

Acquired Brain Injury Slow to Recover Program Review

**Final Report
November 2004**

A report for the Department of Human Services by HDG Consulting Group.

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The consultants would like to acknowledge the cooperative manner in which Southern Health allowed access to documentation, financial records and de-identified program records. All charts and figures in this report are from the ABI:STR Program records and relate to information on service usage and expenditure up to 30 June 2003.

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Executive Summary

Commencing in 1996, the ABI:STR Program was designed to assist those people who experienced catastrophic brain injury, who were not in receipt of compensation and required residential aged care facility (nursing home) level of care with long term support. The program was at the time, internationally ground breaking in that there were few, if any models of service, designed to assist this target group. The program has experienced rapid growth from an initial client base of 24 in 1996, to 181 admissions by mid 2003. The statewide program, managed by Southern Health and delivered through external contracted case management agencies, attendant carers and therapy providers, remains a worldwide leader in a relatively new and evolving field.

The ABI:STR program has been successful in achieving the original objective of providing slow stream rehabilitation support for non-compensable highly dependent persons with severe ABI and facilitating reintegration into community care. Without the program it is fair to surmise that a significant proportion of the target group would be inappropriately residing in aged care residential facilities or, inappropriately staying for extended periods in acute hospitals. The program has improved the quality of life of these people in that many are now living in more age appropriate surroundings and have the opportunity through slow stream rehabilitation to achieve greater independence and engagement with the community. Family members, service users and advocates are highly appreciative of the program.

The implementation of the program has resulted in more effective and efficient use of limited relatively expensive resources in the acute system. A reduction in cost to the residential care sector has also been anecdotally reported, arising from the number of people now residing at home. In addition, any reduced disability at an individual level, has an impact on the long-term costs of care and quality of life. The capacity to assist in the effective and efficient use of acute health resources has occurred at a time when strategies to maximise the efficiency of acute resources have been paramount.

A new management structure at Southern Health had commenced implementing ABI:STR program improvements prior to the review, and continued to act promptly to consider areas identified by the review. At an overall program level, further consideration is needed of the ABI:STR program structure to ensure the best possible model underpins what is now a substantially larger program. At an operational level, ongoing program management, implementation of the financial forecasting model, and revising operational procedures in a number of areas is underway.

Southern Health has undertaken detailed financial modelling to more accurately forecast future demand and budgetary implications. The inherent tension between providing life time support to existing clients and accepting new eligible clients to the program requires careful consideration. In addition, the critical role played by families and the provision of gratuitous care highlights the need for the program to consider options for empowering carers.

Based on current funding levels, the ABI:STR program has reached full capacity. The acceptance of new admissions to the program is dependent on discharge of clients from the program or reductions in service levels. As at May 2004 there were 18 clients assessed as eligible awaiting admission. One implication of this is that patients meeting the ABI:STR program criteria will remain in acute settings for an extended period. Addressing this issue requires a cross-divisional approach within the Department between the acute, sub acute, aged care and disability services program areas and Southern Health.

The ABI:STR Program has advanced, through experience, the knowledge and care of people with an acquired brain injury. The knowledge base will continue to grow over the coming years as new methods and approaches evolve. Implementation of the review recommendations and the ongoing cooperation of key stakeholders will ensure the ABI:STR Program remains a worldwide leader in the field of acquired brain injury.

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1. Introduction

1.1 Background

The Ministerial Implementation Committee on Head Injury (MICHI) identified in 1993 the specific and different needs of people with Acquired Brain Injury (ABI) and high levels of dependency. The ABI Case Management Service and the ABI Behavioural Consultancy Service were established to support these people. In addition, a study was commissioned by the Department of Human Services (DHS) to investigate the slow stream rehabilitation and long term care needs of those people with catastrophic brain injury. This led to the pilot and subsequent development of the Acquired Brain Injury: Slow To Recover (ABI:STR) Program by the Department between 1996 and 1998. Following a competitive tender process the ABI:STR Program was transferred to the auspice of Southern Health in 1998.

The ABI:STR Program is designed to assist those people who have experienced catastrophic brain injury who are not in receipt of compensation and who require high-level care such as that provided in a residential aged care facility with long-term support. The statewide program is managed by Southern Health and delivered through external contracted case management agencies and contracted attendant carers and therapy providers.

Good practice in human service programs includes periodic program evaluation and review to ensure services are meeting the needs of consumers and are being managed and operated in an efficient manner. Accordingly, the Department of Human Services commissioned an evaluation of the ABI:STR Program to review the management and administration processes and service and client outcomes. Given the program had been in operation for seven years and developed a comprehensive history and track record of service delivery, the review was both timely and important to the future and strategic direction of the program.

1.2 Review Aims

The purpose of the review was to assess the service delivery model and service or system improvement outcomes of the ABI:STR Program. The scope of the review included (but was not limited to):

- ABI:STR Program reach and ability to meet need
- ABI:STR Program costs
- Client (non-clinical) and service outcomes
- Referrals and referral pathways
- Care planning and review processes
- The duration of services provided
- The categories and range of services provided
- Transition to aged care and disability services
- Cost-sharing with families and carers
- Linkages with acute and sub-acute health services, aged care, primary care and disability services
- Program scope: rehabilitation vis-a-vis health care
- Relationship with TAC/Workcover

The review did not include an assessment or evaluation of the clinical pathways or clinical outcomes achieved by the ABI:STR Program.

1.3 Review Method

Key stages of the review included:

- ⇒ A review of ABI:STR Program documentation and associated literature (August – October 2003)
- ⇒ Consultation with key stakeholders including DHS, Southern Health, case managers, therapists, attendant care agencies and families (August – October 2003)
- ⇒ Synthesis, analysis and interpretation of data (August – October 2003)
- ⇒ Model development and options (November/December 2003)
- ⇒ Draft report (November/December 2003)
- ⇒ Consultation and feedback on the draft report (January/March 2004)
- ⇒ Formulation of recommendations (April 2004)
- ⇒ Final report (May 2004)

1.4 Structure of Report

Following this introductory section, Chapter 2 provides an overview of the ABI:STR Program aims and service delivery model. Chapter 3 provides an analysis of service delivery by the program including program admissions, reach, duration of service provision and the categories and range of services provided. The cost analysis documented in Chapter 4 reports on overall program expenditure and categories, the cost per client and financial trends derived from seven years of operation. Program management and administration practices including contractual arrangements, are documented in Chapter 5. Chapter 6 reports on the key themes arising from consultation with key stakeholders including families, case management and attendant care agencies, therapists, residential and acute services. A brief literature review and models similar to ABI:STR model are documented in Chapter 7. Chapter 8 provides a synthesis of the review information, poses a series of discussion points, and suggests strategies to enhance the ABI:STR Program. Recommendations arising from the review, documented as a series of Key Result Areas are listed in Chapter 9.

2. Program Overview and Description

2.1 ABI:STR Program Aims

Program documentation lists the aims of the ABI:STR Program as being to:

- Provide individually targeted slow-stream rehabilitation services to people with severe ABI who have the potential to achieve functional gains in their level of independence, and thereby to assist these people to achieve optimum levels of independent functioning.
- Monitor and provide passive rehabilitation for clients not able to benefit from active rehabilitation in the early weeks or months post-ABI, while allowing time to assess realistically the person's potential for recovery and/or to await further neurological recovery that may enable the client to participate in more active rehabilitation.
- Ensure timely and appropriate discharge from acute care and reintegration into community care by providing the necessary level of support and assistance not otherwise provided by mainstream programs for these clients.
- Ensure a maintenance level of rehabilitation to prevent physical deterioration for those who have sustained major and irreversible brain injuries and who may require long-term or ongoing support.
- Extend the currently very limited knowledge of the process of recovery following severe ABI, and the place of rehabilitation services in maximising recovery and independence for these clients, to develop evidence-based guidelines for optimum management of ABI:STR clients.

These aims have further evolved over the life of the program and although not documented in program literature are listed in Appendix 1.

The ABI:STR Program is designed to cater for a small but significant group of brain damaged younger adults who are not eligible for compensation, and who are distinguished by:

- The severity of their acquired brain injury
- Their slow recovery and persisting high dependency requiring prolonged rehabilitation and/or other therapies
- The complexity of their care needs
- Their inability to access, through any other means, services that are appropriate to their age, level of disability, and limited recovery potential.

The complex and long term needs of this group place them beyond the current capacity of mainstream acute and sub-acute rehabilitation services.

2.2 Model Overview

The documented service delivery model to achieve these aims involves:

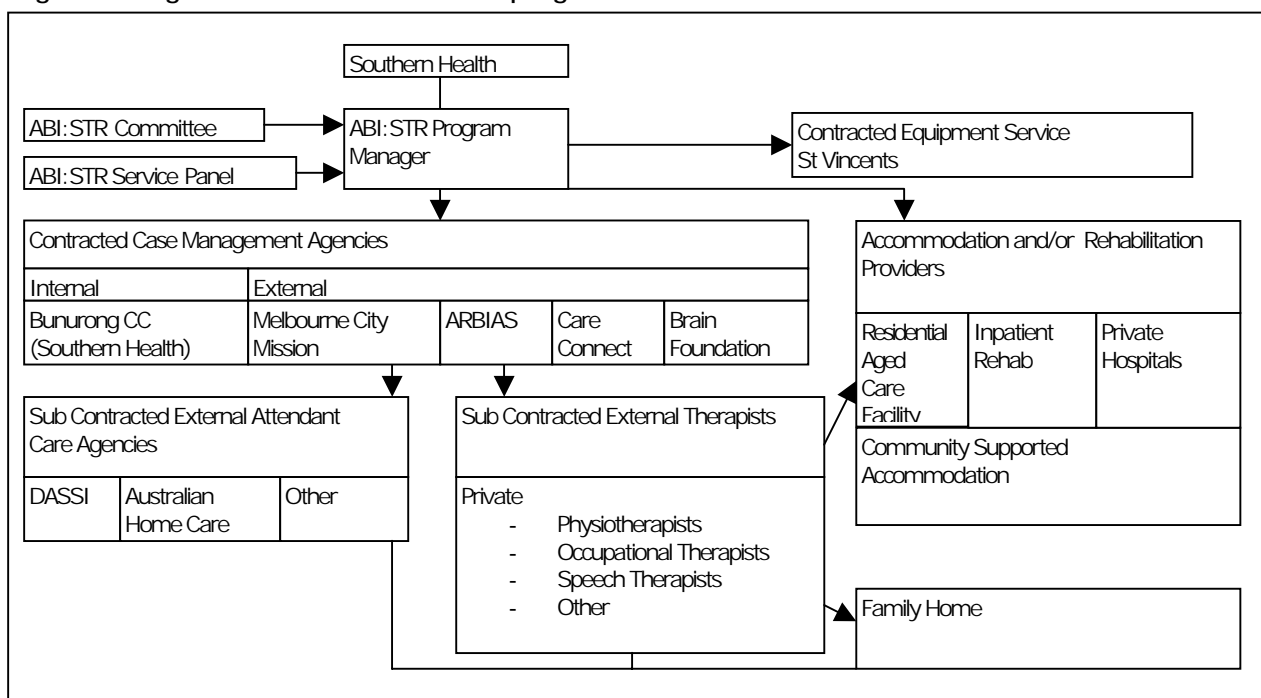
- Identifying the rehabilitation and clinical care needs of individual clients that cannot be met through other program areas, purchasing services to meet those needs and ensuring clients can remain with extra support within generic and community-based services.
- Contract purchasing of core services, including slow-stream inpatient rehabilitation (within existing rehabilitation hospitals), case management, and the management and provision of aids, equipment and home modifications. This ensures a baseline level of services that can be augmented as needed and supports the development of specific expertise in working with clients with severe ABI.
- Coordinating, through case management, services funded by the ABI STR Program, and advocating for client access to mainstream services.

This is achieved through a structure based on the brokerage and contracting and sub

contracting of service providers in response to individual client needs. As indicated in Figure 1 an independent Committee and Service Panel support the program manager. An independent medical rehabilitation consultant (not employed by Southern Health) is the Chairperson of these structures. Part of the role of the Chairman is to protect the budgetary independence of the program and its statewide focus. The Committee's role is to determine policy and program direction and oversee the development and administration of the program. The ten member Committee is intended to meet twice yearly and comprise representation from the ABI advocacy sector (1 member), community service provider representatives (6 members), equipment coordinator, DHS representatives, and representatives of the auspice organisation. However, in practice this Committee was suspended when the review was announced and has not met since April 2002. The role of the Service Panel is to decide on individual eligibility, consider applications to the program and allocate services and funds to individuals based on the care plan. The panel comprises at least the Committee Chairman, two allied health professionals with relevant expertise in ABI and a representative from the auspice body. This panel met in the early stages of the program and ceased meeting in 1998 with its role delegated to the program manager with the Chairman available for expert advice. The provision of equipment for the program is contracted to St Vincent's hospital and supplied on permanent loan to clients. When equipment needs to be replaced therapists and families are encouraged to plan ahead and use the Victorian Aids and Equipment Program however the ABI:STR Program will provide top up funding for more expensive items. In relation to accommodation, financial arrangements are entered into with a range of accommodation providers including inpatient rehabilitation services, community supported accommodation and residential aged care facility (nursing home) - high level care to provide accommodation for clients based on the wishes of the client, their family, the appropriateness of the option, the stage of recovery and availability.

Figure 1 demonstrates the complexity of the structure in relation to brokering services and contractual arrangements. The program contracts 5 case management agencies that are responsible for the development of care plans, who in turn sub contract external therapy providers and attendant care agencies to deliver the services specified in care plans. Therapy providers provide clinical therapy expertise and design therapy programs implemented by the attendant carers. Two levels of care (intensive and maintenance) are available.

Figure 1: Organisational structure and program model



2.3 Eligibility and Priority

Eligibility guidelines for the program state that to be eligible for funding by the ABI:STR Program, an applicant must satisfy all the following criteria.

Figure 2: ABI:STR eligibility criteria

<p>Medical:</p> <ul style="list-style-type: none">- Has a diagnosis of severe ABI in relation to an acute health episode within the preceding two years- Has a current primary diagnosis of ABI- Is post-acute and medically stable or requiring limited medical intervention <p>Age:</p> <ul style="list-style-type: none">- Is at least 5 years of age <p>Legal:</p> <ul style="list-style-type: none">- Is non-compensable- Has a legal guardian or advocate, if unable to give informed consent <p>Social circumstances:</p> <ul style="list-style-type: none">- Requires specific age-appropriate care and support, including individual psycho-social and familial assistance, which is not available through other programs <p>Management:</p> <ul style="list-style-type: none">- Is not eligible for fast-stream rehabilitation or considered eligible for community based rehabilitation- Has been assessed as needing long-term nursing care and/or eligible for Commonwealth-funded aged care residential services high level care.

To be eligible for funding for long-term maintenance services, the client must satisfy the above criteria and require clinical care or therapy in addition to that normally available in a residential aged care facility or other care setting to maintain the level of independence gained through slow-stream rehabilitation.

Program documentation states that priority will be given to people between the ages of 5 and 50 years with the most complex disability and support needs. There may, for instance, be a need to purchase a specific environment because of the person's youth or because of family commitments and responsibilities (eg: a young family and parenting responsibilities). Other factors are considered when determining priority such as whether the person is awaiting discharge from an acute hospital or whether they have responsibility for children under the age of 15 years and/or other dependants.

Current entry to the Program is also based on:

- The presence of other specific medical or social conditions that may indicate that mainstream services may be either more or less appropriate to meet the person's total care and personal support requirements.
- The availability of age-appropriate and clinically appropriate services in the area and community the person lives.
- The ability for a client with a severe ABI to receive or not receive appropriate care by the generic service system.

Application forms (attached at Appendix 4) are generally completed by the Social Worker at the acute facility and forwarded to the program manager for consideration of eligibility. A brief history of the client's circumstances and relevant assessment information is attached to the application forms.

2.4 Processes

Figure 3 outlines the processes for entry to the program and service delivery. As indicated there are a number of steps between the application process and the commencement of service delivery.

Figure 3: Entry and service delivery process



The `intensive` level of service is based on:

- Up to 3 hours per week each of physiotherapy, occupational therapy and speech therapy.
- Up to 44 hours per week of attendant care (10-15 hours to support the therapeutic program with the additional hours supporting activities of daily living) if the person resides at home or 15 hours if the person resides in a residential aged care facility.

The `maintenance` level is based on:

- Up to 8 hours per annum each of physiotherapy, occupational therapy and speech therapy.
- Up to 44 hours per week of attendant care (10-15 hours to support the therapeutic program with the additional hours supporting activities of daily living) if the person resides at home or 15 hours if the person resides in a residential aged care facility. The program may provide top up hours for clients on Home First packages if required.

3. Analysis of Service Provision

3.1 Program Admissions and Reach

Program funding was expected to cater for a minimum of 20 new clients per year over the first five years to provide continuing services to approximately 100 people. Admissions average 25 per year with the lowest admission year being 2001 with 18 admissions; and the highest being 2002 with 35 people admitted to the program. From the program commencement in 1996 to 30 June 2003, a total of 181 people have been admitted to the program. Of these 181 people, 124 are currently receiving services (57 at the intensive level and 67 at the maintenance level), 37 have been discharged (including 2 people who have been compensable) and 20 have died.

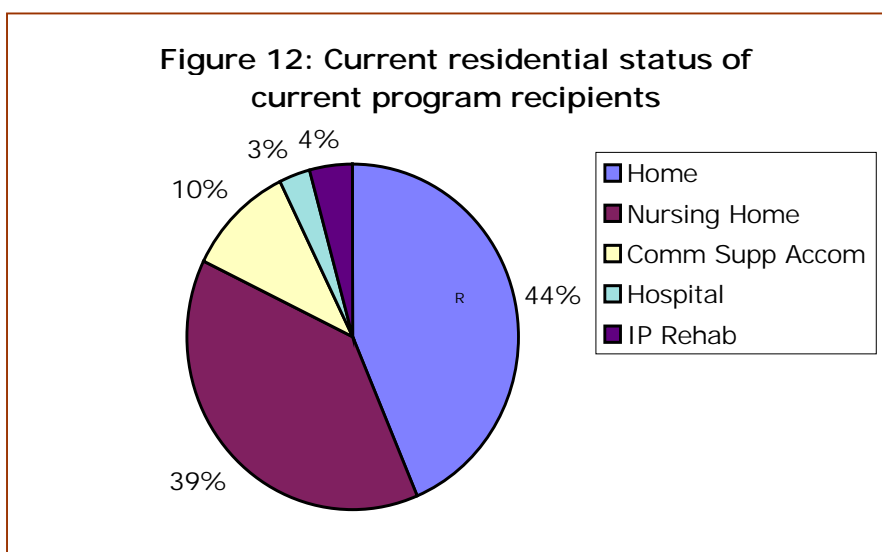


Figure 4 indicates the number of new admissions to the program by year, amounting to a total of 181 admissions over the 7 year period shown. The trend line shows a gradual increase in admissions over the first four years of program operation, followed by a decrease in admissions in 2000/2001 and 2001/2002 then a sharp increase in 2002/2003. The decrease was due to uncertainties about funding and the program anticipating

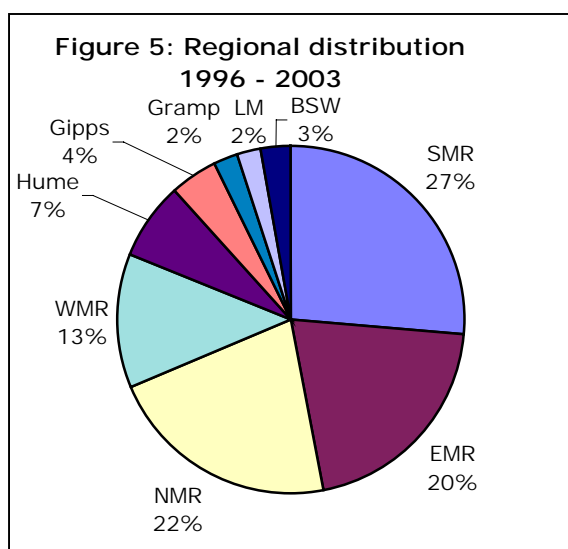
future accumulated costs for existing clients resulting in hesitancy to accept new admissions. The recent increase was due to the realisation that maximising program expenditure was a priority, which in conjunction with discharges and a decreasing cost per client (refer section 4) allowed for an increased admission rate in this year.

The funding and service agreement with DHS specifies 20 admissions per year. It is clear that this number has been exceeded every year except one, suggesting that original assumptions may have been conservative in nature. An appropriate annual admission target is influenced by the additive basis of program expenditure on existing clients over multiple years. Financial modelling currently being undertaken by Southern Health should assist to determine realistic targets for future years.

