaluation instruments to ensure that the overall assessment of project outcomes was not blurred by an over-emphasis on numbers and statistics or, for that matter, the qualitative opinions of individuals. In achieving this objective, four distinct sources of data were used: surveys, interviews, analysis of logs and action research.

Major Findings

A review of the literature reveals a number of important findings relevant to the CAMHS RHSET Project, in relation to Telehealth potential and protocols, remote professional development and educational delivery. The advent of Telehealth technologies, and their potential use as a tool in the professional development of remote health providers, promises to be advantageous for several reasons. Firstly, these technologies have the ability to reduce the level of professional isolation experienced by so many remote health providers (Sturmey, 1994, p. 1). Secondly, the need for an increased level of support in these remote areas is magnified by the fact that often the only people willing to take on such positions are young graduates for whom, in the early stages of their careers, supervision and development is essential (Sturmey, 1994, p. 1). Third, with its offerings of increased support, Telehealth promises to address the issues of poor staff recruitment and retention, which can be partly attributed to professional isolation (Telehealth in Rural and Remote Australia: Report of the Project for the Rural Health Communications and Information Technologies, 1996, p.102).

The RHSET Telehealth Diary maintained by the Project Officer recorded the essential details for each telehealth session during 1998 such as the date, duration and content of the session, together with a record of who was present at each location. An analysis of the diary indicates that a total of 36 sessions were held in 1998, ranging in duration from 45 to 90 minutes (average duration of 56 minutes), involving a total of 45 different participants who participated an average of 4 times each. The number of uses per participant ranged from 1 to 15. The 45 participants came from 11 different disciplines and Darwin was by far the most frequent far end location (60% of all sessions) followed by Roxby Downs (17%) and Alice Springs (14%).

Between February and October 1998, 27 personnel completed a survey instrument, to assess initial perceptions of the predominantly videoconferencing system used to link the sites involved in the Telehealth project. The survey was concerned with initial attitudes and beliefs towards the videoconferencing component of the project. The 27 respondees included psychologists, psychiatrists, social workers, educators, allied health staff, family therapists, psychiatric nurses and a project officer.
The surveys suggest that the most important applications for the group, from the most important to the least, are:

1. consultation with CAMHS professional
2. education
3. staff development/ training
4. consultation with child psychiatrist
5. patient interview with health professional
6. administrative meetings.

In December 1998, interviews were conducted with a sample of seven participants in the Project from the following locations: Darwin (2), Alice Springs, Roxby Downs, Whyalla, Port Pirie and Port Adelaide. Participants considered that the following uses of telehealth had changed their models of the way clinical and educational services can be provided to rural and remote sites:

- the ability to access second opinions
- the ability to access specialists
- the ability to book consultations from Adelaide
- the ability to access supervision from Adelaide.

The impediments to staff development identified in the project by the participants were:

- competition, in one location, for using the equipment, with the adult psychiatry service
- equipment breakdown
- the time required to set up a session
- staff on rotating rosters being available at a set time, e.g. 10.30-11.30am Thursdays
- difficulties with local bureaucratic processes, including approvals
- the imperfect synchronising of lip movement and the audio in videoconferencing sessions
- the cost of sessions involving bridges.

The project management used in the project involved extensive on-site consultation with participants at all sites, programming of telehealth sessions in response to feedback from participants, a focus on documentation and evaluation and an
acknowledgement of the particular challenges faced by and the special skills of the remote site participants.

**Directions for Second Year of Evaluation**

A range of themes and ideas arose during the evaluation that will be investigated in the second year of the RHSET CAMHS Telehealth project. These include:

1. the development of protocols for videoconferencing sessions
2. the continuing exploration of alternative ways of providing professional development, using telehealth technologies
3. the use of four types of interaction during telehealth sessions: learner-content interaction; learner-instructor interaction; learner-learner interaction; learner-interface interaction
4. the usefulness of telehealth for Indigenous matters
5. skill development in the use of telehealth
6. optimising the use of telehealth within the organisation
7. using the Internet component of telehealth effectively
8. issues concerning confidentiality
9. ensuring the innovation is embedded in the organisation
10. developing a more systematic staff development program which is well publicised in advance and which takes into account feedback provided by participants from the first year of seminars
11. investigating how the seminar programs could be placed on the Internet to facilitate more convenient access to material.
Chapter 1: Project and Evaluation Methodology

The Rural Health Support, Education and Training Program (RHSET) Telehealth Project being undertaken from 1998-2000 by Child and Adolescent Health Services (CAMHS) at the Division of Mental Health, Women’s and Children’s Hospital (WCH) involves the provision of professional development for mental health staff in rural and remote sites such as Darwin, Alice Springs, Roxby Downs and Coober Pedy. The project is called, “Bringing child and adolescent mental health services to rural communities.” The three aims of the project are to improve accessibility to services, to establish telehealth networks and to evaluate the effectiveness of telehealth. These services are delivered using telehealth technologies: videoconferencing in particular, as well as the Internet, printed materials and videotapes.

The project is financed by RHSET, the South Australian Department of Human Services, Territory Health Services and Coober Pedy Suicide Prevention Project.

The initial sites involved in the project are Port Augusta, Whyalla, Port Lincoln, Roxby Downs, Coober Pedy, Alice Springs and Darwin.

Context

Research conducted in Australia has shown that up to 20% of all children and adolescents will experience a moderate to severe mental health problem. In South Australia (SA), Australian Bureau of Statistics data indicates that 60,000 young people live in the Northern Country Region of SA, with 61% of these living in outlying rural and remote areas. Historically, rural and remote communities have had limited access to mental health services and service delivery has generally been provided through isolated general practitioners and other primary health care service providers supported by infrequent visiting specialist services.

The Report into the National Inquiry into the Human Rights of People with Mental Illness (1993) repeatedly received evidence regarding the inadequacy of mental health services in rural Australia.

The irony is that in many of the areas where the need is greatest the services are fewest. This is particularly the point in small country communities where mental health services - and certainly mental health services for children and adolescents - are almost entirely non-existent (p.678)
The report also noted that training and support for mental health, health and other professionals involved in working with children and adolescents with mental health problems, in rural and remote areas, was totally inadequate. (See attachment 1 for further details)

The Women’s and Children’s Hospital, Division of Mental Health (CAMHS) has been working to address these issues and has established permanent child and adolescent mental health services in Whyalla, Port Lincoln, Port Augusta and Port Pirie. The Division has also established a Northern Country Advisory Committee to facilitate the development of these services.

The WCH Division of Mental Health is a leader in SA in the development of innovative information technology strategies to further improve service delivery to rural and remote communities who have difficulty in accessing support and services from these established centres. Feedback from CAMHS staff in rural South Australia has indicated that one of the principal reasons that they will work in rural areas is due to the extensive support mechanisms that have been set up by the Division. This project aims to take this positive feedback to the approach and extend it into even more remote areas of South Australia and to assess its applicability at a National level.

Objectives

The three objectives of the project are:

1. to improve the accessibility of rural and remote health and other service providers in remote areas of Australia to specialist child and adolescent mental health consultation and support, and ongoing training and education through the use of telehealth technology

2. to establish telehealth networks between service providers in rural and remote communities (eg, rural and remote areas of South Australia, Darwin and Alice Springs)

3. to evaluate the effectiveness of telehealth as a strategy for providing a broad range of services, related to child and adolescent mental health, to rural and remote areas.

