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Final Report Phase 3:
Evaluation of the Southern Grampians and
Glenelg Rehabilitation Program

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During Phase 3 of the evaluation, members of the SGG Rehabilitation Program Planning Committee included:

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Acronyms

ACAT/S	Aged Care Assessment Team/Service
ADL	Activities of Daily Living
AHA	Allied Health Assistant
BI	Barthel Index
BSW	Barwon South West
CACP	Community Aged Care Package
CEO	Chief Executive Officer
COPD	Chronic Obstructive Pulmonary Disease
CRC	Community Rehabilitation Program
DHS	Department of Human Services
DON	Director of Nursing
EFT	Equivalent Full Time
GEM	Geriatric Evaluation and Management
GP	General Practitioner
IT	Information Technology
LOS	Length of Stay
MMSE	Mini-Mental Status Examination
NARI	National Ageing Research Institute
NOF	Neck of Femur
NUM	Nurse Unit Manager
OT	Occupational Therapist
PC-PART	Personal Care - Participation Assessment Resource Tool
PDHS	Portland District Health Service
ROAST	Rural Organisation of Acute Stroke Teams
SGG	Southern Grampians Glenelg
SWHS	South West Health Service (includes Warrnambool Hospital)
TKR/THR	Total Knee Replacement/Total Hip Replacement
VAED	Victorian Admitted Episodes Dataset
VMO	Visiting Medical Officer
WDHS	Western District Health Service
WEIS	Weighted Inlier Equivalent Separation
WHO-ICF	World Health Organisation's International Classification of Functioning, Disability and Health

1. Introduction

This report presents the findings from the third and final phase of the evaluation of the Southern Grampians Glenelg (SGG) Rehabilitation Program. This final phase is a summative evaluation aiming to determine whether the Program has been implemented as planned and if implementation has achieved the desired outcomes.

The first, formative phase of the evaluation was conducted from January to June 2004, prior to the Rehabilitation Program's implementation in June 2004. The aims of the formative evaluation were to (i) determine the current status of rehabilitation services in the SGG district, (ii) identify possible weaknesses in the Program design, (iii) gauge key stakeholders perceptions and expectations of the Program and their role within it, and (iv) develop an evaluation framework and data measurement approaches. The "Report of Phase 1 of the Evaluation of the Southern Grampians and Glenelg Rehabilitation Program" (Dow & Nankervis, 2004) summarises the methods and findings from this phase. It is available on the National Ageing Research Institute's (NARI) website: http://www.nari.unimelb.edu.au/research/service_hcr.htm

The second phase, the process evaluation, was conducted from September 2004 to June 2005. This phase focused on monitoring and supporting the early implementation of the Rehabilitation Program by the five Health Services. An interactive, action research approach was adopted to support staff to share ideas, identify areas for improvement and to plan, implement and review actions to address these. A report of Phase 2 (Dow & Nankervis, 2005) has been completed and is also available on the NARI website.

1.1 The SGG Rehabilitation Program

Within the SGG district, five Health Services were located across six sites: Heywood, Portland, Coleraine, Casterton, Hamilton and Penshurst¹. The model for the SGG Rehabilitation Program was developed through a consultative process involving these five participating district health services and the Barwon region office of the Department of Human Services (DHS). The Rehabilitation Program was established with the aim of providing a viable, accessible, flexible and sustainable rehabilitation program for the people of the SGG district. It was intended that this would occur through integration of inpatient, ambulatory and primary care services, shared workforce and training initiatives and integrated allied health workforce planning and recruitment across the six sites. Multiple entry and exit points through the continuum of care and flexibility in the mode and the locality of service delivery across the six sites were also intended features of the new Program.

A Rehabilitation Program Project Leader, located at the Portland District Health Service (PDHS) and the Western District Health Service (WDHS) in Hamilton, oversees the Program. The Project Leader is responsible for assessing all rehabilitation clients on admission to the Program as well as case management for all these clients. An occupational therapist is also dedicated to the Program and works across the same two sites. At all sites the Director of Nursing is responsible for Rehabilitation Program management at that site. Two Medical Leaders, one located at PDHS and one at WDHS, oversee the medical care of

¹ Since commencement of the Rehabilitation Program, this changed to four Health Services with Coleraine becoming part of the Western District Health Service (WDHS).

rehabilitation clients. Three beds at WDHS are dedicated to rehabilitation and two beds at PDHS can be allocated to rehabilitation clients as required. Allied health and inpatient nursing staff at each health service are responsible for the delivery of rehabilitation care. General Practitioners in the SGG district have Visiting Medical Officer (VMO) rights within the hospitals and are responsible for the medical management of their patients in the community, playing an important role in the rehabilitative process.