Whilst clients may be accepted as eligible there may be a time delay until they are admitted to the program and services commence. The program database does not currently record date of referral so the time lag between referral and admission is not evidenced without individual case studies. As at September 2003 there were 3 clients assessed as eligible awaiting program admission; as at May 2004 there were 18 clients assessed as eligible awaiting program admission.

In addition to the admission of eligible people to the program, 17 people were assessed as ineligible in the 2001/2002 year (almost equivalent to the number found eligible) and 28 in 2002/2003 year. Key reasons for this were: the client not requiring high level care (13 clients); functional levels more suited to fast stream rehabilitation (11 clients); more than 2 years post injury (2 clients); aged less than 5 years (1 client). This would appear to be a high level of ineligibility suggesting misinterpretation of eligibility criteria by some referrers. It is

unknown how many people are eligible for the program but not referred due to lack of knowledge of the program or perceptions around eligibility criteria.



ABI: STR is a statewide program that services all DHS regions. As indicated in Figure 5, the majority of clients have been from the four metropolitan regions which together account for 82% of clients for the 1996 – 2003 period. It is difficult to make a comparison of this distribution with overall population distribution or comment on the equitable spread of the program given the small size of the target group and the number of influencing factors (age profile, injury risk factors).

However, as indicated in Table 1, it is interesting to note that Grampians region has had no new admissions to the program in the past four years (this may be due to the regional service managing complex ABI clients locally) and Barwon South West has had only 1.

Table 1: Admission by Region

Year	SMR	EMR	NMR	WMR	Hume	Gippsland	Grampians	Loddon	Barwon	Total
1996/1997	5	7	7	2	1	1	2	1	0	26
1997/1998	4	10	4	2	4	0	1	0	1	26
1998/1999	8	3	6	2	2	1	1	1	3	27
1999/2000	9	3	8	5	0	4	0	0	0	29
2000/2001	5	5	3	4	2	1	0	0	0	20
2001/2002	9	3	4	1	0	0	0	0	1	18
2002/2003	8	6	7	7	4	1	0	2	0	35
Total	48	37	39	23	13	8	4	4	5	181

3.2 Duration of Service Provision

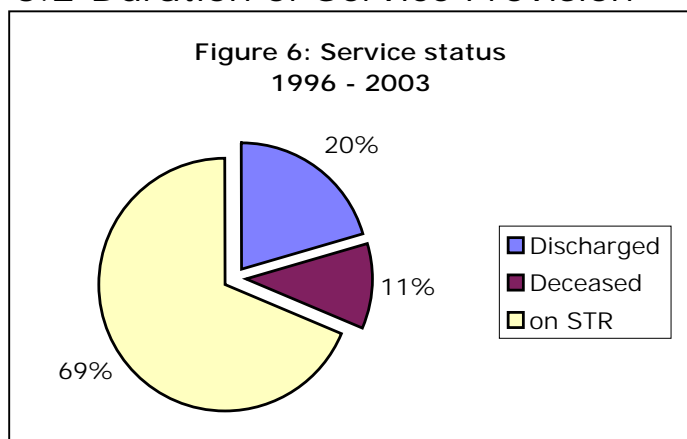
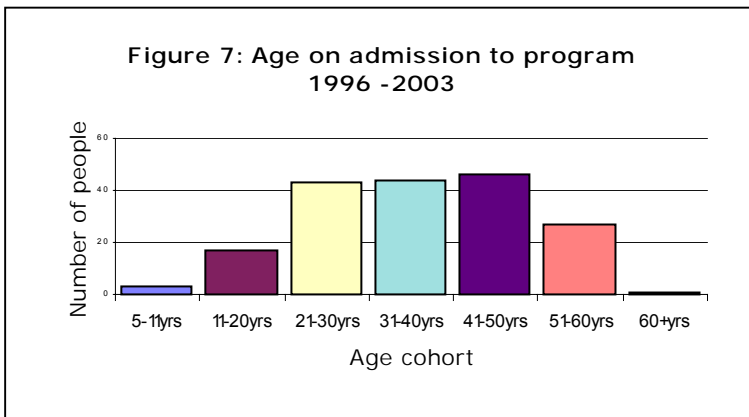


Figure 6 indicates that of all clients utilising the program over the 1996/1997 – 2002/2003 period, 20% have been discharged, 11% have deceased and 69% continue to utilise the program.

Excluding clients who have entered the program in the past three years, of those clients (128) who commenced the program between 1996 and 2000 the figures are slightly different: 27% of clients were discharged, 13% deceased and 60% continue to utilise the program. This suggests that over the longer term,

over half of all people admitted may continue to require support from the program.¹

¹ This figure includes 32 clients from 1996/1997 and 1997/1998, for some of whom a long term commitment was made and who may have suffered their injury more than 2 years prior to program entry.



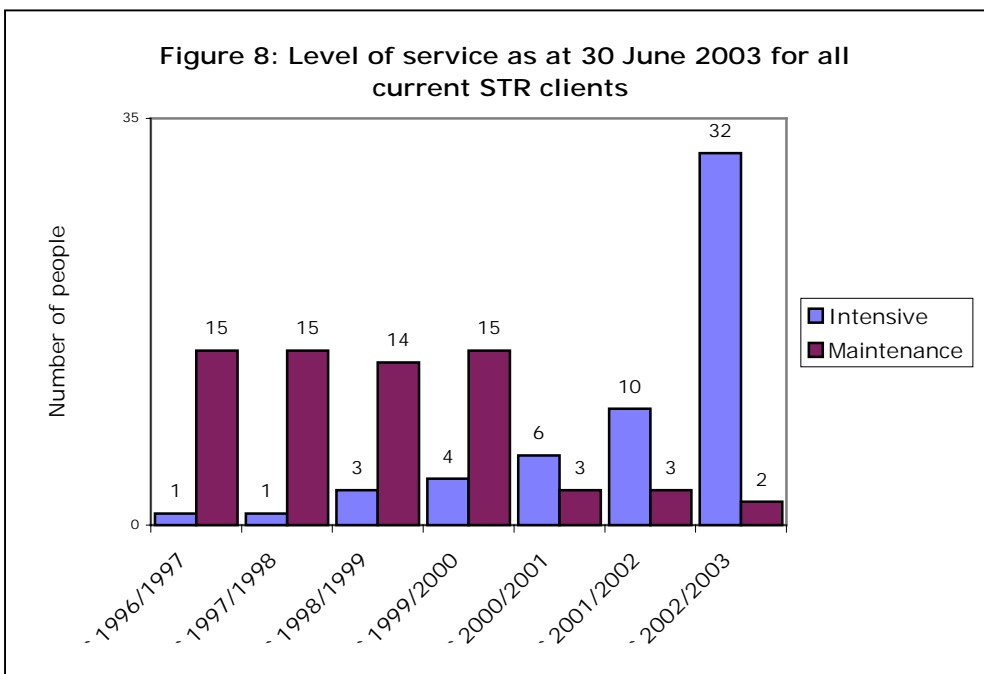
When we also consider admission age (Figure 7) it is clear that the majority of people are relatively young. Taking into account the near-normal life expectancy, this suggests that several decades of ongoing support (from relevant programs) will be required.

At present the program has no cut off point in terms of duration and may continue to provide services to some clients (where alternatives are not available) into the long-

term future. Hence in practice, for some people the program could currently be perceived as providing lifetime support.

The duration of service provision can also be considered by the category of service being provided – intensive or maintenance. The program model assumes that the majority of clients will commence the program on an intensive service level (based on literature suggesting the majority of gain can be made within the first two years) and will then reduce to a maintenance level as goals are achieved.

As indicated in Figure 8, the number of people receiving an intensive level of service at present is influenced by year of admission – the majority of admissions in earlier years have now transferred to a maintenance level; whilst more recent admissions are more likely to be shown as receiving intensive level of service. This demonstrates that the program intention of moving clients through an intensive and then maintenance level is occurring.²

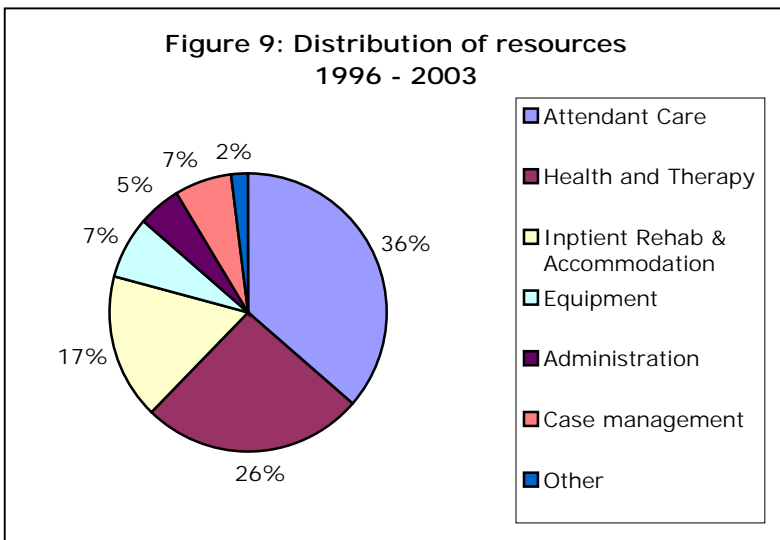


Current data reporting systems do not easily allow reports on the average length of time a client is on intensive before moving to a maintenance level of service; however records show that of all admissions in the 1998/1999 year still currently on the program, 18% of clients remain on the intensive level of service after four

years of the program which may be due to the severity of the ABI.

² It should be noted that 1996/1997 admissions included a number of clients to whom a long term commitment was made and who may have suffered their injury more than 2 years prior to program entry.

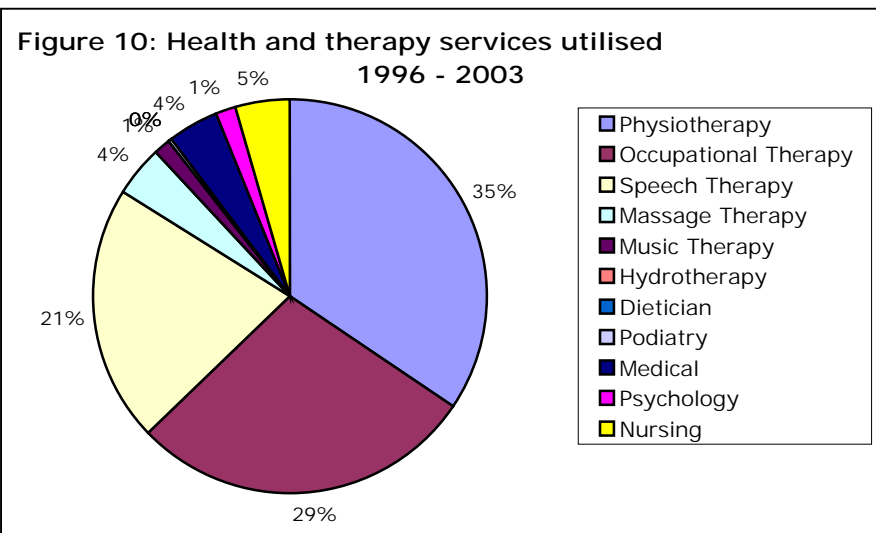
3.3 Categories and Range of Services Provided



Services funded through the program are generally based on the traditional medical/physical model of rehabilitation with physiotherapy, occupational therapy and speech pathology the main therapy services funded. For some clients use of more non-traditional therapies and support for emotional and mental health may be beneficial. With evidence suggesting that up to 50% of people with ABI suffer some level of depressive symptoms and that rates of psychosis are approximately twice that of the general population these needs

should be addressed in care planning. Case managers advocate for clients and their families to access other services in the community to meet recreational, psychological, support and social needs. Disability Services funded Assisted Community Living Packages (ACL) have been successfully negotiated for some clients to meet some of these needs.

Over the 1996 – 2003 period, the majority (79%) of program resources have been distributed to three categories - attendant care, health/therapeutic services and accommodation/ inpatient rehabilitation.



As shown in Figure 10, health and therapy services (excluding attendant care and case management) account for 26% of all program expenditure. Within this category the largest service types accounting for 84% of all health and therapy services are physiotherapy, occupational therapy and speech therapy; with a range of other therapies and health services utilised to a lesser degree.

Added to this a significant amount of attendant care hours are used to support clients therapeutic programs.

3.4 Referral Pathways

As shown in Figure 11, on referral to the program, the majority of persons (62%) were located in acute hospital facilities. This trend has remained constant over all years of the programs operation. The second highest location at referral is aged care residential facilities (high level care).

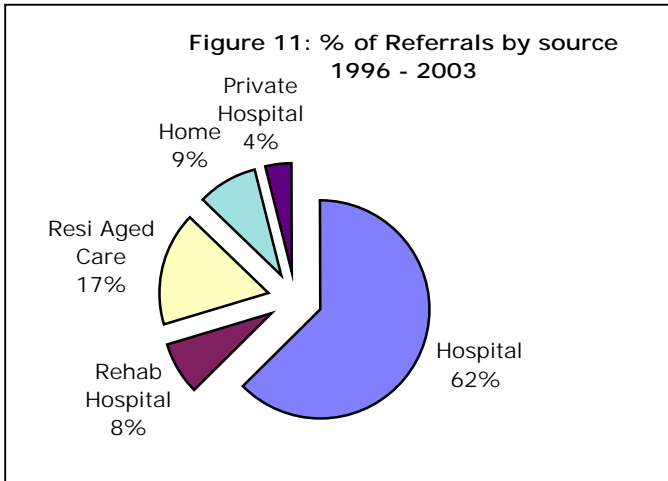
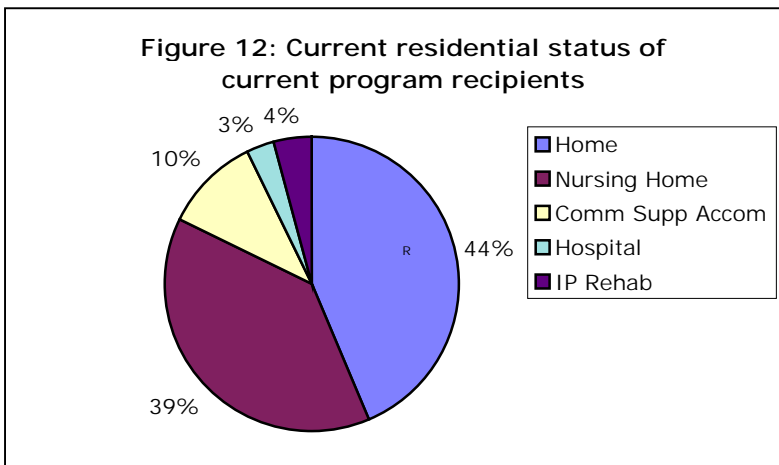


Table 2: Location at referral by year

Source of Referral	Hospital	Rehab Hospital	Residential Aged Care	Home	Private Hospital
1996/1997	18	2	3	2	1
1997/1998	11	1	7	3	4
1998/1999	15	1	8	3	
1999/2000	16	2	8	2	1
2000/2001	13	2	2	2	1
2001/2002	14	3	0	1	
2002/2003	26	3	3	3	
Total	113	14	31	16	7
% of Referrals	62%	8%	17%	9%	4%

3.5 Client Outcomes and Transition to Other Services

Figure 12 illustrates the residential status of all current program clients regardless of year of admission. The largest group (44%) reside at home, and if combined with those residing in community supported accommodation (10%), account for over half of all clients.



Over one third (39%) of recipients reside in residential aged care facilities (high level care), with a small proportion currently located in hospitals or inpatient rehabilitation.

The 10% of clients residing in community supported accommodation continue to receive ABI:STR services, the level of which depends on their needs and whether they are able to gain entry to other government funded services.

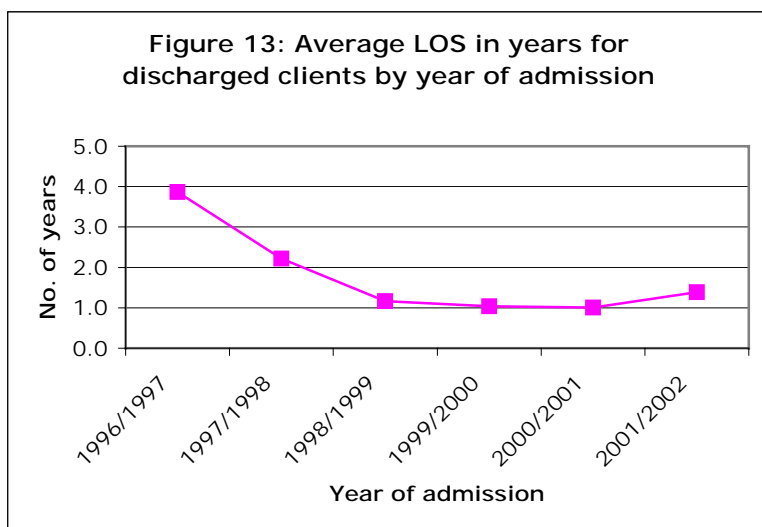
Table 3 indicates the current residential status of all current program clients. Up to 2000/2001, of those admitted half or more now reside at home - this has implications in terms of carer stress, family support and access to respite care. The figures in brackets indicate those clients on an intensive level of support, illustrating that in the last 3 years, half or more of clients residing at home are receiving intensive support from the ABI:STR program. In some cases high levels of support may be provided by generic services.

Table 3: Current residence of current program recipients by year of admission

Year	Home	Resi Aged Care Facility	Community Supported Accommm	Hospital	Inpatient Rehab	Total
1996/1997	8	5 (1)	3	0	0	16
1997/1998	5	5	5	1 (1)	0	16
1998/1999	8 (1)	7 (2)	2	0	0	17
1999/2000	12 (3)	5 (1)	2	0	0	19
2000/2001	6 (3)	2 (2)	1 (1)	0	0	9
2001/2002	5 (4)	8 (6)	0	0	0	13
2002/2003	10 (8)	16 (16)	0	3 (3)	5 (5)	34
Total	54	48	13	4	5	124

A total of 13 current program recipients have Home First Packages through Disability Services. These packages provide up to 34 hours care per week for activities of daily living with the ABI:STR Program funding up to 10 additional hours for rehabilitation support if required. Case Managers may also

successfully negotiate for some clients to receive Disability Services Assisted Community Living (ACL) packages (approximately \$4,500 per year) for community based recreation. Eligibility for these packages for clients on the ABI:STR varies between regions.

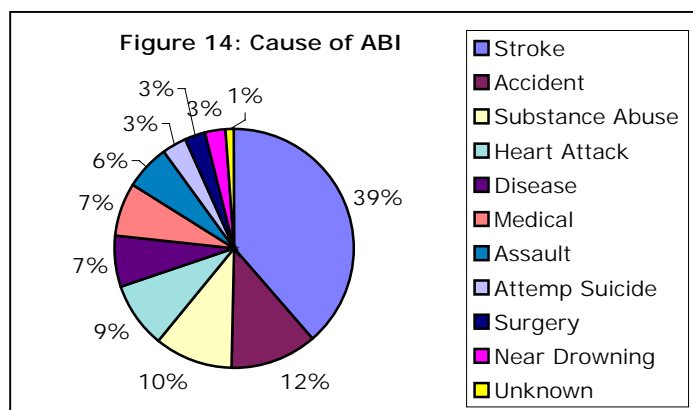


As previously noted 20% of people (excluding deceased) have been discharged from the program meaning no services are funded by the ABI:STR program, although case managers report irregular phone contact with some discharged clients.

Detailed case studies would need to be undertaken to review use of community services (eg: HACC, Linkages etc) after discharge. However program management reports that in many cases clients are discharged with substantial levels of generic services

negotiated by case managers. Figure 13 illustrates the average length of stay in years for discharged clients by year of admission indicating a shorter length of stay in recent years for the discharged group, at 1 to 1.5 years on the program prior to discharge.

3.6 Clinical Outcomes



Clinical outcomes of the program are not within the scope of this review. However, it is interesting to note the main cause of admission to the program. Figure 14 indicates that across all years the main cause has been stroke, followed by accidents and substance abuse. However when considering this trend by individual year, some differences are evident as shown in Table 4. For example, more recent years (2001, 2002) tend to have a lower proportion attributable to substance abuse or near drowning compared to previous years; whilst

indicating a higher proportion of accident and medical causes.