Evaluation Methodology

The objectives of the evaluation necessitated a methodological approach incorporating the use both quantitative and qualitative techniques. Therefore, care was taken in the design of evaluation instruments to ensure that the overall assessment of project outcomes was not blurred by an over-emphasis on numbers and statistics or, for that matter, the qualitative opinions of individuals. In achieving this objective, four distinct sources of data were used:
1. Surveys

A 14 item survey instrument was administered to participants in the project. Scaled-response items were used to measure the attitudes of respondents to issues such as the reliability, ease-of-use, level of privacy and level of confidentiality offered by the system. Further questions allowed respondents to express regarding their perceived benefits of using the system and their main areas of concern. The resultant sample consisted of 27 surveys completed by participants in the project between February and October 1998.

2. Structured Interviews

A structured interview was constructed in order to widen the perspective of the analysis possible from the survey data. The interview comprised eight open questions which sequentially assessed the three objectives of the project. A total of eight interviews were conducted during December 1998. Each of the six locations (Alice Springs, Darwin, Roxby Downs, Whyalla, Port Adelaide and Port Pirie) were represented once, with the exception of Darwin, from which two participants were interviewed.

3. The RHSET Telehealth Diary

A log was maintained by the Project Officer which recorded details for each telehealth session such as the date, duration and content of the session, together with a list of the participants present at each end. A total of 36 entries were made in this RHSET Telehealth Diary.

In analysing the data collected from these three sources, two main statistical techniques were used: (1) descriptive statistics and (2) graphical representations. Descriptive statistics (e.g. means, modes and ranges) were used primarily for such purposes as determining the central tendency of survey respondents’ scaled responses and finding the average number of participants in a session, for example. Graphical representations (e.g. pie charts and histograms) were used to assess distributions (e.g. the percentage of participants who were psychologists, social workers or nurses). No attempt was made to quantify the data collected from the open questions in the survey and the interview: the analysis of these features of the evaluation methodology involved summarising participants’ responses.

4. Action Research

Action Research was used as a technique by the evaluator with two of the key CAMHS project staff to identify concepts that might be explored in the project. A report is contained in a later chapter.
Chapter 2: Concepts from the Literature

A review of the literature reveals a number of important findings relevant to the CAMHS RHSET Project, in relation to Telehealth potential and protocols, remote professional development and educational delivery.

**Telehealth potential and protocols**

The advent of Telehealth technologies, and their potential use as a tool in the professional development of remote health providers, promises to be advantageous for several reasons. Firstly, these technologies have the ability to reduce the level of professional isolation experienced by so many remote health providers (Sturmey, 1994, p. 1). Secondly, the need for an increased level of support in these remote areas is magnified by the fact that often the only people willing to take on such positions are young graduates for whom, in the early stages of their careers, supervision and development is essential (Sturmey, 1994, p. 1). Third, with its offerings of increased support, Telehealth promises to address the issues of poor staff recruitment and retention, which can be partly attributed to professional isolation (Telehealth in Rural and Remote Australia: Report of the PHRCIT, 1996, p.102).

In her research into the effectiveness of videoconferencing as a means of professional supervision, Sturmey (1994) concludes that “videoconferencing with an ordinary-to-large TV screen is technically an excellent way of carrying out supervision over distance” (p. 31). Such results would appear readily generalizable to other forms of professional development. Technical difficulties, issues of confidentiality, the cost of hiring commercial videoconferencing equipment and the need for users to be confident and assertive in their utilisation of the equipment are cited as issues requiring consideration.

Sturmey (1994, p. 50) gives special attention to the issues of confidentiality, and suggests the following protocols:

1. Whilst confidential information is being exchanged via television no staff or technicians should be present in the studio, or if the studio is not sound-proofed or visually private, close enough to hear or see what is happening in the studio. Studio staff should undertake to restrict human movement close to studios that are not sound proof - especially at the supervisee’s site.

2. Once the link has been successfully established and the session is about to begin all monitors outside of the studio must be switched off for the duration of the session, and the room where such equipment is placed locked if a technician or
manager does not have to remain in the room. Any staff that do remain in rooms with monitors should not turn them on.

3. The fax machine should not be situated in a room occupied by staff members or technicians whilst confidential documents are likely to be faxed during the session. Exceptions can be made if special procedures are negotiated with the professional to protect the documents from being sighted.

4. Where deemed appropriate by the professional worker, studio staff or technicians should commit themselves via a Statutory Declaration to not disclosing the identity of or any other information about individuals accompanying the supervisee to the television studios, either publicly or privately. (It is envisaged that this may be needed, for example, where clients are brought to a studio for assessment).

5. As the professionals using the facilities are legally required to be vigilant at all times with respect to ensuring confidentiality for their clients it is ultimately their responsibility to monitor technical staff’s adherence to the procedures outlined.

Remote professional development

Issues regarding inequalities of access are not unique to the consumer of health services in rural and remote areas. Indeed, the isolation of remote health providers working in such areas also emerges as a major area of concern for the industry (Sturmey, 1994, p.1). There are two main reasons for this. Firstly, isolation restricts professional development, whereby a health professional engages in a process of continually updating themselves regarding the latest practices, techniques, models and technologies. The time and cost of the travel required to access these predominantly urban resources (e.g. workshops, seminars, conferences) are largely to blame here. Secondly, remote health providers have limited access to peer support and advice (Report of the PHRCIT, 1996, p.20). This second problem is not merely an issue of restricted networking opportunities. However, regional health providers may also have difficulty accessing specialist expertise unavailable locally.

As we will see, the isolation of remote health providers extends beyond an issue of geographical separation. Inadequacies in telecommunications infrastructure, in particular, represent another facet of the current circumstances that serves only to increase remote health providers’ perceptions of isolation. It is difficult for them to access information (e.g. via the Internet) as well as accessing the necessary human resources (Report of the PHRCIT, 1996, p.25).

Positive consequences of telehealth for remote professional development
With their border-penetrating capabilities, Telehealth technologies deliver the promise of reducing the extent to which remote health providers are isolated, thus enabling them to achieve an adequate level of professional development. Several positive consequences of Telehealth as a means of remote professional development are readily discernible:

1. Staff Retention & Recruitment

The lack of support available to remote health providers represents one obstacle in recruiting staff to work in remote facilities. Even if the recruitment process is successful, the same problem may motivate workers to return to an urban setting. Telehealth has the potential to provide remote health providers with improved levels of support and, therefore, to improve staff recruitment and retention rates in remote areas (Report of the PHRCIT, p.102).

2. Networking & Peer Support

Telehealth technologies offer remote health providers with otherwise less-accessible opportunities to access support and advice from peers (Report of the PHRCIT, p.102). As suggested earlier, this is beneficial in two ways: (1) it facilitates professional networking and (2) it increases the availability of expertise that cannot be accessed locally.

3. Improved Efficiency & Reduced Travel Costs

Professional development achieved via Telehealth technologies reduces the time required off from work and the cost of travelling to urban locations. Those resources can then be re-allocated to meet other local needs.

4. Improved Health Services

An improvement in the efficiency of health care services is one positive outcome of Telehealth that would be expected as a result of the time and cost reductions mentioned above. An improvement in the quality of health care services might be expected as a result of the enhanced skills and knowledge of remote health providers following professional development achieved via Telehealth.

*Barriers to the achievement of professional development using Telehealth*

There do exist, however, several barriers to the achievement of professional development using Telehealth technologies. These include:

1. Costs

The use of interactive technologies for providing professional development to remote health providers implies expenditure on equipment, training, technical support and telecommunications services (Report of the PHRCIT, p.24). Difficulties in finding the necessary funds to finance these costs represents a primary obstacle to professional development via Telehealth.
2. Access to Technical Support

In addition to the costs of technical support, there is an issue of access. Equipment vendors and other support related human resources are generally located in urban areas and, therefore, less accessible for remote facilities.