The Rehabilitation Program was developed and is overseen by a Planning Committee consisting of representatives of the SGG Health Services (Directors of Nursing and Chief Executive Officers/Hospital Managers), the Rehabilitation Project Leader, the Occupational Therapist, the two Medical Leaders and staff from the Barwon South West (BSW) DHS.

The evaluation of the Program has been undertaken by the National Ageing Research Institute (NARI) for the DHS. The work undertaken by NARI has been overseen by a reference group consisting of representatives from DHS (Barwon-South Western Region and Central Office), from the Rehabilitation Program and from organisations specialising in rehabilitation and geriatric medicine.

1.2 Evaluation Questions

The three phases of the evaluation aimed to answer the following questions:

1. What are the expectations of the key stakeholders (DHS, local health service providers, clients and carers) of the Rehabilitation Program?
2. Has the Program been implemented as planned?
3. What elements of the Program have been modified to achieve the intended outcomes?
4. What are the main things that hinder or help the implementation of the Program?
5. What are the critical success factors in the SGG Rehabilitation Program that lead to effective rehabilitative care?
6. What facilitates local linkages and cooperation in monitoring clients who have a progressive or chronic recurring condition that needs bursts of rehabilitation over a long period of time?
7. Are the participating Health Care Services working in a collaborative way to provide effective, accessible rehabilitation to the targeted population?
8. Has this Rehabilitation Program improved the health status and quality of life of the clients and carers?
9. Are clients, carers and practitioners satisfied with the service?
10. Has the Program resulted in improved consumer access to sub-acute rehabilitation services where they most need them?

The first phase of the evaluation clarified expectations of the key stakeholders of the Rehabilitation Program (question 1, above) to identify and correct program design weaknesses, and to provide the framework for the second phase (process evaluation). The process evaluation focused primarily on questions 2-5 and 7. The final phase (summative evaluation) addresses questions 6, 8, 9 and 10.

1.3 Key findings from Phase 1 and 2

1.3.1 Phase 1

Phase 1 included a review of existing rehabilitation practice in the region prior to the development of the Rehabilitation Program. If clients were considered in need of

rehabilitation or allied health services prior to the development of the Rehabilitation Program, their needs were assessed within the local Health Service by each discipline as required. Depending on their rehabilitation needs, they were either managed within the hospital (with allied health services according to their needs and availability of staff) or referred to an out of area hospital such as South-West Health Service in Warrnambool. Clients with specialised needs were referred to regional or metropolitan hospitals such as Ballarat Health Services, Epworth or Grace McKellar.

Allied health services provided in local hospitals were considered high quality services with good integration with the patient's GP and community services. However, there was a lack of formal processes for referral and assessment, rehabilitation planning and co-ordination, case management and expertise in specific streams of rehabilitation (such as stroke or hip rehabilitation). It was also difficult to access beds in the Warrnambool Rehabilitation Program.

Staff perceived that the new Rehabilitation Program would:

- coordinate and formalise what was currently happening in inpatient settings (i.e. case management and protocols such as admission criteria would be established).
- introduce a rehabilitation culture within the hospitals.
- improve integration between hospital and community services.
- provide rehabilitation within the local region.
- lead to development of data systems to track clients, client outcomes and services provided.

The new program was seen as having the potential to benefit clients and their families by providing rehabilitation services closer to home, a more coordinated approach with a rehabilitation plan based on their goals, case management and continuity of care from hospital to home and better community access to rehabilitation. Perceived opportunities for staff included improved job satisfaction with greater follow-up of clients in the community, improved communication between hospital and community services and opportunities to improve rehabilitation skills.