Table 4: Cause of ABI by year of admission

Year	Stroke	Disease	Heart Attack	Substance Abuse	Assault	Near Drowning	Accident	Surgery	Attempted Suicide	Medical	Unknown
1996/1997	19%	19%	12%	8%	12%	8%	8%	8%	4%	0%	4%
1997/1998	31%	4%	4%	15%	8%	12%	4%	4%	8%	8%	4%
1998/1999	44%	0%	15%	15%	4%	0%	15%	4%	0%	4%	0%
1999/2000	48%	10%	3%	17%	7%	0%	7%	0%	0%	7%	0%
2000/2001	30%	5%	25%	10%	5%	0%	10%	5%	0%	10%	0%
2001/2002	28%	6%	11%	6%	6%	0%	22%	0%	6%	17%	0%
2002/2003	57%	6%	0%	3%	3%	0%	17%	0%	6%	9%	0%

3.7 Summary

Key points to note arising from the analysis of service provision are:

- Fluctuating trends in admissions due to a range of funding and management factors
- The majority of referrals have been from acute hospitals, followed by aged care residential facilities (nursing homes)
- The majority of admissions have been from the metropolitan area and two rural regions have nil or one admission in the last four years
- 60% of admissions between 1996/1997 and 2000/2001 are still on the program
- 18% of admissions from 1998/1999 are still receiving an intensive level of service
- Half or more of all currently active clients who were admitted between 1996/1997 and 2000/2001 are now residing at home
- In the last 3 years, half or more of clients at home are receiving the intensive level
- 20% of clients have been discharged (excluding deceased)
- The average length of stay for those discharged is 1 to 1.5 years
- 79% of program resources are expended on attendant care, health and therapeutic services and accommodation/inpatient rehabilitation
- A high number of clients referred are assessed as ineligible.

Implications of these findings are:

- The need to plan and manage admission numbers vis-vis expenditure
- The importance of acute hospital personnel responsible for referrals being aware of the program, referral processes and eligibility criteria
- Ensuring rural areas are continually updated/informed about the program
- Over half of all admissions to the program may require service over the longer term, hence the need to address the inherent tension between the provision of life time support and acceptance of new eligible clients
- The critical role of families in caring for clients at home and addressing carer needs
- Recognition of the savings made in the acute sector due to a reduced length of stay.

4. Program Cost Analysis

4.1 Financial Overview

At program commencement, the original intention was for the program to receive \$1m in the first year increasing by an additional \$1m per year for each of the first five years of operation. This occurred in the first year; however in the second year \$3m was granted to pay for beds at Royal Talbot and Caulfield General Medical Centre (which was achieved at much lower cost than expected). As a result, unexpended funds were rolled over into the third year and the third year grant decreased accordingly. The fourth year allocation was \$4m as originally intended; however this did not increase in subsequent years due to under expenditure by the program.

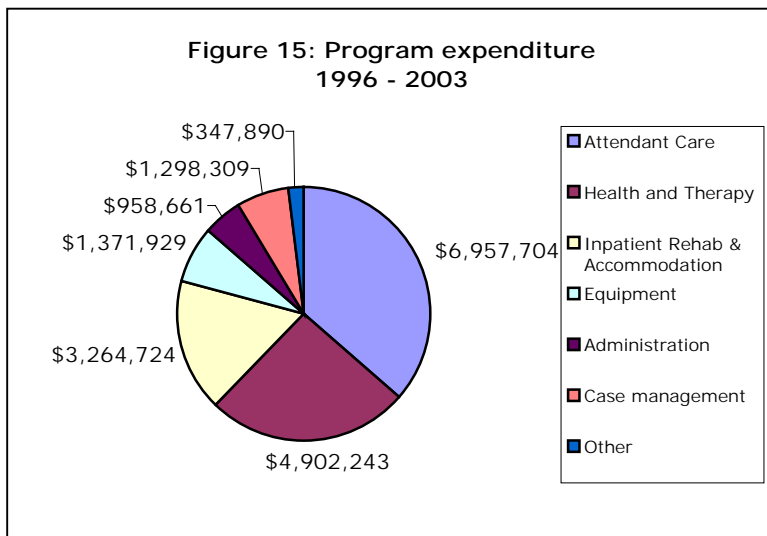
Table 5: Funding and expenditure by year

Year	Period	New Funding Allocation (1)	Committed funds	Expenditure	% Expenditure of New Funding Allocation	DHS Budget Allocation
1	1996/1997	\$1m	\$1,026,832	\$893,226	89%	\$1m
2	1997/1998	\$3m	\$2,089,090	\$1,720,858	57%	\$3m
3	1998/1999	\$2.77m (2)	\$2,864,005	\$2,335,230	84%	\$4m
4	1999/2000	\$4m	\$3,975,962	\$3,423,074	86%	\$4m
5	2000/2001 (3)	\$4m	\$3,981,779	\$3,375,551	84%	\$4m
6	2001/2002	\$4m	\$3,463,331	\$3,113,180	78%	\$5m
7	2002/2003	\$4m	\$4,822,766	\$4,240,340 (4) (5)	100.06%	\$3.017 (6)
Total		\$22.77m	\$22,223,765	\$19,101,460		\$24.017m

[Notes (1) These figures differ to DHS Budget Allocation shown due to the accumulation of surplus funds by the program. (2) Due to under expenditure in previous year. (3) As at June 2001 there was an accumulated surplus of \$2.39m which was recovered by DHS. (4) This figure is taken from the ABI:STR program database as at 25/9/2003. The Southern Health acquittal to DHS showed expenditure of \$3,887,962 for 2002/2003. (5) Plus \$0.962 carried over to 2003/2004 (6) Plus \$1.8m carried over from previous year. [Sources: ABI:STR Program database, Southern Health acquittal to DHS; DHS documentation; not independently verified by consultants].

As shown in Table 5, the program has under expended when expenditure is measured against total budget allocation. When program expenditure is measured against the budget allocation the proportion ranges from 57% to 100%. The variance between commitment and actual expenditure is in the vicinity of 15% and whilst this was not readily apparent in the early years of the program is now a known factor. This variance is due to the time lag in securing therapists and attendant carers and treatment commencing and the ability to engage generic services. This indicates that the program is both under committing and then under expending against commitments resulting in an overall low expenditure. Given this experience the program could actively over commit (eg: 10%) in the knowledge that actual expenditure will be 10-15% lower than commitment.

A total of \$19,101,460 has been expended by the program between 1996/1997 and 2002/2003.



Major categories of expenditure over the seven year period are illustrated in Figure 15. As shown, the three biggest categories of expenditure, accounting for 79% of all expenditure are attendant care, health and therapy services and inpatient rehabilitation/ accommodation services respectively. Case management accounts for 7% of overall program expenditure and administration (excluding Chairman fees and special projects) accounts for 5% of expenditure.

The average cost per client by year is shown in Table 6, showing a general downward trend from \$38,034 in 1999/2000 to \$30,521 in 2001/2002 with an upward trend in 2002/2003. This is possibly due to the large number of admissions and resultant intensive levels of support in 2002/2003. These fluctuations are effected by a number of things including the balance of clients between intensive and maintenance level, the number of high cost inpatient bed days, and the amount of generic services negotiated.

Table 6: Average cost per client by year

	1996/1997	1997/1998	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003
Cumulative number of clients based on new admissions per year (excluding deceased and discharged)	24	46	66	90	102	102	124
TOTAL PROGRAM EXPENDITURE	\$893,226	\$1,720,858	\$2,335,230	\$3,423,074	\$3,375,551	\$3,113,180	\$4,240,340
Average expenditure per client to program	\$37,218	\$37,410	\$35,382	\$38,034	\$33,094	\$30,521	\$34,196

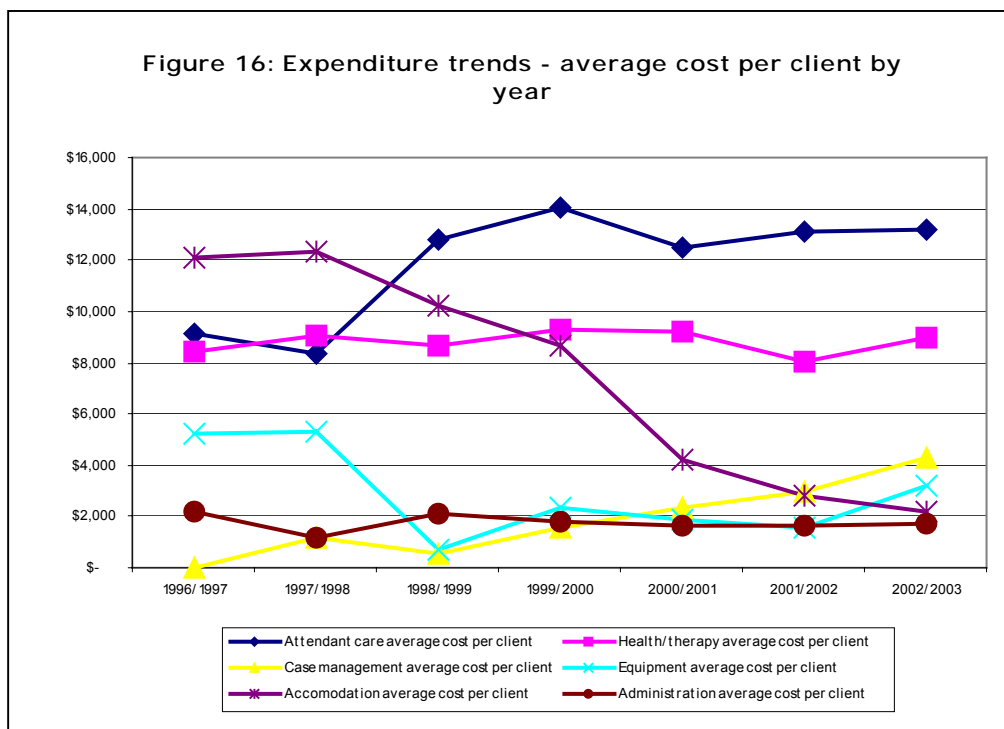


Figure 16 illustrates trends by key categories of expenditure based on the average cost per client: accommodation expenditure has decreased significantly; health/therapy expenditure has been relatively stable; and attendant care and case management have increased. These trends are shown in more detail on the following pages.

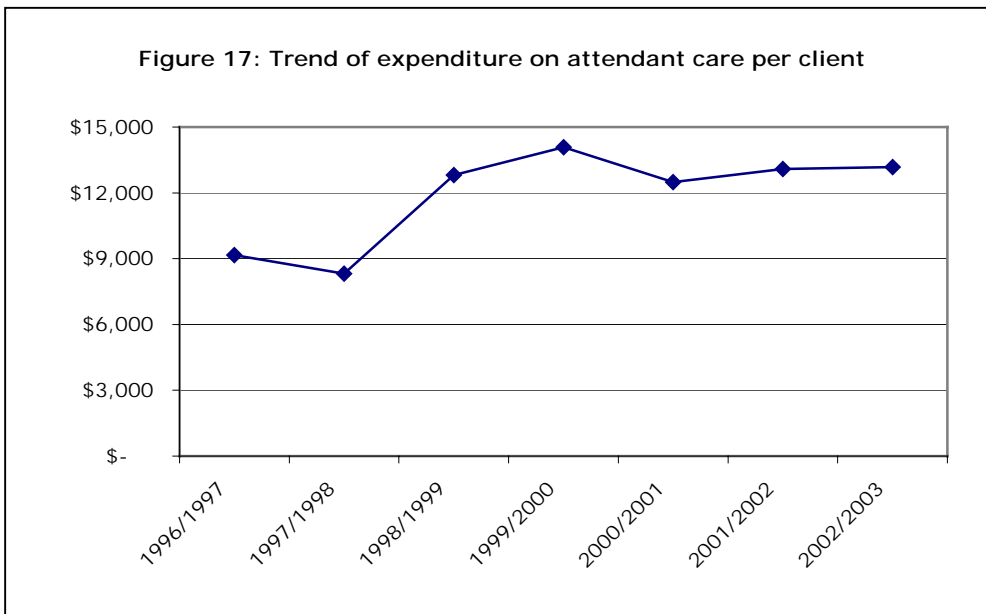
4.2 Attendant Care

Attendant care (which supports the therapeutic program and provides assistance with activities of daily living) is the single biggest item of program expenditure. As shown in Table 7, the percentage of program expenditure on attendant care has increased over the life of the program, from 24% of the overall program expenditure in 1996/1997 to 43% in the 2001/2002 year and then reducing to 38% in the 2002/2003 year. This fluctuation may be due to a combination of; the additive effect of those on maintenance level; lesser access to Home First packages in recent years; and the disability unit price by which this is paid being subject to CPI. The program cannot continue to sustain this growth without careful financial modelling.

Table 7: Expenditure on attendant care services

	1996/1997	1997/1998	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003	Total
Expenditure	\$220,037	\$382,457	\$845,736	\$1,267,546	\$1,273,901	\$1,334,694	\$1,633,334	\$6,957,704
Percentage of total program expenditure	24%	22%	36%	37%	38%	43%	38%	36%
Average cost per annum of attendant care per client	\$9,168	\$8,314	\$12,814	\$14,084	\$12,489	\$13,085	\$13,172	N/a

In dollar terms, the average cost per client per year has fluctuated, ranging from \$8,314 to \$14,084 across the seven year period with a relatively stable trend currently.



4.3 Therapies

The second largest item of total program expenditure is health and therapeutic services accounting for 26% of the total program budget. Expenditure in this area has seen increases in some years but remained relatively stable ($\pm 5\%$) overall. The trend line in Figure 18 indicates relatively stable expenditure in this area per individual client over the life of the program.

Table 8: Expenditure by health/therapy category by year

	1996/1997	1997/1998	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003	Total
Physiotherapy	\$82,643	\$176,016	\$216,761	\$302,072	\$309,548	\$262,480	\$337,628	\$1,687,148
Occupational Therapy	\$40,461	\$111,714	\$149,552	\$231,999	\$248,066	\$243,989	\$366,244	\$1,392,026
Speech Therapy	\$38,425	\$49,626	\$92,244	\$187,131	\$236,036	\$184,535	\$245,685	\$1,033,682
Medical	\$20,410	\$29,467	\$39,953	\$42,042	\$30,188	\$14,578	\$36,831	\$213,469
Massage Therapy	\$12,300	\$12,540	\$19,248	\$33,237	\$41,900	\$38,815	\$43,754	\$201,794
Music Therapy	\$5,876	\$9,938	\$10,530	\$9,135	\$5,590	\$10,584	\$15,278	\$66,931
Psychology	\$2,400	\$8,735	\$11,780	\$23,598	\$15,393	\$6,160	\$5,032	\$73,098
Nursing	\$-	\$19,920	\$30,794	\$540	\$49,440	\$60,128	\$62,392	\$223,214
Dietician	\$100	\$195	\$1,430	\$2,755	\$1,320	\$400	\$260	\$6,460
Podiatry	\$-	\$-	\$1,440	\$-	\$-	\$330	\$166	\$1,936
Hydrotherapy	\$-	\$-	\$45	\$1,516	\$533	\$112	\$279	\$2,485
Total expenditure on health and therapeutic Services	\$202,615	\$418,152	\$573,777	\$834,025	\$938,015	\$822,112	\$1,113,548	\$4,902,243
% of Total Program Expenditure	23%	24%	25%	24%	28%	26%	26%	26%
Average cost per client	\$8,442	\$9,090	\$8,694	\$9,267	\$9,196	\$8,060	\$8,980	N/a

Table 9: Percentage of expenditure by category across all years

Health or Therapeutic Service	Total Expenditure 1996 – 2003	%
Physiotherapy	\$1,687,148	34%
Occupational Therapy	\$1,392,026	28%
Speech Therapy	\$1,033,682	21%
Massage Therapy	\$213,469	4%
Music Therapy	\$201,794	4%
Hydrotherapy	\$2,485	0.05%
Dietician	\$6,460	0.13%
Podiatry	\$1,936	0.04%
Medical	\$312,469	4%
Psychology	\$73,098	1%
Nursing	\$223,214	5%
Total	\$4,902,243	100%

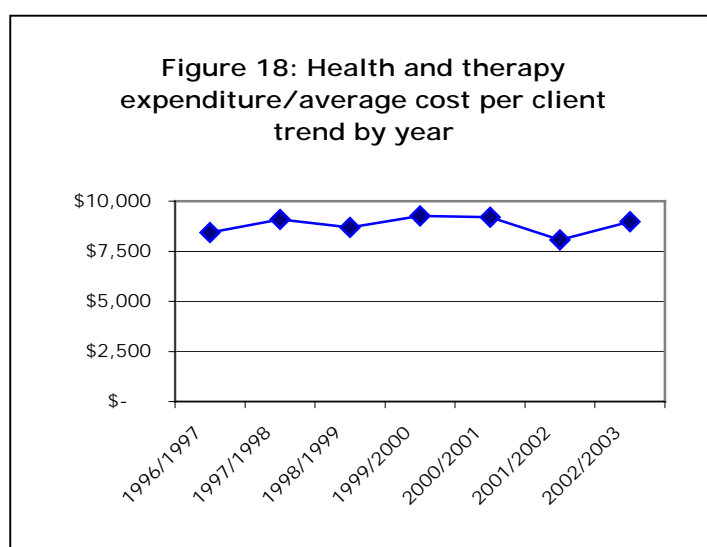


Table 9 indicates the relative division of expenditure across individual health and therapy categories. Physiotherapy, occupational and speech therapy account for the majority of expenditure – 83% overall and medical and nursing account for an additional 9% with the remainder split between psychology and other therapies.

4.4 Case Management

As illustrated in Table 10, of the five contracted case management agencies, four agencies receive funding at the rate of \$67,000 per EFT plus \$5,000 per EFT for travel and one agency receives funding at the rate of \$87,946 per EFT plus \$5,000 per EFT for travel. Case management case loads are based on 15 intensive or 30 maintenance clients per EFT (or a combination of these levels of service where 1 intensive client equals 2 maintenance clients).

Table 10: Case management agencies funding from ABI :STR Program 2002/2003

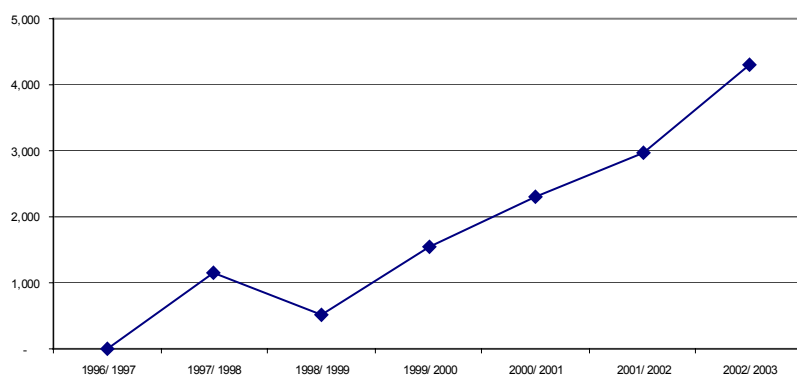
AGENCY	Catchment	EFT	Staff Involved	Funding	Travel Expenses	Total
Melbourne City Mission	Statewide	1.5 EFT	8	\$100,500	\$ 7,500 travel expenses @0.48c per km < 35pmu, .60c per km > 35 pmu	\$ 108,000
Bunurong Community Care	SMR	0.74 EFT	1	\$65,080	\$3,700	\$68,780
ARBIAS	Metro	1.5EFT (1.2EFT 1 July-31 August)	2	\$91,350	\$7,250	\$98,600
Care Connect	Statewide	2 EFT	4	\$134,000	\$10,000	\$144,000
Brain Foundation	Statewide	1 EFT	1	\$67,000	\$5,000	\$72,000
TOTAL		6.74 EFT		\$457,930		\$491,380

Sources: Agreement for provision of services between Southern Health and Melbourne City Mission, pp 1-13 contractual arrangement between SH & MCM; Attachment 1 Service Requirements; Attachment 2 Service Standards.

Table 11: Average cost of case management per client

Year	1996/1997	1997/1998	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003	TOTAL
Case Management	0	\$52,873	\$34,335	\$139,150	\$235,359	\$302,204	\$534,388	\$1,298,309
Percentage of program budget	0%	3%	1%	4%	7%	10%	13%	7%
Average cost per client	-	\$1,149	\$520	\$1,546	\$2,307	\$2,963	\$4,310	N/a

Figure 19: Case management trend - average cost per client by year



The average cost of case management per client has increased as shown in Table 11 and Figure 19. One reason for this is that currently there is under utilised capacity within some of the case management agencies; another reason is due to the timing of invoices (eg: invoices for work undertaken in one year not being submitted and paid until the next financial year).