3. The Need for Training

The use of interactive technologies is likely to be foreign to many remote health providers and, therefore, necessitates the allocation of time and money resources for training (Report of the PHRCIT, p.23). The opportunity costs of allocating those resources must also be considered. Furthermore, there is a portion of the work force reluctant to learn how to use and adopt new technologies. Strategies are required to resolve this human resources problem.

4. Telecommunications Infrastructure

Limited access to telecommunications infrastructure that will support the various interactive technologies possible with Telehealth is a barrier to its widespread introduction. Indeed, the situation is such that most rural and remote health providers do not have access to telecommunications infrastructure that permit anything more advanced than the basic data exchange formats such as email. In 1996, the data transmission rate in rural and remote areas rarely exceeded 2400bps, which is barely sufficient for email, but inadequate even for effective use of the World Wide Web (Report of the PHRCIT, p.25). The installation and use of the high bandwidth communications services necessary to use more advanced interactive technologies is expensive (Report of the PHRCIT, p.25). Fortunately for this CAMHS project, Telstra’s digital network, Integrated Services Digital Network (ISDN), is available at all the sites involved in the project, providing transmission at 128kbps.

5. Rate of Technological Advancement

It is often difficult to keep abreast of the rapid rate of technological advancement. This problem is magnified for those working in rural and remote areas, who are less likely to be exposed to sources of information regarding technology updates (Report of the PHRCIT, p.23).

Whilst these difficulties may limit the speed of implementation of Telehealth facilities, it is difficult to doubt its potential once implemented. The suggestion is not to eliminate entirely the need for remote health providers to have direct contact with their urban-based colleagues but, rather, to allow them to have more frequent exposure to otherwise difficult-to-access resources. In the longer term, the successful delivery or professional development using interactive technologies promises to benefit the health providers, health consumers and the community at large.
Educational delivery

A fundamental component of the CAMHS RHSET project is the use of tried and proven techniques for distance education. Distance learning is not a new phenomenon: for example, American universities began broadcasting educational television as early as 1934 (Payne, 1997, p. 379). In the 65 years that have since elapsed, technology has advanced such that distance education is now widespread. More recently, we have witnessed the introduction of more interactive technologies (Payne, 1997, p. 379) and the advent of entirely new mediums such as the Internet. During this time, an abundance of research has been undertaken to assess the merits and weaknesses of education delivered in this way. In the current section, we aim to summarise some of the most important findings that have emerged from the literature. Whilst it is important to recognise the extent of inter-study variation that exists (e.g. on variables such as the technologies and mediums used, the educational material content and the nature of the students), certain findings have emerged with such frequency in the literature that their general validity cannot be questioned. It is these findings and the implications they have for Telehealth, that are of interest here.

In a comprehensive review of more than 800 representative published and unpublished studies, Payne (1997) presents an elegant summary of the most important findings regarding distance education. Three sections of his paper that are relevant to the current discussion concern the findings with regard to (1) learner achievement, (2) learner satisfaction and (3) interaction.

Learner achievement refers to the extent to which distance education is effective in helping people learn. The design of studies assessing this variable typically feature a comparison between a “remote” group who participate in some form of distance education (e.g. videoconference or audioconference) and a “traditional” classroom group. Academic grades are typically chosen an as appropriate dependent variable. From his review of the literature, Payne (1997) concludes that “students in instructional television learn as much as or, in some cases, more than their counterparts in traditional face-to-face courses (p. 378). He further suggests that “decisions makers should use factors other than increases in learner achievement to justify using the technology, such as reduced costs, increased training opportunities, and standardized message delivery” (Payne, 1997, p. 378). These findings suggest that the outcomes of training remote health providers using interactive technologies would be equally as positive as those that could be expected from face-to-face training.

Learner achievement is not the sole measure of distance learning’s effectiveness. Indeed, some have suggested that learner satisfaction is an equally important criterion against which distance learning’s effectiveness should be judged, largely because of its supposed influence on attrition and enrolment rates, student motivation and learning (Payne, 1997, p. 382). Payne (1997, p. 383) draws three conclusions regarding learner satisfaction. Firstly, learner attitudes towards the delivery method do not impact on their achievement; a distance education student may have negative attitudes towards the course yet still attain the same academic
standard as a student taking the course in the traditional format. Second, learner achievement does not influence learner attitudes; a learner may perform well in a distance education course yet still have negative attitudes towards it. Third, learner’s attitudes do influence their decisions to take additional courses and whether or not they decided to recommend such courses to peers. These results suggest that professional development can be successfully delivered to remote health providers even if their attitudes towards the delivery format are unfavourable. Those participating in the distance learning would, however, be less likely to recommend it to their peers if they found the experience dissatisfying.

The final variable to be considered here is interaction which, Payne (1997) contends, is “necessary for learning to take place” (p. 384). Moore (1989, in Payne, 1997, p. 384) identifies three kinds of interaction in distance learning:

1. Learner-content interaction

The self-dialogue engaged in by learners about the information and ideas presented to them.

2. Learner-instructor interaction

Interaction between the learner and instructor about the information and ideas presented.

3. Learner-learner interaction

Interaction between learners about the information and ideas presented.

A fourth type of interaction was suggested by Hillman, Willis and Gunawardena (1994, in Payne, 1997, p. 384).

4. Learner-interface interaction

Learner interaction with the technology as a means of interacting with the content, instructor or other learners.

Payne (1997) draws two conclusions from his review of the literature concerning interaction in distance learning. Firstly, there is a relationship between interaction and learner satisfaction. Learners who perceive the technology as involving high levels of overall interaction report higher levels of satisfaction. Furthermore, learners’ perceptions regarding the extent of interaction which they were involved in do not influence their perceptions regarding the overall level of interaction. Second, learners’ perceptions of the amount of overall interaction do not influence the level of achievement they attain. These results suggest that remote health providers would experience any distance training they receive as more positive when the level of interaction permitted by the technology is high.
Summary

This section provided a conceptual framework underpinning much of the professional development, networking and service delivery in the current CAMHS RHSET project. Many of the positive comments recorded in Chapter 4 can be attributed to the application of the good practice principles contained in the literature.
Chapter 3: Analysis of RHSET Telehealth Diary

The RHSET Telehealth Diary maintained by the Project Officer recorded the essential details for each telehealth session such as the date, duration and content of the session, together with a record of who was present at each location. An analysis of the diary indicates that a total of 36 sessions were held, ranging in duration from 45 to 90 minutes (average duration of 56 minutes), involving a total of 45 different participants who participated an average of 4 times each. The number of uses per participant ranged from 1 to 15. The following table breaks these statistics down into the near and far end categories.

Table 3.1 Details of sessions

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Near End</th>
<th>Far End</th>
<th>Total/Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of participants</td>
<td>68</td>
<td>111</td>
<td>Total: 179</td>
</tr>
<tr>
<td>Average number of participants in each session</td>
<td>1.9</td>
<td>3.1</td>
<td>Average: 5</td>
</tr>
<tr>
<td>Total number of different participants*</td>
<td>24</td>
<td>21</td>
<td>Total: 45</td>
</tr>
<tr>
<td>Average number of uses per participant</td>
<td>2.8</td>
<td>5.3</td>
<td>Average: 4</td>
</tr>
</tbody>
</table>

* Unspecified persons were counted as first time, different users

The RHSET Telehealth Diary was further analysed to determine the purposes for which the Telehealth system was being used. The results of this analysis are presented in the following pie diagram.