Stakeholders also raised possible concerns and questions in relation to the establishment of the Rehabilitation Program, including:

- lack of staff with rehabilitation experience
- concerns of GPs that they might be excluded from care planning and medical management during the inpatient rehabilitation phase
- concerns from the smaller hospital Rehabilitation Managers that they would need consent from one of the two Medical Leaders at the larger sites to admit patients into their hospital for rehabilitation
- concerns from allied health staff about the additional demands on their time to implement the Program
- concerns from nurses about the lack of accepted nurse to patient ratio for rehabilitation and that they would have to take on more allied health tasks with patients in rehabilitation beds
- lack of rehabilitation culture in hospitals and the community
- capacity of the new Program was too small and wouldn't make any difference

- uncertainty about home based rehabilitation and whether there was adequate funding to support it²
- how clients with chronic conditions would access the service
- what the consequences would be from the two Medical Leaders interpreting their roles differently³.

1.3.2 Phase 2:

Phase 2 of the evaluation identified areas that were working well and factors that facilitated practice change. Things that were considered to be working well included:

- GPs and VMOs were aware of the Program and making referrals
- training had been provided leading to increased confidence amongst staff (e.g. rehabilitation nursing training for nurses and transfer of allied health skills to nursing staff and allied health assistants where appropriate)
- common assessment instruments were being used (Barthel Index and Personal Care - Participation Assessment Resource Tool, PC-PART)
- in the larger hospitals there had been changes such as:
 - including clients and families through family meetings
 - encouragement of clients to be more involved in their care and to be more independent
 - better coordinated care with care planning and management and a stronger focus on future care options, good communication within the team and with referring GPs
- having a dedicated and enthusiastic Project Leader
- Barthel Index (BI) scores indicated that clients admitted to the SGG Rehabilitation Program had poorer function on admission compared with the State average, and had a higher average increase on the BI during rehabilitation compared with the State average. SGG clients also had a shorter average length of stay than the Victorian average
- overall satisfaction with the service reported by clients was high.

Issues and barriers that were raised included:

- smaller sites had not received referrals and had not had the opportunity to put protocols in practice. This prevented protocols such as using outcome measures to be routinely used and allow staff to become confident in using them
- smaller sites also identified the need for improved communication, for example, having a client held record that could be added to by health professionals in any location
- allied health staff were still concerned that they did not have the capacity to provide home based therapy
- some GPs did not perceive the Program to be necessary. There was a perceived need to increase GP awareness and involvement in the Program.

² Stakeholders were unclear about what the home-based component of this Program would consist of (e.g. full substitution of rehabilitation into the home, home visits from nursing and allied health staff, Post Acute Care type services for rehabilitation clients, or clients based at home accessing hospital or centre based allied health and nursing services).

³ In WDHS the Medical Leader saw his role as having overall medical responsibility of inpatient Rehabilitation Program clients but having minimal involvement with community based clients. The PDHS Medical Leader saw his role as gatekeeper to accessing the Program as well as providing consultancy for both inpatient and community Rehabilitation Program clients.

- there was a perceived need to improve client and carer involvement in goal setting and care planning. While clinicians discussed goals with clients on an individual basis, a formal process was needed for this discussion to occur within the team
- recruitment and retention of allied health staff was an ongoing issue
- there was a perceived need to clarify and promote the admission criteria for the Rehabilitation Program, and in PDHS to introduce priority criteria
- there was a need to formalise regular and timely case reviews with the rehabilitation team
- there was still some resistance to change although there were signs of progress towards a rehabilitation culture
- further work was needed to improve pathways from hospital to home including follow-up of clients at home and transferring information from rehabilitation ward to community rehabilitation centre
- nurses were finding having a mixed caseload of acute and rehabilitation patients difficult and found that they needed to prioritise acute patients
- although generally satisfied with the Program, there were some areas where clients and carers reported lower satisfaction including amount of therapy and follow-up after the Program for PDHS clients and provision of information about illness, and allowances and services for WDHS clients.

1.4 Aim and Objectives of Phase 3

The aims and objectives of Phase 3 of the evaluation are described below.

1.4.1 Aim

To provide a summative evaluation of the implementation of a new model of rehabilitation service integration and delivery within the Southern Grampians Glenelg district.