4.5 Residential Accommodation and Inpatient Rehabilitation

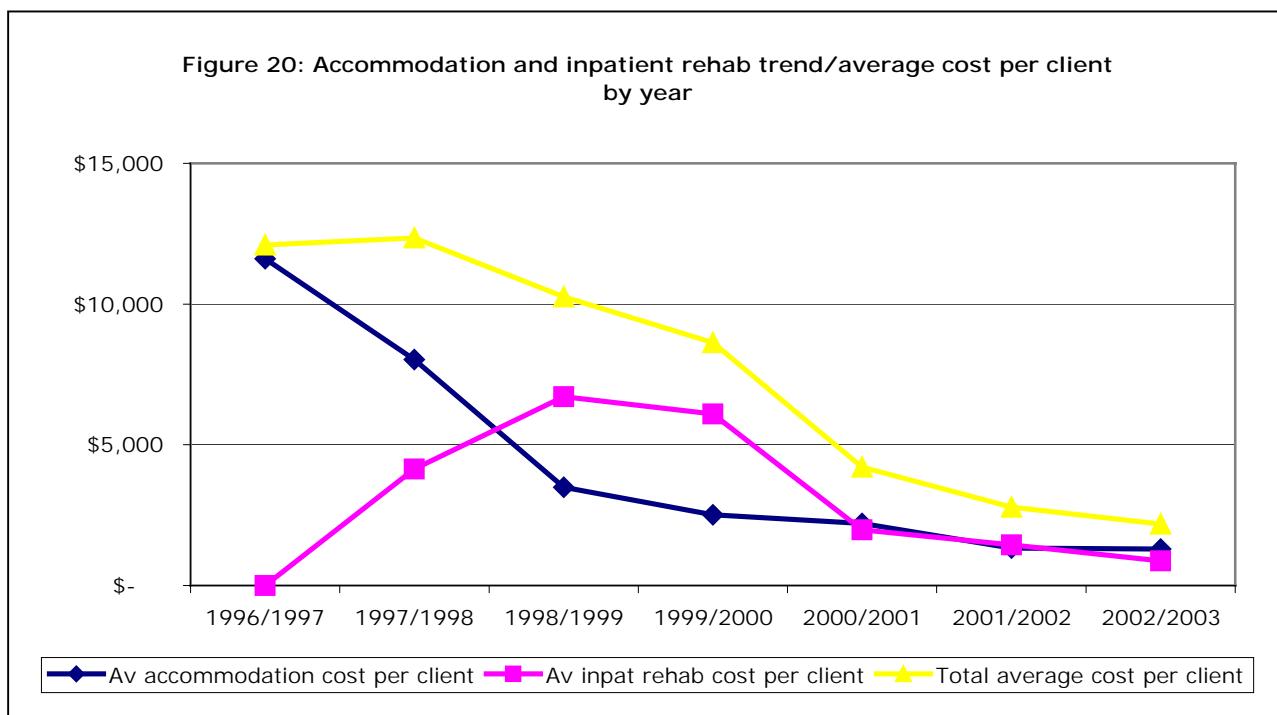
Expenditure on accommodation (including inpatient rehabilitation) is the third largest expenditure category amounting to \$3,264,724 or 17% of the program budget over the 7 years period of operation. The program subsidises accommodation/in patient rehabilitation services at:

- \$500 for inpatient rehabilitation if the facility has met State bed day targets; otherwise ABI:STR pays \$30 per day
- Up to 15 hours for attendant care for aged care residential facilities (nursing homes) which is for rehabilitation support for the client

As shown in Table 12 and Figure 20, the percentage per year spent on this item has consistently decreased from 31% in the first year of operation to 6% in the most recent year of operation. This is due to negotiation of charges with the accommodation providers by the program manager, increased independence resulting in a saving on accommodation support, case managers negotiating alternative accommodation options and the number of people being discharged home. This is evidence that the program has achieved a substantial reduction in cost for the acute sector and reduced inappropriate demand on the residential care sector.

Table 12: Accommodation expenditure by year

Year	1996/1997	1997/1998	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003	Total
Accommodation	\$278,658	\$369,289	\$230,218	\$225,812	\$225,444	\$135,307	\$160,850	\$1,625,578
Inpatient Rehabilitation	0	\$190,556	\$442,985	\$548,360	\$201,417	\$147,218	\$108,610	\$1,639,146
Sub Total	\$278,658	\$559,845	\$673,203	\$774,172	\$426,861	\$282,525	\$269,460	\$3,264,724
Percentage of program expenditure	31%	33%	29%	23%	13%	9%	6%	17%
Average cost per client to STR program	\$12,095	\$12,345	\$10,253	\$8,630	\$4,207	\$2,783	\$2,184	

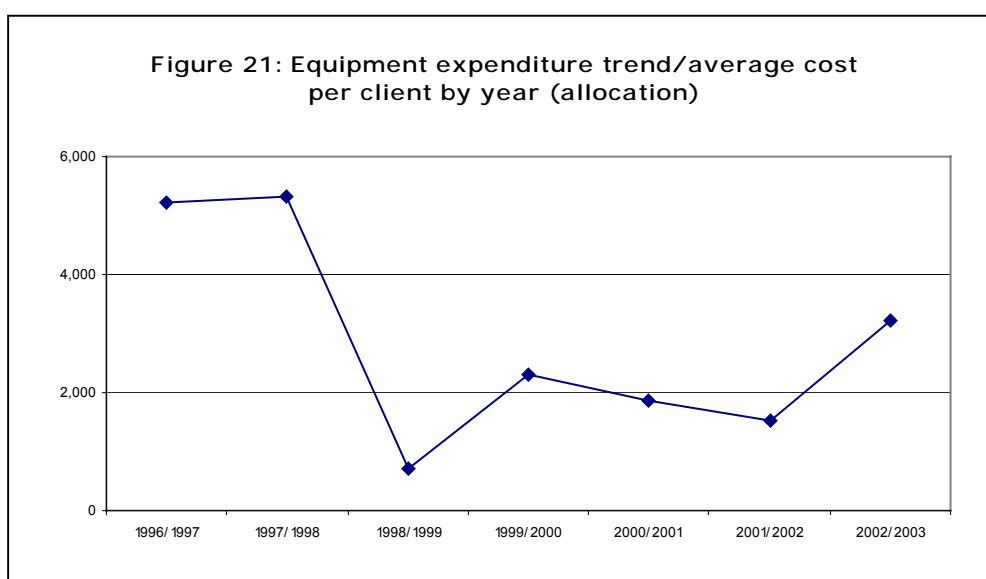


4.6 Equipment

Expenditure on equipment is the fourth largest expenditure category accounting for 7% of the total program budget. The purchase and co-ordination of equipment is contracted to St Vincent's Hospital Aids and Equipment Program, which is paid 20% of the purchase price of each item to cover administration costs. (Prior to 2003/2004 this was 12.5%).

Table 13: Equipment expenditure (Allocation from program to equipment contractor)

	1996/1997	1997/1998	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003
Expenditure	\$125,687	\$245,150	\$46,891	\$208,579	\$189,560	\$156,061	\$400,000
Percentage of budget	14%	14%	2%	6%	6%	5%	9%
Average cost per client	\$5,237	\$5,329	\$710	\$2,318	\$1,858	\$1,530	\$3,226



Whilst overall expenditure on equipment has increased, it tends to have decreased as a proportion of the overall program budget (14% to 9%) and the trend is similar on an individual client basis with an increase in 2002/2003. This fluctuation may be due to a number of reasons including the

increased number of admissions in 2002/2003 and clients requiring establishment equipment and the funds allocation process rather than actual expenditure. (Rollover of unexpended funds to the following year may account for abnormally high figures in some years).

As shown in Table 14, the majority of equipment items are in the under \$500 price bracket which also includes small repairs and courier costs. Most expensive items are Home Modifications, wheelchairs, communication aids and pressure care equipment.

Table 14: Equipment Price Range 2002/2003

Cost of Items	under \$500	\$500-\$1000	\$1000-\$2000	\$2000-\$3000	\$3000+
Number of items	210	30	22	16	23
Expenditure	\$35,858	\$22,289	\$29,037	\$40,342	\$137,362

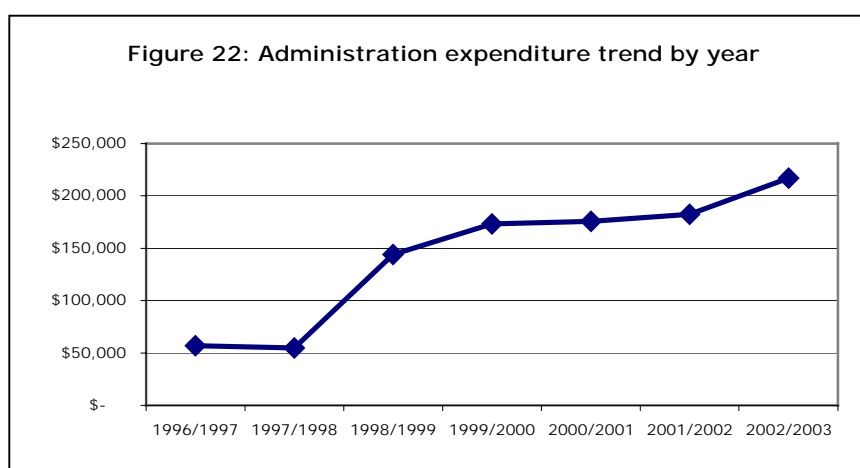
4.7 Program Administration

Program administration consists of the salaries and salary on costs (1 EFT program manager, 1 EFT administrative assistant), Chairman's fees and Southern Health corporate costs and service charges (ie. rent, utilities, financial analysis). Expenditure on program administration has increased over the life of the program in dollar terms (Figure 22) yet remained relatively stable at 5%-6% of the total program budget (Table 15). In 1998/1999 the program transferred from the Department to Southern Health and included the employment of an administrative assistant; the sharp increase from 2001/2002 to 2002/2003 is due to

Southern Health corporate costs. In 2003/2004 the corporate and service charges from Southern Health to the program are projected to be \$91,692 or 1.8% of the total budget. It should be noted that whilst expenditure has increased, program EFT has not increased, and the program manager has managed the significant growth of the client base to its current position.

Table 15: Administration expenditure 1996/1997-2002/2003

Year	1996/1997	1997/1998	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003
Administration	\$52,993	\$52,686	\$138,922	\$165,000	\$168,926	\$170,134	\$210,000
Consultancy (Chairman's Fees)	\$3,922	\$2,031	\$5,185	\$8,140	\$6,820	\$12,260	\$7,000
Total (excluding special projects)	\$56,915	\$54,717	\$144,107	\$173,140	\$175,746	\$182,394	217,000
Percentage of overall program budget	6%	3%	6%	5%	5%	6%	5%



4.8 Cost Sharing with Families

Cost sharing occurs between the program and families. The major area for this is where the family provides accommodation (family home) and the program provides attendant care and therapy services. The gratuitous care and ongoing support that family and friends provide whether the recipient is at home or in other accommodation is also a form of cost sharing. In this sense, families and carers are the programs greatest resource.

In some cases families purchase additional therapy services where they feel the program is not providing an adequate level of service. One example of this is where a physiotherapist assessment of a client on the intensive service level, recommended 7 hours of physiotherapy per week however the program approved and funded 3 hours - the family funded the additional hours at their own cost and believe this has contributed to the clients marked improvement.

The capacity of the family to purchase additional services is dependent on their financial situation. Families experience many additional costs and report there is often a shortfall between client income (benefit) and the cost of health and care (eg: medication, medical fees, clothing, accommodation). Families may also pay the cost of counselling, recreational activities, travel and respite care. Families from out of Melbourne incur the additional costs of transport and accommodation whilst supporting their family member on the program.

4.9 Special Projects

A retrospective study of outcome and carer burden for program clients was undertaken in 2002/2003 by a research assistant under the guidance of Associate Professor John Olver. Thirty-five clients of the program and their families participated with all but one carer reporting high to extreme levels of stress. A summary report of this project, which is still work in progress, is attached in Appendix 3. The project findings have been taken into account in the recommendations of this review.

The program funded another project (\$20,000) in 2003 for Royal Talbot Rehabilitation Centre to pilot a Community Integration model for clients with an acquired brain injury not on the ABI:STR program. The objectives of the pilot were to:

- Facilitate the smooth discharge of clients with an ABI from the hospital to the community
- Provide a trial program to determine whether a client is capable of living in the community with training and supports
- Provide targeted rehabilitation interventions in the clients local community as opposed to a hospital setting
- Assist community providers to develop skills to work with clients with ABI.

Outcomes of the six month pilot showed a more efficient and successful transition from hospital to home for clients and their families, enabling clients to successfully engage with generic services and reduce their length of in-patient hospital stay. An anticipated flow on effect of this project to the ABI:STR Program could be easier access for ABI:STR clients to beds at Royal Talbot. Royal Talbot is seeking opportunities for a further six months funding from the Austin & Repatriation Hospital for the Pilot to enable further data collection to substantiate the findings.

4.10 Financial Projections

Southern Health is undertaking ongoing financial modelling to more accurately forecast program expenditure and capacity, taking into account both current and new clients to forecast increases on an additive basis. The figures shown below do not include the cost of equipment, case management or administration based on 2002/2003 figures supplied by Southern Health. Additional work is being undertaken to further enhance the accuracy of the projections over a longer period, including the cost of accepting those clients currently assessed as eligible to the program but awaiting admission (May 2004). There is an inherent tension between the provision of lifetime support to existing clients and the acceptance of new eligible clients to the program. Southern Health has acted promptly and prepared a briefing to the Department of Human Services as part of negotiations regarding future program capacity and resourcing.

Six categories have been identified reflecting the level of service:

- Category A: Intensive at home \$79,651 - \$21,798 per year with a median of \$51,228
- Category B: Intensive in residential aged care facility –high level care \$63,984 - \$8,508 per year with a median of \$35,146
- Category C: Maintenance at home with no Home First \$80,220-\$920 with a median of \$12,465 per year
- Category D: Maintenance at home with Home First \$ 25,895-\$1,058 with a median of \$12,945
- Category E: Maintenance in SRS, Community Supported Accommodation or Residential aged care facility high level care \$56,615-\$3,416 with a median of \$19,172
- Category F: In-patient Rehabilitation \$500 per day.

Table 16: Distribution of current clients by category by year of admission

Year of Admission	Category	Intensive		Maintenance		E	Rehab	Total
		A	B	C	D		F	
1996/1997			2	1	6	7		16
1997/1998				3	2	11		16
1998/1999	1	2	5	1	8			17
1999/2000	3	2	5	4	5			19
2000/2001	2	3	4					9
2001/2002	5	7	2		1			15
2002/2003	10	16	2				4	32
Percentage		17%	26%	18%	10%	26%	3%	100%

4.11 Conclusions

Key points from the program cost analysis are:

- Expenditure of \$19,101,460 over the seven year period of operation
- Under expenditure in some years as a combined result of conservative financial management, under commitment of budget exacerbated by under expenditure against commitment
- The three largest cost categories accounting for 79% of all expenditure are attendant care, health/therapeutic services and accommodation/inpatient rehabilitation
- A decreasing average cost per client over the seven year period – from \$37,218 in year 1 to \$34,196 in year 7
- A significant decrease in expenditure on accommodation over the 7 year period
- A significant increase in expenditure on attendant care as a proportion of the total budget– from 24% in year 1 to 36% in year 7
- An increasing cost per client for case management
- The majority of equipment are items under \$500
- Program administration expenditure has increased significantly whilst the staff profile (EFT) has remained stable.

Implications of this are:

- Necessity of the financial modelling and forecasting work currently being undertaken to more confidently predict expenditure and program capacity to accept new clients
- As the hourly rate of attendant care is aligned with Disability Services rates this expenditure will continue to grow as a percentage of the budget unless the funding is indexed
- Case management EFT will need to be monitored to ensure there is minimal under utilisation of resources
- With the majority of equipment items purchased costing under \$500, a more streamlined and cost efficient approach to this process could be used
- Current different rates of pay for therapists may need to be standardised
- Estimated expenditure for the current year shows that the program has reached full capacity
- As at May 2004 there were 18 clients assessed as eligible awaiting admission due to lack of program capacity to accept additional clients.

5. Program Management and Administration

5.1 Southern Health

From 1996 to 1998 the program was directly operated by DHS and in 1998 following a competitive tender process, awarded to Southern Health. Since this time the program has been included within the DHS and Southern Health Funding and Service Agreement. Performance measures within the Service Agreement are the minimum number of new clients per annum (20) and the total number of clients being supported.

The following performance indicators have been established for the ABI:STR Program:

- Total budget
- Total committed funds for financial year
- Total spent funds to date
- Total surplus/deficit funds for previous financial year
- Number of clients received or receiving services from program
- Number of clients currently receiving funding from program
- Average age of clients receiving services
- Age spread of current clients receiving services
- Percentage of clients receiving services who have a current care plan
- Number of clients receiving services at (a) home (b) residential aged care facility or extended care centre (c) community based shared accommodation (d) hospital
- Clients residence when program support began and current residence
- Types of services being provided including the total budget commitment for each service and percentage of the total budget
- Average cost of services per client
- Location of each client by area name and postcode
- Equipment expenditure (a) total funds transferred to equipment coordinator (b) funds committed to purchase equipment (c) surplus of deficit funds for the previous financial year.

The program provides a quarterly report to DHS, which in addition to the above indicators reports on:

- Client socio demographic information - gender, ethnicity
- Cause of ABI
- Regional distribution
- Contracted case management agencies
- Special projects (Clinical outcomes research project; Royal Talbot project)
- Teleconferencing usage
- Equipment purchases.

In awarding the contract to Southern Health, benefits were anticipated as:

- Links with the acute facility and clinical expertise
- Links to community services given Southern Health incorporates a number of community based services
- Advantage gained from utilising multiple case management agencies with negotiated contract prices
- Relatively centrally located in the metropolitan area (Clayton campus).

Since mid 2004 there has been increased management support available to the Program Manager and an increased level of overall management. Southern Health is working towards ensuring these benefits are realised.

DHS has a role in contract management and in ensuring the contracted service provider (Southern Health) is meeting contract specifications and contributing in an effective manner to the service system. Whilst currently situated within the Aged Care Division, the ABI:STR

Program has multi-divisional implications across the disability, acute and sub-acute divisions. Communication and collaboration across these divisions has been difficult to maintain due to program funding models, a number of Departmental restructures over the period and changing personnel. However during the course of the review there has been strong cross-divisional engagement and interest in the program.

5.2 Case Management Agencies and Contractual Arrangements

The program has annual contracts with four external organisations and one Southern Health program to provide case management to clients. These agencies have not been appointed through a tender process but approached by the program manager based on their experience with ABI clients. All external case management agencies sign a generic Southern Health contract. A two page attachment to the generic contract provides specific information in relation to the ABI:STR Program, the case management EFT purchased and payment rate. A second attachment outlines Southern Health service delivery standards for care management, which are not specific to the ABI:STR Program. Case management agencies are paid on invoice quarterly in advance by the program. (Refer to section 4.4 for financial data).

All case management agencies are metropolitan based. Melbourne City Mission was the original provider of Case Management to the service with specialist brain injury service ARBIAS being contracted in 1998/1999 and the Brain Foundation contracted in 1999/2000. With the aim of supporting generic case management services to develop expertise in ABI, Bunurong Community Care (part of Southern Health) and Care Connect, commenced service in 2001/2002. Three of the case management agencies cover the state whilst one has a discreet geographical regional catchment and the other by chance a metropolitan focus.

Whilst not stated, it is anticipated that each contracted case management agency will have its own internal policy and procedures in relation to delivery of the ABI:STR Program, however, this is variable across case management agencies leading to significant variance in how the program is interpreted and delivered and the quality of service provided. In some agencies staff are designated ABI:STR case managers with this work forming the major part or all of their workload; whilst in other agencies it is spread amongst staff and forms a very small proportion of an individual staff members case load. For example, one case management agency (specialising in ABI) contracted to provide 1.5 case management EFT delivers this through 8 staff members.

The program specifies that case managers shall have a tertiary qualification in nursing, occupational therapy, social work or psychology or other relevant discipline or demonstrated extensive experience in care management in a community/health setting. The ABI:STR Program does not provide training for case managers as it is expected that this would be provided through their employing agency. Case Management per EFT is based on 15 clients at the intensive level of service with 2 clients at the maintenance level of service equalling 1 client at the intensive level of service. With 6.8 EFT Case Managers funded this would equate to 102 clients at the intensive level of service or say 60 at the complex level and 84 at the maintenance level.

There is a small number of other sub contracting arrangements:

- Metropolitan based case management agencies further sub contract other case management agencies (eg: in rural areas) to provide case management. This arrangement appears complex and adds layers in communication and financial inefficiencies.
- On a few occasions the program has directly contracted rural case managers for individual clients.

Case management agencies are required to negotiate with the program manager regarding a budget for travel beyond the \$5,000 allocation. The lack of rural travel budgets can effectively reduce the amount of service delivery to clients as case managers are hesitant to travel regularly to rural areas.

One of the strategies for review of rural clients with Melbourne based case managers was the use of Telehealth (eg: video conferencing). Equipment is available for use by the program at both Caulfield General Medical Centre and Royal Talbot, however this does not appear to have been fully utilised.