Diagram 3.1: Distribution of Session Topics
It was also of interest to analyse who was using the Telehealth system. The 45 participants came from 11 different disciplines. An analyses of who used the Telehealth system is presented in the following table (which includes a near/ far end distinction) and pie diagram.

Table 3.2: Proportion of total Participants by Discipline

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Near</th>
<th>Far</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin</td>
<td>5.9%</td>
<td>0.9%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Family Therapist</td>
<td>0.0%</td>
<td>12.6%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Nurses</td>
<td>14.7%</td>
<td>27.0%</td>
<td>22.3%</td>
</tr>
<tr>
<td>Psychiatrists</td>
<td>8.8%</td>
<td>5.4%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Psychodynamic Therapist</td>
<td>0.0%</td>
<td>0.9%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Psychologists</td>
<td>8.8%</td>
<td>35.1%</td>
<td>25.1%</td>
</tr>
<tr>
<td>School Counselors</td>
<td>0.0%</td>
<td>5.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Social Workers</td>
<td>51.5%</td>
<td>0.9%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Speech Pathologist</td>
<td>0.0%</td>
<td>0.9%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Team Leaders</td>
<td>5.9%</td>
<td>6.3%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Visiting Specialists</td>
<td>2.9%</td>
<td>0.0%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

Diagram 3.2: Distribution of Participants’ Disciplines
Finally, the extent to which each far end location used the Telehealth system was assessed. Our results indicate that Darwin was by far the most frequent far end location (60% of all sessions) followed by Roxby Downs (17%) and Alice Springs (14%).

Diagram 3.3: Percentage of Time the System was used by each Site
Chapter 4: Analysis of Initial Perceptions

Between February and October 1998, 27 personnel completed a survey instrument, to assess initial perceptions of the predominantly videoconferencing system used to link the sites involved in the Telehealth project. The survey was concerned with initial attitudes and beliefs towards the videoconferencing component of the project.

The 27 respondees included: psychologists, psychiatrists, social workers, educators, allied health staff, family therapists, psychiatric nurses and a project officer. The locations of the respondees included Coober Pedy, Port Pirie, Port Augusta, Whyalla, Port Lincoln, Alice Springs and Darwin.

The attitudes and beliefs summarised in the following account will be used to compare with attitudes and beliefs at later points during the two-year project.

Participants’ previous experience

Of the 27 respondees, fifteen had been inducted into the use of the videoconferencing system before they completed the survey and twelve had not been inducted. Regarding previous experience of the Internet, thirteen had experience or had been inducted into its use, thirteen had no experience or induction and one did not respond.

Most of the group expected to use the videoconferencing system at least once per week, during the first year of the project.

Rankings

Participants were asked to provide a ranked response to the five questions listed in the histograms below. Only the second curve approximates a normal curve. The others are clearly skewed towards the positive responses. This provides encouragement for the project management team that the group generally feels favourably towards the videoconferencing system, particularly its reliability, confidentiality and level of privacy.
How do you generally feel about the telehealth videoconferencing system?

At this stage, how easy do you believe the videoconferencing system is?
Figure 3

How reliable do you believe the system is?

Figure 4

How satisfied are you with the confidentiality of the system?
Expected personal benefits

Participants were invited to list three benefits they might get from using the videoconferencing system. Responses included:

1. networking; information, training and access to new therapy
2. workshops
3. some contact with qualified people; chance to highlight local issues
4. close link than telephone use; consultation re rural/remote issues; supervision access
5. communicating to remote communities; discussing cases with clients; Aboriginal mental health counselling
6. professional development and mentoring; specialist resources and support; cross border networking and training
7. liaise with others with different opinions/expertise re specific clients; liaise with others with different opinions/expertise re specific areas of concern; improve personal knowledge and skills by liaising with others in different disciplines/areas
8. time; cost
9. exposure to new ideas/more therapeutic options; exposure to current trends; ability to tap into specific information/knowledge
10. case discussions - extending knowledge and skills; reviews of ‘stuck’ cases; seminars/networking
11. reduction in travelling time; ability to receive specialist input from other professionals, i.e. psychiatrists, medical officers; supervision

12. educational; consultations and link-up with others; seminars and conferences with others

13. networking - with another agency; sharing skills; educational and clinical support

14. access to specialist services; access to training

15. improved access to expert advice/consultation; improved access to information-developments; develop effective partnership with a quality service

16. professional development; professional supervision; expertise from other professions

17. professional development; IT education; additional resource for education

18. education; sharing/support; updating skills

19. interactive consultation; client centered management; collapses time and distance

20. access to specialist services

21. education opportunities; peer supervision and input; improved client outcomes

22. more education

23. exposure to latest technology; getting another opinion on management of a problem; ongoing education

24. fresh ideas; supervision re complex cases; professional development

25. access to services not available in remote areas

**Expected organisational benefits**

Participants’ responses to the question of the three benefits they think their Unit may gain from the videoconferencing network included:

1. training and development for staff here; debriefing in relation to difficult situations

2. savings in travel and accommodation costs; networking across sites; access to remote communities
3. regular unit meetings business/clinical; client case discussions; referrals to specialist, i.e. Department of Psychiatry

4. learning to use Telehealth as an educational and clinical support tool; networking between CAMHS and SCAAFS; team building - sharing same telehealth sessions

5. liaise with others with different opinions/expertise re specific areas of concern; improve personal knowledge and skills by liaising with others in different disciplines/areas; improvement of standards by comparison with other agencies

6. time; cost

7. improved therapeutic outcomes; less sense of isolation especially with ‘stuck’ cases; exposure to current trends/practices/new knowledge

8. cross-cultural knowledge and skills; widening skills in specific areas, e.g. eating disorders, conduct disorders; exchanging information and possible future planning of joint work/exchange of workers, etc.

9. supervision; consultations; bridging of areas for group discussions, meetings, planning sessions

10. getting input from the other agency; about handling difficult cases; consultation with experts from South Australia; educational materials for Unit

11. familiarity and competence with the new technology; improved professional skills; enhanced the ability to provide a more effective service to clients

12. networking; information, training and access to new therapy

13. improved access to expert advice/consultation; improved access to information-developments; develop effective partnership with a quality service

14. linking services and information; education; professional development

15. professional development; resource for education; IT education

16. education; sharing/support; updating skills

17. provision of quick and efficient interfacing; positive access to clinical management; training and education

18. use of service; set times to contact; face to face
19. improved staff morale – development opportunities; current research based practice models

20. exposure to latest technology; getting another opinion on management of a problem; ongoing education

21. not so isolated; all staff trained re skills = cohesion; staff development

22. access to services not available in remote areas

**Participants’ major concerns**

Participants’ responses to the invitation to indicate their three main areas of concern regarding the use of the videoconferencing system were as follows:

1. clumsiness in conversation flow/ distance; lack of human contact for psychotherapy; lack of protocols, induction and practice in a FUN way

2. expensive for low benefits over using the phone; its use clinically in the mental health area; for other than emergency

3. may not work for Aboriginal students/ families; not immediate enough to respond to

4. lack of technical knowledge; delay in voice transfer causes confusion; not as personal as “face-to-face”

5. signal may drop out; interference of overload; knowledge of using the system

6. my own lack of skills in the mechanics of telehealth

7. confidentiality

8. availability, privacy

9. don’t have any as yet - maybe after induction

10. being unfamiliar with the system; learning to make effective use of the system