5.3 Attendant Care Agencies and Contractual Arrangements

The program model is based on therapists developing and establishing treatment programs with clients. The therapists then train and supervise attendant carers to deliver the program. The external contracted case management agencies through individual case managers engage attendant carers through attendant care organisations; or where the client is in a residential facility (eg: hospitals, aged care residential facilities and Disability Services community residential unit) attendant care may also be directly provided or topped up.

The aim of attendant care is to implement therapy programs with clients; in some cases these therapy programs will be documented for the attendant carer. Anecdotally, some case managers and therapists have investigated the use of Allied Health Assistants to provide improved outcomes in carrying out therapeutic programs (instead of attendants carers) however the combination of higher costs and a lack of Allied Health Assistants has limited this option.

Attendant care agencies are paid at the rate of \$ 26.79 per hour (based on 2003/2004 Home First Disability Services rates) and the attendant carer given on the job training by the treating therapists to undertake the therapeutic program with the client. Attendant carers utilise a time sheet signed by the residential facility or family member/client. Attendant care agencies submit invoices to case managers who authorise the invoice and forward to the ABI:STR Program manager for payment. Some families have reported involvement in the selection process of individual carers, and the ability to change carers if there is incompatibility with the client.

A copy of the ABI:STR program manager's approval letter and the care plan are forwarded to attendant care agencies and therapists to confirm services to be provided. With one exception, case management agencies do not have formal agreements with the attendant care agency specifying the terms of engagement and standards. Case management agencies are aware that such agreements should be in place with one currently looking at developing contracts with each attendant care agency providing services. A role for Southern Health in facilitating this documentation for the ABI:STR program is seen.

Attendant care agencies currently utilised by case management agencies for the program include:

- DASSI
- Australian Home Care
- Paraquad
- McCallum Disability Services
- Broadmeadows Disability Services
- Healthscope
- MSSA

The presence and number of external workers presents significant management issues for some residential facilities. One residential facility with 8 ABI:STR clients reports up to 40 private therapists, attendant carers and case managers attending each week. Management

issues with this external workforce include insurance, orientation, police checks, team meetings/communication and quality assurance. The facility receives no additional funding for the management time expended on these matters. Discussions are in progress between this facility and the program to address these issues with the possibility of moving to a model of direct employment.

5.4 Therapists

Case managers recruit and contract individual therapists according to the approved care plan. The Southern Health protocol for engaging contractors is utilised by case management organisations and is required to be completed, signed and returned by therapists.

Therapists are paid set hourly rates as determined by the ABI:STR Program:

- Physiotherapists \$90 per hour
- Occupational Therapists \$83 per hour
- Speech Therapists \$83 per hour.

Each hour of therapy funding is expected to provide 45 minutes of therapy time with the remaining 15 minutes to be utilised for report writing, team meetings and communication; travel time is not funded however there may be exceptions to this in rural areas. Monthly invoices are submitted to case managers for verification and then forwarded to the program for payment.

The model of contracting private therapists relies on case managers understanding the needs of the client and knowing the appropriate therapist to contract. This is usually through reputation or word of mouth from other case managers. This process is more difficult in rural areas where metropolitan case managers have limited knowledge of the local service providers and their capacity to provide the level of service that the ABI:STR clients require. As many therapists in private practice work in a single discipline practice it can be difficult to build a truly interdisciplinary team and establish team goals for the client.

One of the goals of the program is to build up the skill level and capacity of allied health staff in the community. During the consultations it became obvious that there is variability in the skill level of therapists working on the program with some therapists highly skilled and experienced and others with limited experience. The program has the opportunity to achieve this goal by mentoring, running workshops and providing expert teams to assist therapists.

As the program is currently structured, when clients progress to maintenance level it is expected that they will be at the same level for all therapies at once, however this is not always the case. Clients may still need an intensive level of one therapy whilst needing maintenance levels of other therapies. There may also be the need for additional hours of a therapy for a short-term period (eg: such as moving house when additional OT hours would be required to set the house up appropriately).

The maintenance level (8 hours per year of each therapy) can result in hours of unpaid work for therapists as they are required to assess the client, develop a treatment plan, train and monitor attendant carers providing the therapy program, attend care planning team meetings and write reports.

5.5 Equipment

The ABI: STR Program provides aids and equipment and home modifications to support the service objectives of clients. The program has contracted St Vincent's Hospital Aids and Equipment Program Coordinator to undertake the role of ABI:STR Equipment Coordinator.

This service is available 4 days per week and therapists are required to discuss the client equipment requirements with the Coordinator who places the order. The Coordinator provides advice and scrutinises applications to ensure the most appropriate equipment is supplied in a cost effective manner. Turnaround time for equipment is normally 3-4 weeks however urgent requests may be ordered on the same day.

Consultation with therapists illustrated a general lack of satisfaction with this service. Therapists report time consuming discussion, debate and requests for additional investigation of available equipment prior to an order being placed. There are also reports of delays in the arrival of equipment, which may be due to a number of reasons including, supplier delay, inability of a client to attend for a fitting, response time to request for additional information from therapists to the Coordinator. These delays can limit therapy outcomes for the client.

With 80% of equipment purchases and repairs costing under \$1000 (240 of a total 301 purchases in 2002/2003) a more streamlined process could be instituted to enable the Equipment Coordinator to focus on those items over \$1000.

When clients no longer require equipment, it is returned to the Aids and Equipment program at St Vincents for reissue to other people. Ten percent (43) of potentially returnable items have been returned with all but one of these items being reissued to other clients.

6. Themes Arising from Consultation with Key Stakeholders

This section of the report documents key qualitative themes arising from consultation with key stakeholders: families, service users and advocates; case management agencies; attendant care providers; aged care residential facilities/rehabilitation centres; acute services and therapists.

6.1 Comments from Families, Service Users and Advocates

Approximately 20 service users, family members and advocates were consulted as part of the review. In addition, many of the service providers consulted, described the experiences of clients and families with whom they had worked. Generally speaking, families were very appreciative of the program but had experienced frustration in relation to the administration of various aspects of the program, particularly in relation to communication. For example, one family member commented that they had never received written confirmation that they were accepted to the program, or what this entitled them to; another family commented on the frustration of case managers not returning phone calls; other families commented that they had never received information about the program, program standards, or rights. Families also commented on the inappropriateness of residential aged care facilities as a long-term accommodation option and the need for specially trained rehabilitation nursing staff.

Appreciation of the program

Families of clients who are accepted on to the program appreciate that the program exists and that it recognises recovery can take a long time.

- " [Client] has been on the STR program for approximately 7 years...still continues to improve"
- "Thank heavens for the STR program"
- "Slow to Recover is a wonderful program...but is poorly administered."

Information and Communication

Families requested easily accessible, clear, concise information about the program available in community languages. A number of families had experienced some confusion and uncertainty about what the program could offer and their rights as service users. Suggestions included ongoing updates about the program for hospitals (to improve awareness of the program) and clear information for families about program policies and procedures.

- "Sometimes parameters around acceptance into the program seem unpredictable"
- "It would be great to have a newsletter from STR for families."

Decision Making

Families and advocates commented that there must be transparency in decision-making and independent scrutiny of decisions. Some noted an apparent confusion re roles and responsibilities of the program manager, with both a program management role and clinical role of accepting clients onto the program and assessing care plans. The care plan review and the wait for a response to it were noted as a very stressful time for families. The view that the appeals process should be linked to clinical assessment and an independent second opinion where appropriate was strongly expressed.

- "Need to ensure that families clearly understand the processes."
- "Sometimes I feel there is a culture of exclusion of family members."

Service Development

Families expressed the view that the best time for rehabilitation varies according to the individual and is different for each person. A number felt that the apparent formula (ie. to move on to a maintenance level after approximately 2 years) lacked flexibility. They also

commented that some people needed higher levels of particular therapy resources at particular stages (either intensive or maintenance) and that there should be greater flexibility in terms of the type of therapies that can be utilised, based on the rehabilitation needs and personality of the clients.

- “[The program should]..fund the type of therapies ...art therapy, sound therapy, aroma therapy...that are not usually part of mainstream rehabilitation programs.”
- “The need for care plans to be flexible to meet the changing needs and health situation is so important.”
- “It’s important to know that the program can provide life-time support.”

Service Providers

Families in rural areas expressed the view that case management should be provided by local services and they often felt disengaged with Melbourne based case managers whom they did not feel had an understanding of their local service system. They also commented on delays when case managers were unavailable or on leave. Families had strong opinions in relation to attendant carers and the view that they needed particular training and skills to work with the clients and to implement the therapy programs. Families appreciated the opportunity for joint training of attendant carers and joint therapy sessions where several STR clients live at the same facility and have the same therapist. They noted that this gave the carers peer support and reduced the social isolation for the client. They also commented on the small number of males available for attendant care. They felt the program should monitor differing levels of expertise amongst therapists.

- “Sometimes everything goes on hold whilst the case manager is on leave.”
- “The attitude of all people working with STR clients is so important especially at the stage that they cannot communicate.”
- “It can take so long to get the therapy team and attendant carer in place that sometimes an opportunity is lost.”
- It was so frustrating that the STR could not provide additional therapy in the particular ward he was in at hospital.”

6.2 Comments from Case Management Agencies

Case Management Skills and Role

Case managers commented on the diversity of skills, qualifications and backgrounds of case managers working in the program. They commented that if a case manager has no clinical background that it could be difficult to question therapy goals. Case management agencies are aware that some interpret the case management role broadly and others less so, and that this varies according to the agency philosophy and how the program is structured within the context of the larger agency. For example, some case managers take a holistic perspective, whilst others take an approach more limited to rehabilitation. Case managers commented that program policies and procedures (the majority were not aware of the program guidelines) and a training program for new ABI:STR case managers would be helpful; as are the recently convened meetings between case managers from the range of providers.

Clients in Rural Areas and Travel

Case managers were interested in the capacity to use rural based case management agencies for rural clients. They commented on the extensive travel time to rural areas and suggested that this should be taken into account in caseload calculations. They commented on the difficulty of travel for therapists or attendant carers in rural areas (as this is not paid) and acknowledged that this often meant that the level of service requested could not be provided.

Care Planning and Report Writing

The majority of case managers commented negatively on what they perceived as the excessive amount of time required for report writing with the outcome being limiting of time for actual case management. They suggested that the initial care plan period could be lengthened as often the second care plan ends up very similar to the first. They noted

discrepancies between care plan/review report recommendations based on the clinical expertise of those contributing, vis-a-vis funds allocations decisions that appeared subjective and did not appear to relate to the clinical recommendations in the report. The need for better links between the clinical situation and decision-making about program delivery was highlighted (eg: the person making the decision should have knowledge of the client, an understanding of the clinical information and with capacity to obtain a second opinion).

A strong desire was expressed for consistency in decision-making by the program based on transparency and accountability.

Contracting Therapists and Attendant Carers

Case managers commented on the difficulty in finding well qualified, experienced therapists. Currently the recruitment of therapists for clients is based on recommendations and feedback. Case managers suggested that a community based therapy team in each region would assist this process and minimise duplications. They also commented that it would be useful to have continuing education sessions for therapists about the program as many who provide service to ABI:STR clients have minimal knowledge about the program. Similar issues were reported in relation to finding skilled, well trained attendant carers. Monitoring and follow up of attendant carers was an area identified for improvement.

Service Development

A desire was expressed for the program to move away from what was perceived as a rigid formula (ie. intensive and maintenance levels), to one that allowed flexibility to meet clients changing needs. A holistic model incorporating cognitive and recreational options, as well as the medical/physical services was seen as a priority.

6.3 Comments from Attendant Care Providers

Funding Levels

Attendant care agencies expressed the concern that the current payment of \$26.79 per hour (based on Disability Services unit prices) does not enable the attendant care agencies to pay workers sufficiently for the work required plus travel, or allow sufficient time for training and support of the worker. The impact of this was seen as high staff turnover. Future difficulties are anticipated in relation to the productivity gains expected by DHS.

Recruitment of Staff

Agencies commented that it could take 2-8 weeks to put a team of Attendant Carers in place as preferences are discussed with the family, client, and therapists. They endeavour to recruit staff that wish to be involved in rehabilitation rather than undertaking the task for the client. Continuity of attendant carers for clients was considered a challenge as the client group can be demanding and work can be isolating.

Training of Staff and Communication

Some attendant care agencies are registered training organisations (RTOs) and staff have completed Certificate 3/4, and may have done the ABI modules. Attendant care agencies report the need to provide additional support and supervision to workers on the ABI:STR Program for which they are not compensated. The client's therapist nominates the amount of on the job training required for implementation of the therapy program by the attendant carer, however retraining as the clients situation changes or new workers commence is not always covered by funding. The attendant care agency coordinator and/or worker attend client review meetings but are not always invited.

6.4 Comments from Aged Care Residential Facilities and Rehabilitation Centres

Service Access

These providers commented on the inconsistency of interpretation of guidelines, and how this lead to confusion as to who will be accepted onto the program. They also commented that an independent assessment panel should make decisions about access to the service; and that appeals processes should be more transparent.

- "Its always difficult to work out how to get people onto the program."
- "Some people get hours of treatment they don't need."

Program Structure and Model

The program is perceived as being very physically oriented when clients were seen as benefiting equally from cognitive and recreational activities. The need for ongoing medical monitoring of the clients after discharge was identified, as was handover and support for GPs. When clients are living in the facilities the number of external therapists and attendant carers that came into the facility to provide services to clients – the time and cost of inducting and monitoring these external staff was seen as unmanageable in some cases. For example, as previously commented, one facility has up to 40 external ABI:STR contracted staff attending clients each week and is in the process of addressing this issue with the program.

6.5 Comments from Acute Services

Eligibility and Access

A number of services contacted had minimal knowledge of ABI:STR, which influenced their ability to gain entry for their clients to the program. Some feedback was that the program was flexible and accommodating; in comparison, other feedback was that of frustration in trying to access the program. Entry to the program was seen as a protracted process exacerbated by ambiguity regarding the functional level people needed to be at to gain access to the program; this experience had resulted in the development of alternative projects to support the client group. Priorities were identified as a greater flexibility to meet client needs as they arise; and the capacity to provide interim care between the acute hospital stage and commencement of intensive therapy.

6.6 Comments from Therapists

Skill Level

Therapists commented that there are few specialist therapists working in the ABI area, and consequently there is a diversity of skill levels. They suggested that a skilled therapy team visiting country areas on a regular basis, to support local therapists and attendant carers, could overcome the lack of therapists to provide services in country areas. Whilst many private therapists work in a single discipline practice they acknowledged the need to work as part of an inter- disciplinary team to maximise benefits for clients, particularly in developing care plans.

Assessment of Client Need and Priority

Therapists commented on the limited funding available for community-based therapists to undertake initial assessments and make recommendations regarding frequency and duration of services - instead they work to a plan established in the inpatient setting, which often cannot be varied until the next funding review. They commented that considerable written information is required to advocate for clients outside the 16-45 years age range and that allocation of funds to people outside this range appears "haphazard".

Program model and communication

Therapists commented that the program model based on the basis that most rehabilitation gains are made in the first two years is outdated and no longer supported by evidence. They commented on the need for a cognitive rehabilitation focus as well as a physical rehabilitation focus and that to include recreational therapists as part of the team would be desirable. Increased program flexibility and an individualised approach to meet clients changing circumstances (eg: change of accommodation, transition from school, readmission to hospital and arrangements to continue with the therapy program from the established team) were seen as priorities; as was the ability to bank hours if clients were unable to use a treatment session. In relation to communication, therapists felt that understanding the rationale behind the care planning decisions would be better achieved through speaking with the decision maker directly rather than via the case manager who in many instances did not have a clinical background.

Funding Levels

Maintenance clients are not considered financially viable for therapists as they are funded at 8 hours per year, do not have travel paid, and team meetings, report writing, splint replacement, and retraining of attendant carers as staff change or the client situation changes, clearly exceed these hours. They also commented on the inequality in the hourly rate between physiotherapists and other therapists; and apparent inconsistent decision making in relation to funding decisions and care plans.

- "Sometimes we request less than the standard hours in the care plan but the standard is approved."

Care Planning and Report Writing

Therapists recommended that the care plan proforma needed review and that the timing of reviews should be based on need/outcomes not just at standard periods. They recommended encouraging the use of outcome measures (Life Role checklist, FIM, FAM, COPM, Satisfaction with Life Scale, Community Integration Questionnaire) to inform the review process.

6.7 Comments in Relation to the Equipment Service

A number of key stakeholders proffered comments in relation to the equipment service. Consistent themes identified included a lack of timely responsiveness of the service (responses to requests are slow) and requests for unnecessary additional investigation of equipment.

Therapists felt that their recommendations and expertise was often questioned regardless of their skills, experience and knowledge of the client's assessed needs. The time spent in investigating additional options at the request of the equipment service was seen to reduce the time for other areas of OT intervention and would often not alter the equipment outcome. A level of frustration and dissatisfaction with this service was expressed.

- "[We were] messed around for months to get the equipment"
- "Our clinical expertise is questioned and then duplicated."

6.8 Summary of Strengths and Weaknesses (Processes)

Table 17 summarises the strengths and weakness across the program continuum according to consultations with key stakeholders.

Table 17: Strengths and weaknesses

Step	Process	Desired Outcome	Strengths of STR	Weaknesses of STR
Referral to STR	Personnel in acute facility require knowledge of ABI: STR Program and referral process	Expedient discharge when medically stable. Streamlined and appropriate referral generated days before desired discharge.	Standardised referral form	Lack of knowledge about program by key acute personnel; perceptions about inconsistent decision making of program results in frustration by referrers
Assessment for eligibility	Referrer completes application form and submits/discusses with program manager	Eligibility is established promptly according to transparent guidelines; high percentage of referrals are eligible.	Criteria established; eligibility decision generally made within 1 day	44% of referrals ³ deemed not eligible; eligibility may not result in service leading to false expectations; if program manager on leave decision making is delayed
Acceptance to program	When a vacancy arises eligible applicants are considered by the program manager and the applicant with the highest priority accepted	Vacancies promptly filled; eligible applicants advised of any waiting period; all parties notified immediately; timely appeals process.	People promptly notified following acceptance decision	Acceptance decisions may be delayed due to lack of vacancy. Also influenced by pressure to expend or conserve funds influencing changing priorities.
Appointment of case manager	Program manager maintains case load list for all contracted case managers	Appropriately skilled and qualified case manager appointed; geographical and travel efficiencies.	Some case managers with extensive experience	Varying skill levels of case managers; case managers travelling long distances to rural areas; limited knowledge of local rural services
Discharge from acute hospital	Discharge planner arranges discharge possibly with some communication with STR program	Discharge planner has certainty about post discharge accommodation and STR program role.	STR resources can support expedient discharge	Eligibility and acceptance process creates time lags which may be further exacerbated by lack of program or residential/rehab vacancies
STR assessment for development of care plan	Case manager develops care plan with input from acute facility therapists and possibly input from community services and submits to program manager. Initial care plan allows for intensive levels of service.	Care plan reflects needs of person based on clinical expertise and individual planning and support approach.	Inter disciplinary approach to developing care plan	Care plan developed in acute setting and may not reflect needs in the community setting. Provision of intensive level of service may not match person's rehabilitation stage. Difficulty experienced by independent therapists working as a team.
Acceptance of care plan and allocation of resources	Program manager assesses care plan and accepts or revises prior to allocation of resources. A letter of approval provided outlining allocated resources.	Care plan decisions based on clinical expertise and evidence; resource allocation decisions streamlined.	Close management of resources	Confusion between clinical decision making and resource allocation; individual decision making of program manager in majority of cases; under expenditure of resources

³ 2002 –2003 year
 HDG Consulting Group June 2004

Step	Process	Desired Outcome	Strengths of STR	Weaknesses of STR
Appointment of therapists and attendant carers	Case managers recruit and sub contract therapists and attendant carers	Streamlined access to teams of therapists with specialist skills and attendant carers with core ABI skills.	Commitment of specialised therapists in metro area	Duplication of recruitment of therapists; lack of access to therapists in rural areas; individual appointment of therapists can minimise benefits of team approach. Attendant care role is partially allied health assistant activities; availability and matching of carer to individual
Review of care plan	Care plan reviewed at 3, 6, and 12 months, then annually. Therapists review progress and submit new care plan goals to case manager who collates information and develops new overall care plan and submits to program manager.	Care plan reflects persons needs based on clinical expertise and evidence; resources allocated		Varying interpretation of care plans – care plans have a physical rehabilitation approach whereas additional issues (eg: cognitive, social, psychological) may need to be addressed and significantly impact on outcomes. Time consuming nature of care planning process; decision making by program manager overriding clinical expertise; lack of ability to respond quickly to changing client needs.
Transfer from intensive service provision to maintenance level	Based on outcome of care plan and achievement of goals; usually occurs at the 2 – 3 year period	Service level reflect needs based on evidence	Some flexibility	Lack of ability to swap between intensive and maintenance based on persons needs or changing situation; no capacity to `bank' hours; significant difference between intensive and maintenance levels
Engagement of other services	Case manager works to engage mainstream services to replace and/or complement STR	Maximise community integration through use of mainstream services	Some achievement of this evident (eg: 11% of people in receipt of HomeFirst packages)	Metropolitan based case managers experience difficulties in engaging with rural mainstream services; rural families report preferences for local service provision; no consistent statewide approach to access for ABI:STR clients to Disability Services packages
Discharge			20% of people discharged from STR	

7. Literature and Models

7.1 Literature Review

Four key themes from a limited literature review are noted below.