11. difficulties operating the system; system failing - not linking up or link breaking down

12. use of Internet site; reliability of the unit; confidentiality with regards to case discussion

13. no one on hand for back-up/ help if something goes wrong.
14. access limited to 2 sites; current use only re child and youth issues; access to Board Room at Alice Springs Hospital

15. slow response time to problems; impersonal; opportunity for access

16. informed consent from clients; impersonal structure; time availability for staff to attend

17. confidentiality; how time consuming will it be

18. technology needs consolidating and clarification; access and reliability; confidentiality

19. the specialist will not provide on ground support; will be expected to do things with very little training; expectations of us will be raised

20. don’t know enough about it to have any concerns

21. may become under utilised once initial “push” is over; due to high staff turnover there will be an ongoing need to educate re use of equipment

22. seems to take up to an hour to connect; a need for the presenter to be organised; need for viewers to be organised and on time

23. ensuring staff using the equipment are adequately trained

Preferred applications of the technology

The main technology used during the project will be videoconferencing. Other supplementary technologies will be the Internet, videotapes, printed materials, telephone and fax.

Participants were asked to rank six applications of the project’s main technology videoconferencing in order of importance from one to six, with one representing the most important application and six the least important. Three separate analyses were performed on these data to determine the importance of the applications: (1) the mean (average) ranking (2) the mode (most common) rank and (3) the percentage of participants who assigned each rank to the six alternative applications. The following table presents the results from these analyses.

Table 4.1 Preferred Applications of the Project Technology
<table>
<thead>
<tr>
<th>Application of the project technology</th>
<th>Descriptive Statistics</th>
<th>Percentage ranked as:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>Education</td>
<td>27</td>
<td>2.70</td>
</tr>
<tr>
<td>Consultation with CAMHS professional</td>
<td>25</td>
<td>2.36</td>
</tr>
<tr>
<td>Consultation with child psychiatrist</td>
<td>25</td>
<td>3.68</td>
</tr>
<tr>
<td>Administrative meetings</td>
<td>26</td>
<td>5.27</td>
</tr>
<tr>
<td>Staff development/ training</td>
<td>27</td>
<td>2.70</td>
</tr>
<tr>
<td>Patient interview with health professional</td>
<td>25</td>
<td>3.80</td>
</tr>
</tbody>
</table>

The data presented in the above table suggest that the most important applications for the group, from the most important to the least, are:

1. consultation with CAMHS professional
2. education
3. staff development/ training
4. consultation with child psychiatrist
5. patient interview with health professional
6. administrative meetings.
Chapter 5: Analysis of Interviews with Participants

In December 1998, interviews were conducted with a sample of seven participants in the Project from the following locations: Darwin (2), Alice Springs, Roxby Downs, Whyalla, Port Pirie and Port Adelaide. The eight questions are set out below, grouped into the three objectives for the Project, with a summary of the answers following. As far as possible, the identities of the participants have been disguised.

Objective No.1: Establishing Networks

1. In what ways has the Telehealth Project enabled you to establish new networks with the service providers involved in the project?

One participant appreciated that the Project had enabled her team to establish relationship with professionals in other locations. Another commented that he ‘could ring and talk to the staff at CAMHS and hold discussions when necessary’. Another said that, prior to the Project, ‘finding networks was a nightmare. There was not much information available. We had to start from scratch. Being in a new town it is very difficult. Now I know who I can ring’. She added a poignant comment:

Two children died at … this year. To know you were right on track (with the debrief treatment) and there were people outside whom you could talk to about ‘this is how we were feeling’ was important.

The Telehealth Project has enabled participants to use CAMHS as a source of resources, such as articles, pamphlets, videotapes and contact details for other professionals. Conversely, CAMHS staff in Adelaide felt that they had developed improved links with remote sites as a result of the Project: ‘I have had a couple of phone calls and they have used me as a resource’ commented on CAMHS manager.

2. What other opportunities might be available to you in the future to establish new networks with service providers involved in the project?

The advent of a pre-paid videoconferencing bridge service is seen by a number of the participants as a major opportunity to more frequently connect with a range of other sites.

One participant was keen to set up supervision with a fellow psychologist. Staff sickness and annual leave has not allowed this to date, but he will pursue the matter in the future. Another participant thought that the telehealth system would continue to be valuable because his town does not have a resident child psychiatrist.

A CAMHS professional felt that the telehealth links had enhanced relationships between her regional officers and a remote country town involved in the Project. It had also enabled CAMHS to develop new links to the remote town’s school. The
Project may lead to the development of a visiting service to the remote town, using the videoconferencing facilities for support.

More links between Darwin and Alice Springs were seen as a desirable development by one participant. One suggested that the network be extended to Katherine, Gove and the Kiwi Islands and to remote areas of north west Western Australia such as Cunnunara.

Staff in Alice Springs are keen to set up an exchange program with CAMHS in Adelaide, with a reciprocal sharing of skills. For example, Adelaide staff could experience Aboriginal issues at Alice Springs.

3. What are the impediments and incentives for you to establish new networks with service providers involved in the project?

The impediments identified by the participants were:

- competition, in one location, for using the equipment, with the adult psychiatry service
- equipment breakdown
- the time required to set up a session
- staff on rotating rosters being available at a set time, e.g. 10.30-11.30am Thursdays
- difficulties with local bureaucratic processes, including approvals
- the imperfect synchronising of lip movement and the audio in videoconferencing sessions
- the cost of sessions involving bridges.

The negative attitude of some senior staff in health departments was cited as a major barrier. In one location, senior bureaucrats have felt that their town was the priority location and they were less interested in servicing other areas via videoconferencing. Changes to the structure of mental health services in Northern Territory may result in the child and adolescent mental health specialists changing their target group from 0-18yrs old to 5-25 years old, which may impact on the types of support needed by Northern Territory staff.

The incentives to use the telehealth network identified by the participants were:

- training and development opportunities
- establishing networks
- raising the awareness of other projects.
The overall incentive for one remote area professional was ‘to do the job better, to provide more services for kids and parents, to have more knowledge of services available’. An Adelaide CAMHS manager commented: ‘It gives me a broader perspective. It keeps me in tune’.

One participant was pleased that his mental health team was able to invite other agencies to attend telehealth sessions, hence developing rapport with these other groups.

A CAMHS staff member commented that CAMHS services were currently ‘very strained financially’ so there is an incentive to use telehealth services to provide a credible service to remote areas. CAMHS staff can use telehealth to talk to remote area mental health workers about CAMHS delivery models and can change and adapt services in response to the feedback.

Objective No.2: Accessibility to CAMHS Services

4. What aspects of the training and education provided in the Telehealth project have you most appreciated and why?

Participants generally agreed that they had acquired new knowledge and skills from the sessions and had enjoyed the variety of topics discussed. One commented: ‘Training and development is imperative for the mental health program to work better in our community’. One participant appreciated being able to share case presentations about ‘how children work’.

Participants rated highly the fact that the telehealth sessions had affirmed that their own practices were appropriate: ‘clinically we were not off track’; ‘it was refreshing to know we were using the same approach, e.g. narrative’. One commented more fully:

> It was good knowing there were people with similar points of view, similar approaches, people willing to share their experience. There was support, guidance and skill sharing.

A highlight for a number of participants was the session conducted by Mary-Sue Moore from the USA, on Attachment Theory. The session was videotaped and the participants appreciated being able to view it later - ‘even if we disagree with her’, added one participant.

Another session that attracted several compliments was conducted by English psychiatrist Dr Bruggen: ‘The classification of diseases by Dr Bruggen was very useful. He is English and it was very refreshing to see how the other side works’.

Many of the participants at remote site found the videotapes of sessions of value. They also liked the other literature often forwarded to them, to supplement the videoconferencing sessions. The Web page was welcomed and one participant described it as ‘fingertip access’ to health services. However, a number of participants at remote sites were unable to access the web site, due to their inadequate equipment.
5. In what ways has the use of telehealth changed your models of the way clinical and educational services can be provided to rural and remote sites?

Participants felt that they had learnt new skills: ‘the presenters have shown us innovative methods’ and ‘we are learning new ways’. On the other hand, some participants said that they thought their service models were being shown to be similar to CAMHS’s. One commented on this duality: ‘The Project provided a wider range of options for working with people. We often got reassurance of our own competence’.

A number of participants commented that they liked the multidisciplinary approach of the presenters. During one telehealth session a young male patient provided his point of view about his situation and this was ideal for the multi-disciplinary staff assembled for the session.

Participants considered that the following uses of telehealth had changed their models of the way clinical and educational services can be provided to rural and remote sites:

- the ability to access second opinions
- the ability to access specialists
- the ability to book consultations from Adelaide
- the ability to access supervision from Adelaide.

One participant described the Telehealth Project as a ‘package’ of support services and said that the package could be used to train other health professionals. Another learnt from the links to other remote sites such as Roxby Downs and Coober Pedy: ‘you can hear professionals talk about problems and there is feedback’. An Adelaide CAMHS manager commented: ‘I am a bit of a convert. I now see the huge potential of telehealth for direct training and support. Support is just as important as training in the small locations’.

6. What barriers have prevented you from accessing more of the specialist consultation and support services in child and adolescent mental health services made available through this project?

Barriers cited by the participants included:

- the lack of psychiatrists in rural areas
- costs of the ISDN and bridging service
- occasional equipment failure
- access to the videoconferencing room
• if the participants at remote site are not present when the videoconferencing call is made, it is often difficult to locate the remote participants

• having to address an urgent case locally, when the telehealth session is scheduled

• time differences between SA and NT

• some clients have difficulty establishing rapport. For instance, one patient will not disclose information in a telehealth session as he thinks he can be seen on television all over Australia, when he uses telehealth facilities.

A forthcoming barrier at Darwin is that the videoconferencing equipment is being relocated to the Royal Darwin Hospital, necessitating the borrowing of a departmental car and a 20 minute trip by road to use the equipment.

A barrier that was overcome early in the Project was the process required, initially, to obtain a psychiatric assessment via telehealth. As a result of feedback, the process has been shortened.

**Objective No.3: Effectiveness of Telehealth**

7. What do you believe are the strengths of telehealth in providing a range of services, related to child and adolescent mental health, to rural and remote areas?

The strengths of telehealth identified by the participants include the services telehealth can provide to the staff located in rural and remote areas, including being able to access specialists, being able to provide supervision and conducting consultations. One rural-based practitioner used the telehealth link to CAMHS for two emergency situations in 1998: for a consultation for a suicidal patient and to access a psychiatrist, in response to a request from a GP.

A participant noted these strengths of telehealth:

You can have access to special skills. It is electronic face-to-face. It is a sort of presence. You can see the person and their expression as they respond to you. Adolescents are very difficult to treat. No-one has the absolute truth about treatment. Exchanging ideas and putting up ideas about what to do is valuable. I was impressed with an approach I saw in one of the sessions so I adopted it. The approach concerned the technique of asking the patient multiple questions to avoid the shrug of the shoulders.

Another participant commented: ‘telehealth reinforces for staff in remote areas that support is available. This gives staff in the country more confidence’.

One practitioner commented that videoconferencing provided a ‘face-to-face’ consultation that was superior to a telephone consultation. She felt that videoconferencing offered both informality and formality, depending on the context for the meeting. She also felt that ‘as you get to know the presenters, you get to know them as colleagues. Distance is no problem’. Another commented: ‘In an instant you can meet people. You can then put a face to a name so that in future whey you are face-to-face with them, you know them’.
Ease of use, accessibility and the speed with which a link can be dialed were cited by one participant as strengths of telehealth. She added: 'To go to the nearest town is a five hour round trip. Parents will only go if the situation is severe. Telehealth gives parents and patients more access'.

A participant provided an example of how a psychotic child in distress often needs to be sedated before being transported, so that when the patient arrives at the larger centre, he or she is quietened, making a diagnosis of the initial problem difficult. With videoconferencing, the specialist at the larger centre can see the remote patient before he or she is sedated and transported, enabling a more useful diagnosis.

An Adelaide CAMHS manager summed up: 'It's instantaneous. Cheap. It makes things that weren't possible possible. The medium is good enough'. However, most participants believe that, ideally, a professional would always be present with the patient at the remote site. 'Videoconferencing is hard for kids. They need some face to face support'.

8. What improvements would you like to see made in the way telehealth is used in providing a range of services, related to child and adolescent mental health, to rural and remote areas?

Suggestions for improvements to the telehealth project included:

- regular sessonal times with the same, not a rotating, psychiatrist
- using the facilities for secondary consultations if no patient needs to be seen
- using the facilities after hours for emergencies.

One participant commented that telehealth needs to become ‘part and parcel’ of the delivery of professional development in mental health because ‘professional development and supervision is almost impossible to provide in remote areas’. Another commented:

As we become competent in using the system the sky is the limit. We need to set aside time to access experts. I would like a situation where we only needed to give 24-48 hours to access a specialist.

Participants are keen to see telehealth succeed and attract permanent funding. One participant commented that practices could be improved. Hence, necessary protocols for consultations such as psychiatric assessments and follow ups are currently being developed.

Some participants would like to have access to more seminars and to have more sessions which were presented jointly by Adelaide-based and remote teams. The participants suggesting the joint sessions believed that Adelaide-based CAMHS staff need to better understand the lack of specialists available in remote areas.

An Adelaide CAMHS manager suggested that the network could be extended to Ceduna, Maitland and Clare, supplementing a visiting service.
Chapter 6: Analysis of Project Management

This chapter summarises the major actions undertaken by the project management group in the CAMHS RHSET project. The data used in the chapter is drawn from the evaluator’s observations at the majority of team meetings in 1998; an interview with Project Officer, Chris Seiboth, in January 1999; and the paper by Robinson et al (1999).

Project Management Structure

The Project has been managed using a two-tiered structure: a Project Management Group and a Project Advisory Committee.

The Project Management Group consists of the Project Manager, Phil Robinson, Project Officer, Chris Seiboth, and senior members of CAMHS. The group met monthly during 1998 and addressed the following topics at each meeting:

- arrangements at each of the main sites, Darwin, Alice Springs, Roxby Downs and Coober Pedy
- responses to the regular telehealth sessions, particularly the Seminar program and the distribution of videotapes
- project documentation, including conference papers, preparation of a journal article, and the web site
- evaluation
- training
- budgetary matters.

The Project Advisory Committee was formed with representatives from all sites, members of the project team and invited members from State and Territory Health Services. During 1998, the Committee met on a bi-monthly basis to provide the overall direction for the project. Robinson et al (1999) report that the Project Advisory Committee has:

- provided ongoing advice regarding the development of the RHSET Telehealth project to selected rural and remote sites in South Australia and Northern Territory
- contributed to project planning by the provision of information and advice regarding particular needs and issues occurring at each site
• provided comment on the development of evaluative processes to determine the efficiency and efficacy of using Telehealth as a strategy to address the mental health needs of children and adolescents

• participated in the development of initiatives to further develop Telehealth services to the selected rural and remote sites

• ensured the objectives lists in Bringing Child and Adolescent Mental Health Services to Rural and Remote Communities project proposal are met.