Recovery Timeframe

The period of recovery from a severe traumatic brain injury is the topic of ongoing research. Rehabilitation programs must be tailored to each individual - Eames et al report that "the length of time needed to complete rehabilitation is determined by individual needs...It is not, nor should be considered to be, a quick process."¹ Whilst studies acknowledge that the length of time needed for recovery and rehabilitation is determined by individual needs, earlier studies tended to suggest the majority of gains were likely to occur in the first two years. However, more recent research based on studies with longer follow up periods "calls into question the concept of plateauing recovery and the widely accepted notion of maximal functional recovery occurring within 2 years after injury at least for the slow to recover severe TBI population."⁴ Gray notes: "the existing evidence suggests that this emerging but important group of brain-injury survivors is capable of significant functional recovery over a period of months-to-years after injury, and that rehabilitation may serve to further ameliorate disability and reduce long term costs of care."² This is supported by Khan et al who note that "recovery from TBI can continue for at least 5 years after injury."³ Likewise, based on a randomised controlled trial of community based rehabilitation after severe TBI, Powel et al⁴ suggest that "even years after injury it can yield benefits which outlive the active treatment period."

Access to services for people more than two years post injury is not always available however Wales and Bernhardt report: "Tuel et al (1992) found that one third of patients who were dependent on admission to late stage rehabilitation (on average 2.9 years after ABI) achieved assisted independence by discharge. Our own experience, and that of others (Olver et al 1996) suggests that "functional gains can continue over an even longer period of time."⁵ Eames et al state that "When rehabilitation should best begin and whether it is ever too late ... evokes differing opinions," and in their study they suggest that "long delays between injury and the institution of intensive rehabilitation are still comparable with worthwhile achievements in terms of enhanced independence."⁶

Interdisciplinary Team Approach

When working in rehabilitation of people with ABI the value of the team approach is emphasised. Williams refers to the professionals as a team, alluding to the emphasis on collaboration not fragmentation.⁷ Tierney comments: "these patients have complex and multiple problems and need a team approach;" and talks about the art of referral and assessment: "which therapists are likely to have the specialist and personal skills to get the best out of this particular person and work well as a team?"⁸ Khan et al suggest that "rehabilitation is effective using an interdisciplinary approach and close liaison with the patient, family and carers...a focus on issues such as retraining in activities of daily living, pain management, cognitive and behavioural therapies and pharmacological management...family education and counseling and support of patient and carers' is important."⁹ An interdisciplinary team works "in an integrated, cooperative manner with agreed-upon goals." The client is "considered a team member and the focus (with the family) of the team." The importance of involving the clients family is further emphasized by Beers and Berkow, "caregivers, including family members, can also enhance the team's goals by identifying realistic and unrealistic expectations based on the patient's habits and lifestyle."¹⁰

Family Needs and Carer Burden

Long term family and emotional adjustment in close relatives of individuals with TBI has been studied by numerous researchers. Ponsford et al¹¹ found that "families were on average functioning in the normal range on the Family Assessment Device...anxiety and depression were more likely to be present in those responsible for care of their injured relative." They conclude that "every attempt should be made to develop models of long-term support and care that alleviate these sources of burden on relatives."¹² A study by Flanagan reports that "Traumatic brain injury (TBI) places a disproportionate burden on families of the injured, not least because most TBI occurs amongst younger people who are likely to require family care and support for the rest of their lives."¹³ Flanagan suggests that levels of expressed emotion (stress) is influenced by the carer's perception of social support and the degree to which the burden of sharing can be shared with others. He suggests that "the presence of high expressed emotion in a care giving relationship may signal which TBI households are approaching crisis point ... enabling supportive interventions to be directed towards the most affectively distressed families." Other studies suggest that the level of stress experienced by carers tends to increase over time. Brooks et al showed that relatives were under greater stress at five years than one year post injury; likewise Stebbins¹⁴ found "increasing levels of unmet needs as time since injury increases." This is of particular importance to the STR program as 20% of clients have been discharged home.

In some models, family and patient counseling and family support to relieve stress, is an ongoing part of the rehabilitation program. A study by Man et al "indicated a four-factor solution (skill, knowledge, support, and aspiration) empowerment process among family care givers for their family members with traumatic brain injury."¹⁵

Information and Access to Services

At the time of trauma and the immense change this brings with it, families rely on health professionals around them to assist in accessing the most appropriate treatment however, Foster and Tilse found that "access to rehabilitation following TBI is a dynamic phenomenon concerning interpretation and negotiations of health care professionals, which in turn are shaped by the organisational and broader health care contexts."¹⁶ The importance of information for caregivers at the various stages of care has also been documented. Flanagan suggests that clinical experience has shown that with "problem focused" information and the knowledge that professional support is available, it is possible to change the relatives' perception of the problems." Stebbins states that "family needs changed from focused acute medical and professional supports during the first two years to an expanded range of needs, such as community supports, financial resources, care giver supports and health information."

7.2 TAC Model – Lifetime Support

The Transport Accident Commission (TAC) supports people who have acquired significant disabilities following a transport accident, through the Major Injury Division. They have developed a new approach to Lifetime Support based on Person-Centred Practice, focussing on clients' abilities and needs and inclusion in the community. In 2001 TAC supported 600 people with severe ABI and 600 people with mild ABI; with a growth rate of approximately 200 per year.

TAC clients progress through the acute phase at an emergency hospital and once stabilised move to a rehabilitation hospital. During this time a TAC Support Coordinator is assigned to each client to manage the ongoing relationship between the client and TAC. Planning starts with clients for when they will leave the rehabilitation hospital and focuses on returning to life in the community. During this transition stage the client, family, the treating Rehabilitation Team, a Case Manager and the TAC Support Coordinator work together to address the clients goals and support needs for the short

and longer term.

TAC have developed five Principles of Therapy based on independent research and international findings. These principles listed below are to guide therapists and TAC on how to provide the most effective and outcome focussed treatment.

- Clinical justification and interventions
- Goal focus and alignment of strategies
- Effective use of peoples time and systemic resources
- Social and inclusive models of practice
- Recommendations are clearly related to assessment and review findings.

The TAC are working towards a more self determined program which following legislative change will enable clients/families to self manage their care; and the option to move in and out of case management as a clients situation changes.

7.3 NSW Model

The NSW Brain Injury Rehabilitation Program (BIRP) funded through the NSW Department of Health has fully integrated specialist teams located at 8 rural and 5 metropolitan (3 adult and 2 children) centres. Compensable and non compensable clients from age 0-65 years can use the service and slow stream and fast stream rehabilitation is available. Services available include Physiotherapy, Occupational Therapy, Speech Therapy and Neuropsychology plus support from a Community Rehabilitation worker (to address issues that arise on return to the community) and Community Support worker to support children returning to the community. The South West Brain Injury Rehabilitation Service (SWBIRS) based at Albury provides residential and non-residential/ outreach services to TAC clients from the Victorian Hume region and is an active member of the Hume Region ABI Network and the ABI service system. SWBIRS has provided service to ABI:STR clients and is keen to do so but this is not a common occurrence.

7.4 Traumatic Brain Injury Model Systems

In America, the Traumatic Brain Injury Model Systems (TBIMS) which is a collaboration between the Brain Injury Association of America, The National Institute on Disability and Rehabilitation Research (NIDRR) and Kessler Medical Rehabilitation Research and Education Corporation (KMRREC) has been established. Throughout the United States, 17 designated centres are undertaking a prospective, longitudinal study examining the course of recovery and outcomes following traumatic brain injury.

Each of the centres provides a coordinated system of emergency care, acute neurotrauma management, comprehensive inpatient rehabilitation and long term interdisciplinary follow up services. They aim to respond to the short and long term needs of the person with the traumatic brain injury and their family.

Research activities and the collection and submission of data to the national TBIMS data base is also an important function of each centre. The program at the Mayo Clinic studies the course of recovery and outcome following delivery of coordinated care from emergency care to post acute intervention focused on community reintegration.

8. Discussion

8.1 Program Achievements

8.1.1 Review Findings

It is evident that over the first seven years of operation the ABI:STR Program has been successful in achieving the original program objectives of providing slow stream rehabilitation support for non-compensable highly dependent people with severe ABI and facilitating reintegration into community care. Without the program it is fair to surmise that a significant proportion of the target group would be inappropriately residing in aged care residential facilities or staying for extended periods in acute hospitals. The program has enhanced the service delivery system in Victoria to respond to this client group and advanced, through experience, the knowledge and care of people with a severe acquired brain injury. The knowledge base will continue to grow over the coming years as new methods and approaches evolve.

Increased independence has an impact on the quality of the person's life and long-term costs of care. The capacity of the program to support people with individual packages of care to live in a range of more appropriate and cost effective alternatives maximises functionality and therefore improves the quality of the person's life and subsequently reduces the cost to the overall health system.

The implementation of the program has resulted in more effective and efficient use of limited relatively expensive resources in the acute system. A reduction in cost to the residential care sector has also been anecdotally reported, arising from the number of people now residing at home. In addition, any reduced disability at an individual level, has an impact on the long-term costs of care and quality of life. The capacity to assist in the effective and efficient use of acute health resources has occurred at a time when strategies to maximise the efficiency of acute resources have been paramount.

The review has identified a number of areas to be addressed. There is clearly the need for and desire by key stakeholders to work cooperatively to address the issues identified and orientate the program to ensure sustainability, efficiency and maximise program outcomes for people with severe ABI.

Table 18: Achieving the aims of the ABI:STR Program

Stated Aim	Commentary
Provide individually targeted slow-stream rehabilitation services to people with severe ABI who have the potential to achieve functional gains in their level of independence, and thereby to assist these people to achieve optimum levels of independent functioning	Clear evidence of functional gain – refer Clinical Outcomes Study. (appendix 3) There is the potential to further tailor packages of service, funding levels and timing of service delivery to individual needs.
Monitor and provide passive rehabilitation for clients not able to benefit from active rehabilitation in the early weeks or months post-ABI, while allowing time to assess realistically the person's potential for recovery and/or to await further neurological recovery that may enable the client to participate in more active rehabilitation	
Ensure timely and appropriate discharge from acute care and reintegration into community care by providing the necessary level of support and assistance not otherwise provided by mainstream programs for these clients	Clear evidence of community integration (eg: 44% clients reintegrated into community and residing at home). There is significant potential to improve the programs responsiveness and streamline the acute to ABI:STR pathway.
Ensure a maintenance level of rehabilitation to prevent physical deterioration for those who have sustained major and irreversible brain injuries and who may require long-term or ongoing support	Clear evidence of long term ongoing support provided to clients plus evidence of use of other community services.

Stated Aim	Commentary
Extend the currently very limited knowledge of the process of recovery following severe ABI, and the place of rehabilitation services in maximising recovery and independence for these clients, to develop evidence-based guidelines for optimum management of ABI:STR clients	Knowledge has been extended through servicing the 181 clients admitted to the program (to June 2003). There is clearly the opportunity for improved documentation, development of clinical pathways and evidence-based guidelines.

8.1.2 Safeguarding the strengths of the program

The strengths and value of the program should be commended. The ABI:STR program is a world leader in the field and will continue to evolve as new knowledge and information in relation to service delivery emerges. Particular strengths of the program are identified as:

- The availability of the program – practitioners, families and clients are extremely appreciative of the existence of the program and its capacity to meet the complex and long term needs that are beyond the capacity of mainstream services of this client group
- The number of clients discharged from the program- since program commencement in 1996, 20% of clients admitted to the program have since been discharged (excluding deceased) and no longer require program support
- The number of clients integrated into the community and residing at home – 44% of all current program recipients reside at home (prior to program commencement these clients were likely to be located as long stay patients in acute hospitals, inappropriately placed in aged care residential facilities or at home without access to services)
- From a consumer's perspective, the capacity of the program to provide indefinite (life time) support if required
- The development of a shared care approach between the program and divisions within DHS to establish a package of care/accommodation support for clients
- Flexibility of brokerage model – in theory this model allows services to be provided in a flexible manner to clients, enabling both an appropriate service mix and delivery system
- Utilisation of existing infrastructure and capacity – funds allocated to clients are used to purchase services from existing services rather than creating a new service infrastructure
- Financial benefits to acute sector - decrease of bed days in acute care
- Knowledge and experience of the current Chairman and program manager of the program and stability of program personnel.

In addition the program has indirectly influenced:

- Specialist ABI skill development amongst a small group of rehabilitation therapists, which was not previously available
- The development of professional and consumer networks.

Any changes to the program arising from the recommendations of this review must ensure these program strengths are acknowledged and strategies developed to enhance them.

As a groundbreaking program, there is the capacity for research to identify best practice and new learning in relation to the rehabilitation and support of this client group. The program has undertaken a clinical outcomes study, and is shortly to commence a prospective study. The facilitation of a research and evaluation program, informed by an Advisory Group, could include a focus on the key areas of:

- The readmission rates to hospitals due to preventable factors
- Individual case studies highlighting the impact of the program
- Economic and actuarial analysis over a lifetime of care
- Impact of accommodation and the environment on the person's quality of life,

ability to make improvement, health and well being.

Protocols for researchers to access information would be beneficial. Research will be of interest both nationally and internationally and enable the program to continue to develop evidence-based practice and evolve new and successful methods and approaches. The importance of ensuring a research element within the program model should not be underestimated.

8.2 Discussion Regarding Program Model

The discussion points below synthesise the key themes arising from the review in relation to the overall program structure and model. In considering the potential options for reconsidering the program model, it is important to acknowledge both the original aims and service delivery model of the program, perceived strengths and note any program improvements arising from the review findings, to be applied.

8.2.1 Reconsidering the structure of the program model

The cross sector nature of the program in conjunction with its small size and program model results in both advantages and disadvantages. There is an inherent tension between providing a statewide service in a cost efficient and consumer responsive manner vis-à-vis the small target group and program budget. On one hand, advantages are seen as the flexibility to purchase and broker services for individual clients needs combined with a clear focus on the target group across traditional program boundaries. On the other hand, there are difficulties in terms of achieving program efficiencies and accessibility at a statewide level. The number of different provider agencies - each of which has differing organisational cultures, operational practices and skill bases, exacerbates this. For example, families in rural areas express frustration in dealing with distant case managers; the dispersion and relatively limited number of therapists skilled in ABI is variable around the State; promotion of the program to acute services throughout the State is challenging given the small target group.

Ideally, the preferred program model must achieve:

- Flexibility to cater to individual client needs using an individual planning and support and inter-disciplinary team approach
- A partnership approach to empower families and a culture of inclusion with family members
- Statewide access
- Responsiveness to other elements of the service system in terms of referral processes and contractual arrangements with providers
- Detailed program standards
- Clear policies and procedures which are transparent and unambiguous, especially in relation to eligibility, allocation of resources, independent appeals and exit from the program
- Efficient program management and administration practices
- Effective use of clinical expertise
- Monitoring and reporting against performance indicators
- Capacity for skilled financial management and forecasting
- A reduction in legal and management risks (as associated with the multiple levels of contracting and sub contracting inherent in the current program model)
- Program viability (managing the inherent tension between providing a statewide service in a cost efficient and consumer responsive manner vis-à-vis the small target group and program budget)
- Capacity for research and analysis of program experience with the client group leading to the development of appropriate systems and planning and forecasting models

- Links with the major acute ABI services and compensable systems and Centres for Health Independence⁵
- A cross-divisional government approach to resourcing and client pathways.

One way to counteract the disadvantages arising from the small size of the program would be to consider locating the program with another similar service. Other alternatives include centralising the program model to some degree; or increasing the size of the program thus utilising the program strengths and expertise by expanding the program to serve additional related client target groups and to improve access for eligible people in the 55-65 year age group. ⁶ These options are discussed further in section 8.4.

If the program is to remain a small stand-alone program limited to ABI:STR then a number of strategies must be actioned to achieve the points listed above.

8.2.2 Maximising use of financial resources and attaining operational efficiencies

Due to the restricted nature of the budget, the program has been especially careful in allocating resources in the desire not to exceed the program budget. In some years the program has suffered from under expenditure compounded by two practices – firstly, that to prudently manage the program within budget resources that it should minimally under-budget; and secondly and therefore compounding this practice the finding that of all committed funds less than 100% are likely to be expended. The impact of this under-expenditure has been a recoupment of funds by DHS and some perceived limiting of program growth. In response to this finding, Southern Health has acted promptly and undertaken financial modelling and forecasting to both maximise the use of available resources, and assess the budgetary impact of the admission of new clients.

As at May 2004 the program is at full capacity and has 18 eligible clients awaiting admission. The inherent tension between providing life time support to existing clients and having the program capacity to accept new eligible clients needs careful consideration. One implication for eligible clients awaiting admission is that they may stay in acute settings for a longer period of time or be discharged inappropriately to aged care residential facilities. Discussions between Southern Health and DHS have commenced in relation to this situation.

Given implementation of the program has resulted in more effective and efficient use of limited relatively expensive resources in the acute system, and considering maximising client functionality reduces the burden of care on the system, a cost-benefit analysis could be prepared to inform a joint bid for growth across the acute, sub acute, aged care and disability sectors. The program should be indexed to ensure cost parity.

One of the fundamental assumptions behind the program structure was that the brokerage model would achieve efficiencies in resource allocation and purchasing of services (through market forces), thus enabling the program to cater for a larger number of clients and potentially minimise the demand for future growth in funds. However, in practice, these efficiencies have been difficult to realise. For example, the small size of the program has meant that case managers are located in metropolitan areas, thus requiring extensive travel to rural clients which is both inefficient and often

⁵ Centres for Health Independence are outlined in 'Improving care for older people: A policy for Health Services,' DHS 2003

⁶ Qualitative information suggests unmet need, particularly in the 0 – 5 years and 55 plus age cohorts; additional target groups such as those with spinal injuries and neurological conditions; late stage admissions).

unsatisfactory from a client/family perspective; due to the small number of therapists skilled in the area, case managers are constantly having to recruit and employ therapists effectively duplicating one another's efforts; the process for equipment approval is repetitive; residential facilities face issues with multiple external staff. Furthermore, unit prices for therapy services are not indexed, effectively resulting in an inequitable situation when compared to similarly funded programs. Hence, the brokerage model does not appear to have achieved the efficiencies originally envisaged.

8.2.3 DHS

From a DHS perspective the program sits across a number of divisions (aged care, disability, acute, sub-acute) although management responsibility rests with the Aged Care Branch. This creates challenges at a Departmental level in terms of leadership, reporting, and realising cross program benefits and supports.

A cross-divisional structure within DHS could be instituted to address this, which would require executive level support and regular meetings. One option is for the program to be transferred from the Aged Care Branch to Disability Services, which has responsibility for other ABI programs and individual planning and support for people with disabilities.

This would require Executive support and commitment to the ongoing financial growth of the program and recognition that the best outcomes will be achieved by a cooperative approach to both the resourcing and monitoring of the program.

8.2.4 Links with other program areas

A number of systemic barriers and challenges impact on the program. The original program design (1994) proposed designated ABI:STR Units and the availability of residential aged care facilities, extended care units or other long term accommodation; by 1996 it had been recognised that the development of such specialised ABI:STR Units was not feasible and that the program should endeavour to utilise existing infrastructure and accommodation options. These include access to residential aged care facility high level care beds and rehabilitation beds, which if delayed as commonly occurs due to demand pressures on these services, in turn impacts on expedient hospital discharge. To counteract these problems one hospital has developed a pre-ABI:STR strategy that places the client in alternative accommodation until the ABI:STR Program has the capacity to respond. Whilst addressing the needs of hospitals for timely discharge this duplication suggests that the ABI:STR Program requires more responsive procedures. It is clear that the program needs to develop procedures to provide a significantly faster response to potential program clients awaiting hospital discharge and establish benchmarks to monitor performance in this area. This will need to be supported by more formalised arrangements with a select group of accommodation providers. (Such arrangements can be informed by the forecasting model currently under development, which should enable a level of certainty in relation to access or purchase of beds for both the program and the accommodation provider).

An additional challenge in relation to effective discharge is ensuring appropriate hospital staff are informed about the program and able to make appropriate referrals, minimising the amount of time and effort currently expended on 'ineligible' referrals. A benchmark could be established for performance in this area.

At the other end of the client pathway, access to other support packages (eg: HomeFirst) impacts on program discharge practices. As these packages face increasing demand pressures their availability to ABI:STR clients may be reduced. In turn this may limit the exit pathways for clients who may not be meeting rehabilitation goals but

continue to require attendant care support, and can not be discharged from the program due to a lack of alternatives, thereby limiting the programs capacity to accept new clients. The program may wish to reconsider its long-term commitment to, and exit strategies for, those clients who have met their program goals. This may require the transfer of attendant care resources to an ongoing provider.

8.3 Strategies to Enhance the Service Delivery Model

The discussion points below synthesise the key themes arising from the review in relation to improving program management and service delivery. The applicability of these will depend to some degree on decisions regarding the program structure and model as discussed above.

8.3.1 Improved transparency and accountability

The model allows for a Committee chaired by an independent medical rehabilitation consultant, responsible for program policy, direction and allocation of resources. Whilst this Committee met regularly in the early years of the program it was suspended pending this review in April 2002, although the independent Chairman of the Committee has continued to provide advice and direction to the program manager over this time.

The current size of the program and structure of the program model means that a single program manager has day-to-day responsibility for an unusual combination of administrative, management and individual client related semi-clinical decisions, within a context of significant program growth. This has resulted in questions by some key stakeholders in relation to program transparency and accountability. Since the commencement of the review, Southern Health has been proactive in addressing a number of these issues and increasing support to the program manager. Whilst the program expenditure on administration has increased as the annual program budget has increased, the staffing EFT⁷ has remained relatively constant over this time despite the growth in client numbers.

In the initial years of the program, a program service panel, responsible for ratifying decisions relating to eligibility, and recommending priorities for the allocation of resources to individuals, supported decisions relating to individual clients. The panel originally comprised a range of stakeholders and the guidelines stipulate that its minimum composition is that of the Committee Chairman and program manager. The panel ceased meeting in 1998 when its role was delegated to the program manager, with the Chair available for expert advice. This has led to some stakeholders questioning the transparency and accountability of the program.

The following broad strategies are suggested to address these issues:

- Further development and documentation of the program philosophy and vision, including the positioning of the program within the broader ABI service system, with input from key stakeholders
- Transparent policies/procedures and program priorities
- Development of comprehensive program standards addressing all levels of the program
- Monitoring of all aspects of the program against standards (including value for money and client/family satisfaction)
- Financial modelling, management, monitoring and reporting of trends
- Management of the increasing expenditure on attendant care as a proportion of

⁷ 1 EFT program manager plus 1 EFT program administration

- the overall budget
- Instituting appropriate contractual arrangements between case management agencies, attendant care agencies and therapists
- Monitoring and reporting mechanisms regarding all aspects of the program, by Southern Health
- Improved reporting mechanisms across DHS programs areas
- Formal regular monitoring of stakeholder satisfaction.

8.3.2 Streamlining processes and pathways and increasing flexibility and responsiveness of service delivery

The current program model means that referral, eligibility, resource allocation, decision-making and review pathways are multi layered and lacking in vertical integration. This results in perceived time delays and a lack of responsiveness at times when practitioners (acute staff, case managers, therapists) and clients/families wish to expedite these matters. Given the program is premised on brokerage packages of services tailored to meet the `widely differing needs of clients with severe ABI', it should not offer a rigid model of service but rather enhance the flexibility of case managers, practitioners and families/clients to make decisions regarding the timing and type of service provision within the boundaries of allocated resources. Ideally the model would incorporate trigger events (based on evidence-based practice) that are linked to entitlements (resources) to be used flexibly to prevent adverse outcomes and maximise the gains made. In turn this would require improved data monitoring to map client progress and outcomes.

The following broad strategies are suggested to address these issues:

- That, pending discussion and decisions about adjustments to the program model, aspects of decision making are delegated and that case managers/practitioners have increased flexibility within defined boundaries regarding the use of allocated resources (eg: increased flexibility in the period/timing of resource use; increased flexibility in type of services resources expended on such as cognitive as well as physical therapies).
- The development of client pathways to map and predict the level of planning and support required by categories of individuals
- Introducing an individual planning and support philosophy (rather than intensive and maintenance service levels), possibly with the capacity to bank hours
- Considering the possibility of family case management (with the option of using professional case management) and family governed funds in future
- Provision of quarterly financial reports for families outlining expenditure and use of resources at an individual client level against the allocation of funds
- Upgrading of the client data base to allow for more systematic and automated reporting against key service delivery indicators (eg: date of referral to date of admission; length of stay between service levels; use of community services post discharge)
- A move to care planning and report writing practice being evidence-based and measurable
- The further development of proformas to streamline report writing and processes for applying for one off funding
- Delegation of authority for expenditure on equipment less than \$1000
- Meeting client/family needs through the ongoing provision of standardised documented program philosophy and information across the stages of care pathways
- Review the program objectives and introduce key performance indicators in relation to them.

8.3.3 Strengthening management, roles, responsibilities and grievance procedures

The Committee and Service Panel have not been in operation for some time. The Committee, independent of the Department and auspice organisation had an important governance role and was responsible for overall program policy, program development, the appeals mechanism and appointment and remuneration of the Chair. It provided an important role in terms of accountability, representation of key stakeholders and balanced decision-making. The Service Panel, as a sub group of the Committee was responsible for ratifying the program manager's recommendations and decisions regarding eligibility and funds allocation to individual clients. Given the program now has an operational history this panel may no longer be required, however, clear and unambiguous documented policy and procedures are required, and possibly, the capacity to convene this panel at the request of practitioners or clients/families. An independent appeals and grievance procedure is required, separate from the Chair and the program manager, and linked to the broader appeals and quality processes of the auspice organisation.

As noted within the body of the report, the current contracting arrangements present a series of risks for the program and the contractors alike, which should be addressed if the current program structure remains.

Pending outcomes as to the program model, the following broad strategies are suggested to address these issues:

- Establishment of an Advisory Committee (in place of the current Committee) responsible to the relevant Southern Health Senior Manager, to periodically provide advice and information. Membership of the Advisory Committee to be inclusive of clients, families and peak bodies, through an open expression of interest. Terms of Reference to guide the operations of the Advisory Committee, including best practice such as the annual rotation of the Chair, declaration of conflicts of interest, an annual agenda cycle and documented minutes which are publicly available.
- Reconsideration of the Service Panel structure and/or the allocation of additional clinical resources to program management (eg: to undertake program development, interpret clinical recommendations in care plans, to assess quality of service provision, undertake program research and analysis).
- Development of key performance indicators
- Consideration of appropriate grievance procedures and appeals process independent from the day to day program management or Advisory Committee, ensuring transparency and access to clinical expertise and case review.
- Development of clear and concise program information for practitioners
- Implementation of a communication strategy to continually inform and update potential referring hospitals around the State.

8.3.4 Developing a skilled workforce and monitoring quality of service provision to maximise outcomes to consumers

As documented, one of the key challenges for the program has been in developing a skilled workforce. The program has tended to recruit and contract a small group of therapists based on word of mouth, who have a particular interest in working with the severe ABI group. Whilst this has been successful to some degree, and some therapists have an extremely high skill level, the majority of therapists have been single private providers, rather than members of inter disciplinary teams. The disadvantage for clients is that most care plans are discipline based rather than integrated and that therapists are required to spend additional hours in communication with one another that are not always recompensed. The scarcity of therapists in rural areas creates an additional challenge, as does availability of attendant carers. In addition, ensuring quality of service delivery becomes problematic in the absence of any preferred providers or accreditation process. The development of new approaches and modes of working with

the target group by skilled practitioners is important, and reflects the iterative and evolving nature of the field.

Pending outcomes as to the program model, the following broad strategies are suggested to address these issues:

- Strengthening the interdisciplinary 'care team' approach and communication (rather than segregated therapists)
- A philosophy of mutual partnership and the inclusion of family members/carers on the care team
- Introducing an individual planning and support approach (person focussed) to the development of care plans and allocation of resources
- Introducing the use of common assessment tools, evidence-based care plans and specific measurable treatment objectives
- Defining the case management parameters to achieve a consistent approach
- Streamlining access to therapy providers and attendant carers
- Use of accredited/registered practitioners
- The development of preferred provider interdisciplinary teams for therapists (in preference to stand alone therapists)
- Standardised position descriptions/duty statements for case managers
- Program induction to ABI:STR and attendance at bi-annual program updates
- Nomination of senior therapist/s in each discipline to provide secondary consultation and share information regarding approaches and modes of work with other therapists
- Improving continuity of care (eg: attendant carers, case managers, therapists) and ensuring a minimum level of service to retain skills and knowledge (ie. case managers spend a minimum of 25% of time on ABI:STR clients)
- Considering the use of Allied Health Assistants
- Consider ways in which to acknowledge, foster, encourage and recognise the skills of attendant carers with experience in ABI:STR
- Controlling and monitoring the quality of purchased services (case management, therapeutic services, attendant care)
- Improving access to case management and therapeutic services in rural areas.

8.3.5 Carer Involvement and Empowerment

Carers and the client's extended family play a critical role in the success of the program and are the programs greatest resource. This can place a significant burden on the family regardless of whether the client is at home (44%), in a residential aged care facility or other community supported accommodation. The limited literature review highlighted the stress placed on carers and the trend of increasing stress from the point of injury over time. The Clinical Outcomes study supports these findings and identified the need for strategies to assist carers.

The following broad strategies are suggested to address these issues:

- Extension of the program philosophy to be fully inclusive of families and consider carers as co-clients
- Consultation with carers to investigate their needs, and incorporation of a carer assessment tool
- Expansion of case management parameters to include carers
- Links to established carer support strategies
- Provision of formal assistance to carers (eg: training, family counselling, respite care)
- Provision of information at critical stages during the rehabilitation process and regular program updates to families (eg: program newsletter).

8.4 Model Options

A range of possible program models is documented below to prompt consideration of the optimum model for the ABI:STR Program in future. It should be noted that the models are not mutually exclusive – it may be that components from one model can be integrated with another to create ‘hybrid’ approaches. Some models are clearly more feasible and practical than others. The model options presented below are broad concepts only. Any decisions regarding the preferred model should be preceded by:

- Detailed descriptions of each model and consideration of the strengths and weaknesses and implications from a funding, service delivery and service user perspective
- Ensuring a ‘best fit’ with the program philosophy and service model criteria as suggested in section 8.2.1
- Ensuring the model is well positioned within the overall context of government funded rehabilitation and support services, taking into account of the relative newness and evolving nature of the field
- Development of detailed operational requirements/standards/specifications
- Identification of the cost implications of the models and of potential savings and financial implications
- Consultation with key stakeholders.

The preferred program model will influence future decisions regarding the auspice of the program.

Table 19: Broad Model Options

Model	Description	Advantages	Disadvantages
A) Stay as is	Single auspice and multi-level contracting model.	Little change	Complex contracting model. Quality control. Continuity of care. Travel to, and local access for rural areas.
B) Partial Consolidation	Employment of assessment team and case managers directly by program auspice. Care team approach with link to rehab consultants for reviews. Sub contracting of preferred (mainly private) therapy and attendant care services.	Closer control of program and consistency in assessment and case management approach and culture. Removes one layer in structure and communication. Preferred provider model ensures quality.	Ongoing variability in therapy and attendant care services. Travel to and local access for rural areas.
C) Partial Consolidation	Employment of assessment team, case managers and therapists directly by program; sub contracting of preferred attendant care providers.	Closer control of program and consistency in service provision Removes two layers in structure and improves communication. Develops specialist skills and ‘care team’ approach.	Continuity of attendant care. Travel to and local access for rural areas.
D) Four key providers/ teams	Distribute resources across the State into 4 teams (2 metro and 2 rural) to be based within appropriate auspice agencies according to tender process. DHS has contract with 4 auspice agencies. Each team consists of case managers and therapists and has	More efficient use of resources (travel) and more local approach. Statewide eligibility plus local priorities pending local service system. Tender specifications would include arrangements with residential providers, accreditation of therapists, quality.	Hard to predict areas of admission – however similar to many programs where access depends on resources available. Potential for inconsistency. Small program with diluted resources (unless program can

Model	Description	Advantages	Disadvantages
	brokerage \$ to purchase attendant care.	Develop MDS reporting.	expand).
E) Partnership	Enter into partnership arrangement or contract program to a single statewide similar ABI provider eg: TAC. Detailed contract specification.	Utilises existing infra structure and expertise. Addresses viability tension and achieves economies of scale. Improved statewide coverage. TAC establishing life time support model based on flexible service provision.	Perceived loss of control by DHS constituents however current collaborative arrangements.
F) Cooperative arrangement with Community Rehabilitation Centres based at Centres Promoting Health Independence	Current program model with the exception of therapy - contract 1 CRC in each region to deliver therapy services. The CRC should be located within the regions Centre for Health Independence where possible.	Builds up therapy ABI expertise in public system. Closer supervision by therapists (who could be employed by the CRC or be a contracted provider). Uses community infrastructure. Group setting offers social benefits for client, respite to carers, support for attendant carers/allied health assistants.	Transport co-ordination and costs.
G) Integrate into mainstream ABI programs	Ceasing ABI:STR as a stand-alone program and integrating it into mainstream ABI programs as a specialist program component with quarantining of resources.	Economies of scale in relation to day to day operations and administration. Horizontal integration of services. Specialist skills of agency.	Loss of focus on target group and slow stream rehabilitation; dissipates body of knowledge. Reaction of key stakeholders.
H) Program expansion	Expand the target group (eg: spinal injuries, long term neurological conditions, major injuries) and increase resources accordingly.	Economies of scale. May keep other younger people out of aged care residential facilities. Increases overall viability of the program.	New resources required or re-allocation of existing resources to these groups.

Feedback from key stakeholders in relation to the models presented above indicated that additional information in relation to the potential models and a consultative process was required before informed decisions could be taken. It was suggested that the proposed Advisory Committee would play a leadership role in relation to progressing further work and discussion regarding the optimum program model.

9. Recommendations

The following recommendations, listed as a series of Key Result Areas, were developed following feedback on the draft report. It is envisaged that a newly formed Advisory Committee will allocate responsibilities and indicative time frames to implement these recommendations.

Key Result Area 1: A vision and philosophy underpinned by increased transparency and accountability

Recommendations	Strategies
<p>To update program documentation in relation to the program philosophy, policies, procedures and standards</p>	<ol style="list-style-type: none"> 1. With input from key stakeholders, review and further develop and document the program philosophy and vision. In doing so, take into account: the evolving knowledge regarding service delivery to the target group; the relative newness and small size of the ABI:STR service delivery sector; the notion of flexible, client and family orientated services; the tension inherent in the provision of life time service provision; findings of the clinical review; and the recommendations of this review. 2. Review and update the program policies and procedures 3. Develop a priority of access policy 4. Develop comprehensive program standards and key performance indicators addressing all levels of the program 5. Develop standard contracts for use in the employment of Case Management agencies and for the contracting of Allied Health services and Attendant Care agencies 6. Define the case management role and parameters and document standardised position descriptions/duty statements 7. Develop key performance indicators for use by Case Management agencies, Allied Health services and Attendant Care agencies 8. Develop clear and concise program information for case managers/practitioners 9. Develop clear and concise program information across the stages of care pathways to meet client/family needs 10. Develop a communication strategy to continually inform and update potential referring hospitals.
<p>To undertake program monitoring and reporting</p>	<ol style="list-style-type: none"> 11. Upgrade the client data base to allow for systematic and automated reporting against key service delivery indicators (eg: date of referral to date of admission; length of stay between service levels; use of community services post discharge; reasons for non acceptance of referrals) 12. Ensure internal monitoring and reporting mechanisms within Southern Health 13. Conduct regular DHS cross divisional meetings to improve collaborative responses to the program 14. Undertake independent formal monitoring of stakeholder satisfaction.

Key Result Area 2: Increased carer/family/client involvement and empowerment

Recommendations	Strategies
<p>To extend the program philosophy to be person-focussed and fully inclusive of families</p>	<ol style="list-style-type: none"> 1. Adopt a person-focussed program philosophy 2. Recognise carers/families as the programs greatest resource 3. Ensure program flexibility according to the needs and desires of the client and family 4. Consider the carer as a co-client and include family members/carers on the care team 5. Consult with carers to investigate their needs 6. Introduce the use of a carer assessment tool (ie. a cooperative process with the carer/s to identify their support needs and assist in addressing these needs) 7. Ensure case management and decision making is based on a philosophy of mutual partnership with clients and carers, and that this is reflected in contracts with the case management agencies 8. Consider expanding case management parameters to include carers/family as case managers in partnership with the program 9. Establish links to statewide/local carer support strategies to assist in providing formal assistance and supports to carers/family (eg: training, family counselling, respite care, mainstream carer support services) 10. Provide information at critical stages during the rehabilitation process and regular program updates to families (eg: program newsletter).

Key Result Area 3: Financial management

Recommendations	Strategies
<p>To ensure appropriate program resourcing</p>	<ol style="list-style-type: none"> 1. Undertake financial modelling and prepare draft financial scenarios for discussion with DHS 2. Schedule discussions with DHS to consider funding for program growth to meet ongoing program demand 3. Request DHS to consider funding for indexation 4. Discuss the preparation of a cost/benefit analysis with DHS (analysis to incorporate disability, acute, rehabilitation and residential care data) 5. Ensure the program philosophy, documentation and financial forecasting addresses the tension inherent in lifetime service delivery and resource implications.
<p>To undertake budget monitoring and reporting</p>	<ol style="list-style-type: none"> 6. Ensure monthly monitoring of budget 7. Ensure quarterly reporting of income/expenditure trends and their implications 8. Consider the future possibility of providing quarterly financial reports for families outlining expenditure and use of resources at an individual client level against the allocation of funds.

Key Result Area 4: Renewed program structure

Recommendations	Strategies
<p>To ensure the program management structure reflects independence, transparency and professional management</p>	<ol style="list-style-type: none"> 1. Establish an Advisory Committee (in place of the current Committee) responsible to the relevant Southern Health Senior Manager, to periodically provide advice and information to the program. Membership through an open expression of interest and to be inclusive of clients, families, service providers and peak bodies. 2. Ensure program advisory structures include sector involvement. 3. Ensure program advisory structures operate according to detailed Terms of Reference that articulate the respective roles, responsibilities and relationships between structures (ie. Advisory Committee, working groups, Southern Health management, ABI:STR program management, service panel). 4. Develop new Terms of Reference for the Advisory Committee, based on accepted best practice including the declaration of conflicts of interest, an annual agenda cycle and documented minutes to be publicly available. 5. Consider allocation of additional clinical resources to program management. (eg: to undertake program development, interpret clinical recommendations in care plans, to assess quality of service provision, undertake program research and analysis). Reconsider the Service Panel structure pending the allocation of additional clinical resources to program management. 6. Institute Grievance procedures and an appeals process <i>independent</i> from day to day program management or the Advisory Committee.
<p>To delegate some aspects of decision making to case managers/practitioners</p>	<ol style="list-style-type: none"> 7. Pending discussion and decisions about the program model, to delegate aspects of decision making so that case managers/practitioners have increased flexibility within defined boundaries regarding the use of allocated resources (eg: increased flexibility in the period/timing of resource use; increased flexibility in type of services purchased eg. mental health, cognitive as well as physical therapies).

Key Result Area 5: Increased operational responsiveness

Recommendations	Strategies
<p>To streamline client pathways and maximise service responsiveness</p>	<ol style="list-style-type: none"> 1. Develop client pathways to map and predict the level of case management and support required by clients at different stages and with different support structures 2. Introduce a person-centred individual planning and support philosophy (rather than intensive and maintenance service levels) and protocol 3. Provide flexible case management options to families including consideration of family case management (with the option of support from professional case management) and family governed funds (based on a protocol for operation and allocation, reporting, monitoring, accountability) where desired 4. Introduce evidence base to care planning and report writing 5. Further develop proformas to streamline report writing and process for applying for one off funding 6. Delegate authority for expenditure on equipment less than \$1000 7. Link these strategies to the workforce development strategies listed in KRA 6. 8. DHS Aged Care negotiates with Disability Services in relation to resourcing and client pathways and to ensure a statewide common response to eligibility/access to Disability Services programs.