Project Management Processes

Beginning with the preparation of the submission for the RHSET funding, this project is characterised by a high level of consultations with all sites to ensure the needs of each site are addressed. Robinson et al (1999) report that staff from the Women's and Children's Hospital conducted site visits to each rural and remote location before commencing the delivery of Telehealth services. The purpose of the site visits were to:

• personalise the service through face to face contact

• conduct a needs assessment by interviewing all staff

• training staff in the use of video-conferencing and internet equipment

• negotiate a service agreement

Robinson et al (1999) believe that personal contact at the commencement of the project greatly contributed to the early success of the project. Most remote locations are unable to draw on specialist services and thus develop a generalist approach to addressing Child and Adolescent Mental Health problems. Site visits enabled Divisional staff to experience first hand the challenges faced by workers in these remote locations.

Conducting a detailed needs assessment at each site and for each worker meant services were tailored for the individual needs described. Each location identified a diverse range of needs, as some sites had access to Child Psychiatrists, while at the more remote locations generalist health workers. These workers are required to manage mental health problems as well as a variety of physical medical conditions. The needs assessment also brought out the preferred learning styles of workers. This in turn shaped the modality of service provided (eg: clinical case consultations, training workshops or seminars). (Robinson et al, 1999)

The site visits also revealed that the use of videoconferencing equipment and access to Internet varied greatly from site to site. Approximately 50% of the workers in rural and remote sites had not used or been trained in use of Telehealth technologies available to them. Robinson et al (1999) report that the project management staff were able to conduct training sessions that enabled local workers maximise the use of their equipment. At the time of these visits (early 1998), some locations did have problems accessing the Internet and the mental health resources available via that
medium. However, this has now been overcome at all sites with the installation of upgraded computing equipment.

A major achievement of the Project Management Group was the establishment of a service agreement between the agencies involved with the project. This was done to ensure all parties were clear about what format, time and resources would be required to successfully achieve the objectives of the project. This was an important milestone considering it was an inter-sectoral project linking State and Territory Health Services. (Robinson et al, 1999)

All sites initially requested a service that allowed them to discuss the management of cases that were of greatest concern. This raised some significant legal, ethical and confidentiality issues that were promptly addressed:

Firstly the client or the client’s guardian would need to have provided specific informed consent before the case could be discussed with other clinicians via Telehealth. The second issue related to the legal position about advice provided by a registered clinician from other State or Territory. Informed consent and operational protocols have been developed and continue to be updated and refined as project progresses. In regard to the second issue, the project has adopted a cautious approach by ensuring workers comply with the registration boards in South Australia and the Northern Territory. (Robinson et al, 1999)

Clinical case consultations enabled workers from remote sites to access specialist services that previously were unavailable. It also facilitated an improved understanding by metropolitan workers of the variety of clinical challenges faced in remote locations.

The inability to access training and development sessions was cited as a major disadvantage in working in rural and remote locations. To redress this problem, the project conducted a series of training seminars during the second half of 1998:

The themes of these seminars were developed from information gained from the initial needs assessments and by the expressed needs by workers in each location. For example, one small community experienced a series of deaths that had significant repercussions for a number of children and their families. Subsequently the training for this site focussed on managing grief and loss issues. (Robinson et al, 1999)

**Interview with the Project Officer**

An interview was conducted with the Project Officer in January 1999, to gain an ‘insider’s’ perspective on the project, in comparison to the views of the participants, as set out in the previous chapter. The interview revealed the following:

- informal ‘networks’ of practitioners were established among the project’s participants, partly by referring phone callers from remote sites to peers within CAMHS.

- networks also were established by ‘pairing’ CAMHS staff at Port Augusta and Port Pirie with Roxby Downs and the Western Office at Port Adelaide with
Coober Pedy.

- regular access to a videoconferencing bridge will enable more sites to be regularly in contact with each other, hence expanding the possibilities for professional networking. Sessions were videotaped and the tapes distributed, to partly address the problem that most sessions were only between two sites.

- participants were particularly positive to seminars conducted by Mary Sue Moore from the University of Colorado, Andrew Tootell who focused on a 15 year old patient using a narrative approach and Margie Richardson who targeted child anxiety and school refusal.

- the Telehealth sessions in early 1998 were predominantly case discussions, based on the remote sites' recent cases. Seminars on particular topics began around May 1998. A one hour session combining discussions of theory followed by participants' recent cases was a popular approach later in the year.

- a key to the success of the 1998 telehealth sessions was that remote site participants felt that their needs were being addressed. Participants were pleased that the seminar topics were in response to their requests. They also liked the inclusion in each session of both theory presentations and the discussion of recent case studies.

- staff turnover at the remote sites meant that new participants were joining the sessions through the year and needed inducting and training.

- fear of the technology quickly dissipated during the project's first year.

- the versatile videoconferencing facilities provided in Telehealth Room 1 at the Women's and Children's Hospital were used for most of the Adelaide transmissions.

- a feature of the sessions in 1998 was the enthusiasm of participants at all sites.

- in response to the experiences in 1998, twenty seminar topics have been arranged for 1999. Recent cases will be discussed on other occasions. Transcripts of each presentation will be produced and an extract will be placed on the web site. Plans are in place to include audio streaming on the web site.

Frames of Reference

In order to capture data that may have been missed using other instruments, the evaluator used a four-frames of reference model in the interview with the Project Officer. The four frames of reference are the human relations aspects of the project, the political, the symbolic and the structural.

This project is replete with human relations issues as it involves so many staff from very different locations and organisations, across South Australia and the Northern
Territory, in metropolitan, urban, rural and remote settings. How does the project management deal with such complexity and keep all participants satisfied? The Project Officer believes that the following factors contributed to success in 1998:

- a key to the project is trying to understand the challenges and constraints faced by participants in all these different settings
- it is also important to acknowledge the skill level of all participants
- the site visits are crucial to establish trust and rapport
- the participants need to be convinced that they have a stake in the success of the project and that the program will be modified to suit their needs
- participants need to feel that the program is flexible to the extent that it will be modified each week to accommodate recent issues.

The symbolic aspects of a project include the belief systems and models used by the participants. In initial discussions with participants, the project management found a range of belief systems and professional models used by the participants, particularly the different models used by psychiatrists compared with other disciplines. Remarkably, these differences were not an impediment to the free flow of ideas during the telehealth sessions. The Project Officer commented:

> Sometimes when professionals talk face-to-face there is peer competition and political factions may be present. Videoconferencing is a leveler: it is sometimes easier to talk about issues by videoconferencing than face-to-face; participants forget about their discipline and just listen and respond to the content.

The two, regular psychiatrists used during the sessions were popular with the participants, hence dissipating any possible clash of clinical models between psychiatrists and others.

The political aspects of a project include the power or lack of power or status of a participant within their organisation. It was surprising that this project was not more affected by power issues, as the participants were drawn from different status levels and from a range of organisations, each with their own hierarchies and power balances. A few participants conveyed their disappointment that they were not receiving the support they desired from their superiors and some sites were more complicated than others in terms of the distribution of power.