Key Result Area 6: Increased external workforce management and quality

Recommendations	Strategies
<p>To support and develop a skilled workforce to deliver quality services</p>	<ol style="list-style-type: none"> 1. Ensure contracts with external providers are updated to reflect the recommended changes as a result of the review and as listed throughout all KRAs 2. Consider strengthening the interdisciplinary 'care team' approach, including the development of preferred provider interdisciplinary teams for therapists, with the use of accredited/registered practitioners 3. Streamline access to therapy providers and attendant carers through use of preferred providers 4. Consider nomination of senior therapists in each discipline to: provide secondary consultation to other therapists; share information re modes of work; and offer a range of different approaches in recognition of continually developing knowledge and practices 5. Consider therapist representative on the Advisory Committee 6. Introduce common assessment tools, evidence-based care plans and specific measurable treatment objectives 7. Develop a protocol regarding access to additional services (mental health, community support etc) 8. Provide induction to ABI:STR program and bi-annual program updates (paid) 9. Review rate of pay to therapists on annual basis 10. Improve continuity of care (eg: attendant carers, case managers, therapists) ensuring a minimum level of service to retain skills and knowledge (ie. case managers spend a minimum of 25% of time on ABI:STR clients) 11. Consider the use of Allied Health Assistants 12. Consider ways in which to acknowledge, foster, encourage and recognise the skills of attendant carers with experience in ABI:STR 13. Consider ways to improve access to case management and therapeutic services in rural areas.

Key Result Area 7: Continued research

Recommendations	Strategies
<p>Facilitate research to inform the area of catastrophic brain injury rehabilitation and supports, and evidence-based best practice</p>	<ol style="list-style-type: none"> 1. Utilise and respond to the findings of the clinical outcomes study (planned for publication 16 August 2004) 2. Commencement of the prospective study 3. Develop a research and evaluation program focussing on key areas with input from the Advisory Committee to identify and prioritise future research needs and funding options. Consideration of future independent research to include: readmission rates to hospitals; individual case studies to highlight the impact of the program; economic and actuarial analysis over a life time of care; impact of accommodation and the residential environment on the persons quality of life, ability to make improvements, and health and wellbeing 4. Develop protocol for researchers to access research information.

Key Result Area 8: Revised program model

Recommendations	Strategies
<p>To ensure the best possible program model is utilised to maximise quality service delivery to clients and ensure an efficient and effective program</p>	<p>The Draft ABI:STR Review Report gave an overview of possible models or combinations of models that the ABI:STR Program may wish to consider in the longer term. Respondents to the report considered they required more detail and discussion to make an informed decision on supporting a particular model.</p> <ol style="list-style-type: none"> 1. To undertake further work in developing and investigating potential models (including hybrids of models suggested in the draft report) due to the widespread interest in the ABI:STR program and its ongoing development 2. The Department of Human Services to invite the field to nominate people for a working group to progress this, reporting to the ABI:STR Advisory Committee.

Appendices

Appendix 1: ABI :STR Program Aims

A number of goals have been added or modified since the commencement of the program. As provided by the program manager these include:

- To provide individually targeted rehabilitation and support services to people with catastrophic brain injury in a timely manner
- To develop a service delivery approach that prevents or limits the number of younger people with ABI being systematically trapped in residential aged care facilities
- To influence mainstream service system change by filling service gaps and providing expert clinical support and advice
- To ensure appropriate discharge of people with ABI and complex care needs to appropriate community based care
- To establish an alternative, flexible, client focussed approach for the care of people with complex care needs in the community
- To provide resources for new clinical rehabilitation services and techniques extending the limited knowledge of treatment and the process of recovery following a severe ABI
- To engage all relevant generic services to share the cost and expertise of providing complex care to people with catastrophic ABI in the community
- To ensure services are provided in an efficient manner

Appendix 2: Excerpt from notes on ABI Costings prepared by Southern Health (December 2003)

1. Client groupings

For the purposes of investigating case costs, ABI clients were grouped into six broad functional categories.

- A. Clients receiving intensive support at home.
- B. Clients receiving intensive support in residential aged care facilities
- C. Clients receiving maintenance level of care at home without "home first" program support
- D. Clients receiving maintenance level of care supported by "home first" program resourcing
- E. Clients accommodated in hostels or special accommodation units receiving maintenance level of care
- F. Clients receiving rehabilitation services at Royal Talbot or Caulfield General Medical Centre

Refer also to attached diagrammatic representation.

2. Assignment to groups and case cost estimates

Clients receiving care in 2002/03 were assigned to the six categories by month through the year following reference to client record.

Clients treated by the service continuously over the 12 months period who remained in the same category for the full year were used to estimate the client cost within each functional grouping.

The following table sets out the results of this analysis. Refer also to the attached tables and graphs (ABI STR Categories 02/03/xls) for further information on category costings.

Category	Cases	Median	Mean	STD DEV	Min	Max
A	9	51,228	48,986	18,499	21,798	79,651
B	16	35,146	32,824	14,732	8,508	63,984
C	17	12,465	19,009	22,671	920	80,220
D	13	12,945	12,700	7,031	1,958	25,895
E	24	19,172	20,849	9,264	3,416	56,615

The fairly large cost standard deviations indicate that within designated categories there is a significant variation in the level of care provided to clients.

Appendix 3: Summary of the Acquired Brain Injury Slow to Recover Program Retrospective Study

Work in Progress by a research team lead by Dr John Oliver

Thirty five clients out of a cohort of one hundred and fifty two agreed to participate in a retrospective study of the Acquired Brain Injury Slow to Recover Program during 2003. These clients were interviewed regarding their pre brain injury history, degree of disability, pre and post injury accommodation, and level of community participation. As well, a carer burden scale was used to estimate stress levels of their carers.

One third of the thirty five clients had suffered a stroke as a cause of their acquired brain injury. Two thirds were male, and the mean age of the cohort was forty one, with the average time since onset of the brain injury being five years. The study which is still being evaluated, demonstrated that at the time of interview, fifty seven percent of the clients were living in a house or apartment, with the next largest group being thirty four percent who were living in a residential aged care facility (nursing home).

It was estimated that before the inception of the program, eighty percent of such clients were living in residential aged care facilities (nursing homes). When assessed at an average of five years post injury, thirty of thirty five clients were noted to be in the severe range of disability on the Rappaport Disability Rating Scale. In activities such as shopping, meal preparation, housework, childcare, sixty percent of the clients rated as completely reliant on others for all of these activities. Sixty eight percent however, were able to participate in activities such as leisure activities, visiting friends and relatives, and going on shopping outings.

In terms of mobility, only twenty percent of the clients were able to walk with aids at the time of interview, the remainder being independent in a wheelchair or requiring help in a wheelchair, and eleven percent being predominantly bedfast. In terms of supervision, ninety four percent of clients required more supervision when outdoors, and sixty percent required a lot more help indoors than prior to the brain injury occurring. Most clients reported problems with communication and had difficulty concentrating. None of the clients had returned to work, whereas seventy one percent were in paid employment and six percent were students prior to the injury.

When a standardised scale was used to measure relatives or carer's level of strain, only one carer reported not being under strain. The overwhelming majority reported experiencing high to extreme levels of strain. This was one of the most significant results to come out of the study. Further analysis of the results has shown that whilst there was a continued high level of disability amongst this client group, their level of social integration improved as time went by.

Appendix 4: Acquired Brain Injury: Slow To Recover Program Application Form

All applications must contain an Application form (Appendix 1) including a brief history, a Consent form (Appendix 2) and a Declaration of Compensation form (Appendix 3) completed and returned to the ABI:STR Program Manager.

Process

The process of application for ABI STR services is as follows:

1. Submission of application forms to the Manager, ABI STR program who will determine eligibility in consultation with the independent ABI STR Service Panel.
2. The ABI STR Program Management will advise applicant of eligibility.
3. ABI STR Manager to engage case management service to prepare care plan.
4. Care plan submitted to ABI STR Service Panel to consider for approval.

If client approved ABI STR services

- Case manager to engage approved services and manage the care plan.
- Case manager to ensure services are being delivered within approved budget.
- Review of client's progress to take place on initial recommendation of ABI STR Service Panel.
- Case Manager to be responsible for monitoring the ongoing appropriateness of the care plan within the review period.

If client not approve ABI STR services

- Transfer to mainstream services or a generic case management service.

Appeal or Grievance Process

An applicant or an applicant's representative can appeal a decision of ABI:STR Service Panel providing any additional information to support the application. Your appeal is to be in writing and addressed to:

**Chairman, ABI:STR Committee
C/O Manager ABI STR program
Cardinia Community Health Service
PO Box 277
PAKENHAM VIC 3810**

Phone: (03) 5941 0597 Fax: (03) 5941 0535

Should a grievance still exist, an appeal can be made to either the:

Health Services Commissioner
30th Floor, 570 Burke Street
Melbourne Vic 3000
Complaints Line 86015200
Toll free 1800 136 066

or

The Ombudsman
Level 22, 459 Collins Street
Melbourne Vic 3000
Phone: 9613 6222

Application Form

This form is to apply for Acquired Brain Injury: Slow to Recover services.

Applicants and families should understand that by completing this application, it does not guarantee a service. The ABI STR Program has a panel of independent rehabilitation practitioners that will decide on the merit of this application for slow to recover services taking into account the applicants eligibility, priority and the resources available to provide services.

Please complete the following questionnaire and return to:

Mr Murray Gee
Manager
ABI STR Program
Cardinia Community Health Service
PO Box 277
PAKENHAM VIC 3810

1. **Applicant's Surname**

2. **Applicant's First Names**

3. **Date of birth**

4. **Gender (M/F)** **Date of birth of primary care giver.**
Primary carer has total responsibility for the care of the client)

5. **Department of Human Services Region of Origin**

6. **Current residence/location of applicant**

7. **Address**

8. **Country of Birth**

9. **Are you of Australian Aboriginal and/or Torres Strait Islander origin?**
(X appropriate box)
 No, not Aboriginal or Torres Strait Islander
 Yes, Aboriginal
 Yes, Torres Strait islander
 Yes, Aboriginal and Torres Strait Islander

10. **Cause of ABI**

11. **Date ABI Occurred**

12. *Has the applicant been assessed as needing long-term nursing care and/or eligible for Commonwealth- funded nursing home services?*

Yes No

13. *Has the applicant undertaken any form of post acute rehabilitation?*

Yes No

If yes please include details in the client history.

14. *Does the applicant have parenting responsibilities for children less than 15 years of age?*

Yes No

If yes please include details in the client history.

15. *Person filing application details.*

Name

Address

Relationship to person with ABI

16. *Attention: Please attach a brief history of the client's circumstances, including how they acquired their brain injury and details of their current physical, cognitive and medical status.*

Consent form

(Please cross out italics if not applicable)

*I hereby give my consent,
As guardian or responsible adult I hereby give consent on behalf of,*

.....
(Name of the client)

- for the ABI STR Program to obtain any medical information it deems necessary to make an assessment for ABI STR services.

*(optional - cross out if you do not wish personal details to be transferred by internet or electronic media)
- and medical assessments and information may be electronically sent via the Internet to all relevant people involved in the care and the provision of such services.*

I have been provided with relevant information regarding the ABI:STR Program and I understand that this application is part of a process to determine eligibility and does not guarantee that services will be provided.

All information will be provided with the strictest confidentiality in accordance with Southern Health privacy and confidentiality policy and procedures.

Person giving consent/
Guardian or responsible adult
Print Name Signature

Relationship to recipient eg. Self
(Please circle one as appropriate) Wife
Husband
Legal Guardian
Parent
Sibling
Other – Please state

Address of person giving consent.
.....

Contact Phone Number
Work: Home:

Declaration of Compensation

Please place an X in the appropriate Yes/No response box.

1. Name of potential recipient of Slow to Recover services.

.....

Print name:

2. Has the client ever received a compensation payment for their injury?

Yes No (Go To Q4)

If Yes, please state the nature of the compensation and the injury.....

.....

.....

3. If the client has previously received a compensation payment, did the terms of the settlement specify it to be used for personal care/ accommodation support, equipment or housing modifications or for any other specific use?

Yes No

If Yes, please attach details and documentation of the client's settlement.

4. Has the client ever made or intends to make a claim for compensation or damages for their injury.

Yes No

5. Is the client eligible for or receiving personal care/accommodation support or other support services from another source? (eg Veteran's Affairs, Transport Accident Commission or Workcover).

Yes No

If Yes, please provide details.....

.....

Declaration:

I hereby acknowledge as the recipient of ABI STR services or as the guardian or the adult responsible for the above named recipient's affairs, that should I or they apply for and receive compensation in relation to my/their acquired brain injury then the following conditions apply:

- 1. Southern Health must be notified of any such compensation proceedings.***
- 2. Southern Health may claim repayment of funds advanced for services previously rendered and will rely on this acknowledgment in any recovery proceedings legal or otherwise.***

.....

Print Name: Self, guardian, responsible adult

Signature

Note: A) You may wish to seek independent legal advice prior to signing this agreement.

B) You should also notify your solicitor that there would be a requirement to repay funds advanced by the Southern Health from any compensation received.

Glossary

Low Care Resident	A resident that is classified at a level between 5-8 using the Resident Classification Scale
High Care Resident	A resident that is classified at a level between 1-4 using the Resident Classification Scale
Resident Classification Scale	A nationally consistent instrument which assesses a residents care needs. This scale has 8 classification levels ranging from low to high care, with each level having a specified subsidy level which is paid to the provider for providing the required care to the resident.
Residential Care	Personal and/or nursing care that is provided to a person in an aged care home in which the person is also provided with accommodation that include appropriate staffing, meals, cleaning services, furnishings and equipment, for the provision of that care and accommodation.
Maintenance Therapy	Therapy delivered by health professionals or care staff directed by health professionals, designed to maintain the persons level of independence in activities of daily living.
Nursing Services	Initial and ongoing assessment, planning and management of care for residents carried out by a registered nurse. Nursing services carried out by a registered nurse or other professional appropriate to the service (eg. Medical practitioner, stoma therapist, speech pathologist, physiotherapist, or qualified practitioner from a palliative care team). Services may include, but not be limited to, the following:

Establishment and supervision of a complex pain management or palliative care program, including monitoring, and managing side effects

- Insertion, care and maintenance of tubes including intravenous and naso-gastric tubes
- Establishing and reviewing catheter care program, including insertion, removal and replacement of catheters
- Establishing and reviewing a stoma care program
- Complex wound management
- Insertion of suppositories
- Risk management procedures relating to acute or chronic infectious conditions
- Special feeding for care recipients with dysphagia (difficulty with swallowing)
- Suctioning of airways
- Tracheostomy care
- Dialysis treatment
- Enema administration
- Oxygen therapy requiring ongoing supervision because of a care recipients variable need

Sub –acute services Time limited goal oriented health services that follow acute care consisting of both inpatient and community based services.

Appendix 4: References

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Acquired Brain Injury Strategic Plan (2001): Disability Division, Department of Human Services

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Acquired Brain Injury: Slow to Recover Program, Southern Health
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Acquired Brain Injury Slow to Recover (STR) Program Guidelines (Draft August 1999):
Community Health Services, Southern Health Care Network

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Department of Human Services

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Victoria & Transport Accident Commission

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Department of Human Services

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(August 2003)

Improving care for older people: a policy for health Services: Department of Human Services,
November 2003

Appendix 5: Consultation and Feedback

List of people consulted, including people in attendance at meetings attended by the reviewers and those who gave written responses.

Alan Blackwood, Young People in Nursing Homes Coalition
Alan Martin, VBIRA
Amanda, Melbourne City Mission
Amanda Bowe, Australian Homecare Services
Ann Dastey, ARBIAS
Anne Kissane, Physio RCH
Annette King, ABI:STR Equipment Coordinator, St Vincents Hospital
Antoinette Bogg, Melbourne City Mission
Assoc. Professor John Olver, ABI: STR Chairperson
Barry Jory, Social Worker , Sunshine Hospital
Bebe Tan, VCASP
Bernadette Clancy, ABI:STR family member
Bronwyn Harding, Bunurong Community Care
Bronwyn Morkham, Young People in Nursing Homes Coalition
Brydie Quinn, Continuing Care, DHS
Carolyn Rigg, ABI:STR family member
Catherine Thompson, DHS Aged Care
Cathy Bucolo, VCASP
Cecily Fletcher, Hume Consultation
Christine Gibbon, VCASP
Darren Cass, VCASP
Deb Routley, Care Connect
Debbie Knight, VCASP
Deborah Funnell, VCASP
Delwyn Riordan, Young People in Nursing Homes Coalition
Dennis Ginnivan, South West Brain Injury Rehabilitation Service
Dianne Denton, ABI:STR Administrative Assistant
Donna Pearce, Hume service provider
Dr Barry Rawicki, VBIRA
Dr Geoff Abbott, Melbourne Health
Dr Joan Tierney, VBIRA
Dr Kevin Dunne, Royal Children's Hospital
Dr Wendy Castle, Royal Talbot
Elmeor Rossiter, VCASP
Francis Diver, Alfred Hospital, Bayside Health
Gary Foley, Hume service provider
Gloria Smith-Tappe, VCASP
Gypsie & Laurie ,family member & consumer
Helen Boehm, Hume service provider
Helen Perry, ARBIAS
Helen Williamson, VCASP
Hiliary Reid, Hume service provider
Jane Rajoie, VCASP
Jane Lawless, ABI:STR family member
Janine, Inability Possability Group
Jenny Boulton, VCASP
Joy Gadd, Upper Murray Health Service
Juan Bailey, VCASP
Julie Fleming, VCASP
Karen Honson, Young People in Nursing Homes Coalition

Kate Boyle, VCASP
Katy Fielding, Hospital Demand Management Strategy, DHS
Kay Jenkinson, ABI:STR family member
Kemal Cevikaglu, VCASP
Kerry Spiby, Melbourne City Mission
Kerry Stringer, Disability Services, DHS
Kris Hopkins, Royal Talbot
Kylie Franklin, Care Connect
Lea, Inability Possability Group
Leanne Healey, Occupational Therapist
Lea Kewish, Occupational Therapist
Len Britton, Southern Health
Len Stevens, Melbourne City Mission
Libby Calloway, Occupational Therapist
Loretta, Hume service provider
Maree Dyson, TAC
Marg Darcy, Physio
Margaret Fouche, Care Connect
Margaret, ABI:STR family member
Mark Zentgraf, Melbourne Health. Gardenview
Mary Hoodless, Upper Murray Health Service
Mary Nolan, Inability Possability
Mary Rice, ABI:STR family member
Megan Gunning, Care Connect
Megan, Inability Possability Group
Melissa Sanders-Ward, ABI:STR family member
Merrilee Cox, CEO Headway; VCASP
Michael Bladen, ARBIAS
Michael Hedderman, Hume Consultation
Michelle Brackin, TAC
Michelle French, Occupational Therapist
Michelle O'Sullivan, TAC
Miriam Segon-Fisher, Disability Services, DHS
Moirra Thomas, ABI:STR family member
Murray Gee, ABI:STR Manager, Southern Health
Nola Howe, Hume Region Consultation
Noleen Ling, ABI:STR family member
Occupational Therapists ABI Special Interest Group
Paula Dimakos, Gardenview
Professor Peter Disler, Melbourne Health
Professor Stephen Davis, Royal Melbourne Hospital
Robert King, Brain Foundation
Robyn Trebilco, Southern Health
Robyn Batten, Southern Health
Simon Moy, Continuing Care, DHS
Sonia Berton, VCASP
Sophie Argiriou, Bunurong Community Care,
Sue Cox, DASSI
Sue Sloan, VBIRA
Susan Grey, Care Connect
Suzanne Brown, VCASP
Takelsh Tan, VCASP
Tess Veitz, Young People in Nursing Homes Coalition
Tom Worsnop, Melbourne City Mission; VBIRA; Young People in Nursing Homes Coalition; VCASP
Tracey Littlejohn, VBIRA
Vicki Fitzpatrick, family member
Virginia Hartley, VCASP
Vittoria Mancini, Disability Services, DHS

List of People and Organisations that provided feedback on Draft Report March 2004

Family, Friends and Advocates

Moira Thomas
Inability Possability, Family and Friends Association
Merrilee Cox on behalf of Headway and Young People in Nursing Homes Consortium

Service Providers

Dr Mal Hopwood, Director, Brain Disorders Program, Royal Talbot Rehabilitation Hospital
Gloria Smith–Tappe, Senior Neuropsychologist, ABI Unit Royal Talbot Rehabilitation Hospital
Tom Worsnop, Victorian Coalition of ABI Service Providers (VCASP)
Barry Rawicki, Victorian Brain Injury Recovery Association Inc (VBIRA)
Janet Kearns, Occupational Therapist
Lynne Cooper, Occupational Therapist
Tracey Littlejohn, Speech Pathologist, Enable Therapy Services
Jenny Robson, Occupational Therapist, Enable Therapy Services
Irene Wilkinson, Physiotherapist, Enable Therapy Services

Case Management Agencies

Kerry Spibey, Melbourne City Mission
Margaret Fouche, Care Connect
Margaret Smythe, Brain Foundation

ABI:STR Program

Murray Gee
Annette King

Advisory Group

Francis Diver, Bayside Health
Catherine Thompson, DHS Aged Care Division
Brydie Quinn, DHS Continuing Care
Dr David Murphy, Bendigo Health
Assoc Professor Dr John Olver, Director Rehabilitation, Epworth and Caulfield General Medical Centre

End Notes

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