The structural aspects of a project include all the arrangements made by the project management team. To anticipate and solve problems, members of the project management team visited all sites before transmissions commenced, to check on local facilities, technology and procedures. The project team also put in place a training scheme to ensure quality participation. Some resistance to undertaking training was experienced, but the project management team persisted in requiring presenters, in particular, to be trained before conducting sessions.
By using the above four frames of reference, additional insights were provided into the range of behaviours experienced during the project and the effective interventions of the project management team.
Chapter 7: Action Research Theme: the Use of the Expert

A qualitative method employed in the CAMHS RHSET project was Action Research. One of the benefits of the Action Research methodology is that concepts are generated, tested and refined, building on the participants’ reflection on the project.

First thematic concern: the use of the expert

With Action Research, before beginning the very first planning stage, it is necessary to find a thematic concern, upon which some reflection is required. The first thematic concern identified by two project team leaders in April 1998, Chris Seiboth and Bernie Koszegi, was ‘the use of the expert’ in the delivery of professional development. This theme emerged from the team’s interest in testing educational delivery models in relation to the technological media used in the project. Some of the educational delivery models initially identified by the team include the lecturer mode, the seminar mode, combinations of synchronous (e.g. videoconferencing) and asynchronous communication (e.g. videotapes), and the use of the expert.

Members of the project management team met on three occasions in April-June 1998 to undertake action research and used a number of questions to investigate this theme in a structured manner. To order the discussion, the team asked itself questions in relation to

- language (e.g. what do we mean by the word ‘expert’ in professional development?)
- activities and practices (e.g. what activities during videoconferencing sessions enable participants to develop their own meanings?)
- social relationships and organisation (e.g. what issues arise when staff from different organisations combine for professional development activities?).

The thematic concern - the use of the expert in the CAMHS RHSET project - culminated in a wide-ranging discussion between project team leaders and the evaluator on 4 June 1998, and is summarised below.

Language

Key words raised in this discussion included: expertise, expert teams, expert knowledge, expert resources, valuing options and collective development of new knowledge.

The word ‘expert’ provoked a range of ideas in the team’s discussion. There was considerable concern about the label of ‘expert’ and some discomfort in
acknowledging that someone at the CAMHS Northern Office was an expert, as the word ‘expert’ did not fit easily with CAMHS interest in empowering people. The team is keen to construct a different term to expert, through further dialogue with other project participants.

The videoconferencing links from CAMHS Northern Office presuppose that there is expertise there, to be made available to the other sites. The team preferred to see it that the links were about valuing the opportunity to discuss different options. The notion of an expert suggested that there are answers, while the project team preferred to emphasise the process needed to resolve problems. It is important to note that most of the videoconferencing sessions to date had resulted in the development of a range of options for actions.

The team was comfortable with the concept that ‘everyone’s an expert’: for instance, individual staff have specialist expertise in working with adolescents, aggressive boys, child sexual abuse, domestic violence and working with Aboriginal Programs.

There was discussion of the concept that there are ‘expert teams’ in CAMHS: multidisciplinary groups of staff with a variety of interests. Previously these expert teams had developed incidentally, but now their development was encouraged, for instance by the allocation of portfolios, at the Northern Office.

There was discussion of the concept of ‘expert knowledge’ as a recognition that some staff are well versed on particular topics.

Interestingly, some clinicians would not see themselves as expert resources, while others would. During a recent videoconferencing session, staff at one site said they would like a psychiatrist at the sessions to answer questions, as if they saw psychiatrists as expert reference points.

Export resources include videotapes, print materials, people, videoconferencing sessions and world wide web material.

The team is keen to use the term ‘expert’ to suggest the collective development of new knowledge, rather than see the need for an expert to meet a deficit in knowledge.

Organisation

The team members believed that the staff at the other sites might have differing perspectives on the notion of an expert.

It is expected that staff in different locations will respond to any particular expert’s position by saying that ‘we did it differently because we had different resources’. This response may be worth exploring, as it suggests that each staff member is influenced by locally available expertise.

Practice
The team members feel that the project is about metacognition, in that participants are being asked to reflect on why they've made decisions or taken courses of actions or why they have made a particular judgment or why an intervention was made. The project is about providing the individual staff member with the opportunity to interact with experts, so they can ask themselves why did they take a particular course of action. This suggests there is a synergy between the staff member, the expert and the delivery system.

There is a view in the project team that this synergy leads to the creation of new knowledge. This position encourages the belief that all participants have a role to play, that we’re all in it together, that we’re developing a narrative and creating something new.

In narrative therapy, the notion of a reflective team is a key concept and the range of questions asked is more important than any ideas proposed by an expert. The Northern Services Action Group has used a narrative approach in their session, using a structured approach where the audience watches, questions are asked by nominated personnel and participants are asked to reflect on issues raised.

An external expert had been involved in a number of videoconferencing sessions to date, and the participants had sought follow up articles, videos and other people. A Western Office speech therapist had made a presentation on autism, and provided participants with a videotape and the organisers had offered to provide more information if it was needed.

The videoconferencing medium, enabling staff from different locations and organisations, is proving to be a rich environment for professional development. For example, social work students are finding the sessions are very valuable to observe.

This project has given participants licence to explore other ways of working. There is some indication that participants in the RHSET project are looking to alter their models of practice, as a result of seeing different models of practice. For instance, the ‘Coolness Under Pressure’ manual was a new model for some Darwin participants, who have now requested copies of the manual. Also, Darwin staff have asked about negotiated action plans.

Planning

The development of the above thematic concern, the use of the expert, will be extended by the use this Chapter or a precise of it as the basis for a group discussion among other project personnel.
Chapter 8. Themes for Further Investigation

A range of themes and ideas arose during the evaluation that will be investigated in the second year of the RHSET CAMHS Telehealth project. These include:

1. the development of protocols for videoconferencing sessions
2. the continuing exploration of alternative ways of providing professional development, using telehealth technologies
3. the use of four types of interaction during telehealth sessions: learner-content interaction; learner-instructor interaction; learner-learner interaction; learner-interface interaction
4. the usefulness of telehealth for Indigenous matters
5. skill development in the use of telehealth
6. optimising the use of telehealth within the organisation
7. using the Internet component of telehealth effectively
8. issues concerning confidentiality
9. ensuring the innovation is embedded in the organisation
10. developing a more systematic staff development program which is well publicised in advance and which takes into account feedback provided by participants from the first year of seminars
11. investigating how the seminar programs could be placed on the Internet to facilitate more convenient access to material.
Bibliography


Sturmey, R. (1994), Clinical Supervision by Videoconferencing in Rural and Remote Areas, University of New England, Armidale


Appendix: Interview Questions, December 1998

Objective No. 1: Establishing Networks

1. In what ways has the Telehealth Project enabled you to establish new networks with the service providers involved in the project?

2. What other opportunities might be available to you in the future to establish new networks with service providers involved in the project?

3. What are the impediments and incentives for you to establish new networks with service providers involved in the project?

Objective No. 2: Accessibility to CAMHS Services

4. What aspects of the training and education provided in the Telehealth project have you most appreciated and why?

5. In what ways has the use of telehealth changed your models of the way clinical and educational services can be provided to rural and remote sites?

6. What barriers have prevented you from accessing more of the specialist consultation and support services in child and adolescent mental health services made available through this project?

Objective No. 3: Effectiveness of Telehealth

7. What do you believe are the strengths of telehealth in providing a range of services, related to child and adolescent mental health, to rural and remote areas?
8. What improvements would you like to see made in the way telehealth is used in providing a range of services, related to child and adolescent mental health, to rural and remote areas?