1.4.2 Objectives

1. To determine whether the Program has been implemented as planned:
 - Has the service redevelopment been completed – according to the revised Program plan developed by the SGG Planning Committee in July 2004?
2. To assess the effectiveness of the Program in achieving its' stated aims, which were:
 - improving consumer access to sub-acute rehabilitation services where they most need them;
 - achieving consumer utilisation;
 - improving health outcomes for clients;
 - improving user satisfaction – clients, carers, clinicians and managers.
3. To identify and document the main factors that hindered and/or helped in the implementation of the Program.
4. To make recommendations about the potential application of this Program in other rural areas.

1.5 Key Activities

The evaluation has involved a range of data collection strategies and consultation with a broad range of key stakeholders. Table 1 summarises the data sources and broad collection strategies in each phase. The evaluation has involved consultation with the Rehabilitation Program's Planning Committee, nursing and allied health staff involved in the Program, services/GPs who might refer clients to the Program, and potential or actual rehabilitation

clients and their carers. Various Health Service and Rehabilitation Program data sources have also been utilised.

Some of the strategies have been repeated to provide comparisons and measure changes over time. For example, Health Service data, such as type and number of admissions to the Rehabilitation Program were collected in Phase 2 (the early stages of the Program) and then again in Phase 3 to compare whether there had been any change in the admission patterns as the Program has settled. Rehabilitation staff in the Planning Committee were interviewed in all three phases to monitor their perceptions and expectations of the Program before it commenced, after it first commenced, and then again after the Program settled.

Table 1: Consultation strategies in the three phases of the evaluation of the SGG Rehabilitation Program.

Data source	Phase 1: Jan-Jun '04	Phase 2: Jun '04-Jun '05	Phase 3: Jul '05-Dec '06
Consultation with Planning Committee	<ul style="list-style-type: none"> • Interviews with Health Services' Staff • Ongoing reporting of evaluation progress 	<ul style="list-style-type: none"> • Interviews with Health Services' Staff • Teleconferences • Ongoing reporting of evaluation progress 	<ul style="list-style-type: none"> • Interviews with Health Services' Staff • Ongoing reporting of evaluation progress
Consultation with allied health and nursing staff involved in the Rehabilitation Program (including Project Leader)	<ul style="list-style-type: none"> • Survey • Provision of support and information to project leader as required 	<ul style="list-style-type: none"> • Action research groups • Survey 	<ul style="list-style-type: none"> • Survey
Consultation with clients and families	<ul style="list-style-type: none"> • Interviews with Health Service patients in SGG region with a condition responsive to rehabilitation 	<ul style="list-style-type: none"> • Satisfaction survey 	<ul style="list-style-type: none"> • Satisfaction survey • Interviews with Health Service patients in SGG region with a condition responsive to rehabilitation
Consultation with referring agencies/GPs	<ul style="list-style-type: none"> • Interviews 	<ul style="list-style-type: none"> • Interviews 	<ul style="list-style-type: none"> • Survey
Health Service data collection	<ul style="list-style-type: none"> • VAED 	<ul style="list-style-type: none"> • VAED • Program data 	<ul style="list-style-type: none"> • VAED • Program data

The following five chapters of this report present the findings from the data collected from Phase 3 of the evaluation. Chapters 2-6 of this report provide summaries of the findings according to the various data sources shown in Table 1 (i.e. the Planning Committee; allied health and nursing staff involved in the Rehabilitation Program; clients and families; referring agencies/GPs; Health Service data collection). Chapter 7 provides a summary of

Phase 3 and also provides an overview of the evaluation as a whole and recommendations including recommendations for other rural regions that may be considering developing a similar rehabilitation program model.

2. Consultation with Planning Committee

2.1 Data Collection

Feedback was obtained from members of the planning committee including the Rehabilitation Program Project Leader, the Occupational Therapist dedicated to the Rehabilitation Program, the five Rehabilitation Program managers (Director of Nursing from each site), the two medical leaders, and CEOs/Hospital Managers from Casterton, WDHS, Heywood and PDHS. In total, ten face-to-face interviews were conducted and one set of notes were provided by a CEO who was unavailable to be interviewed. Two interviews were conducted with two staff present including one where a nurse unit manager undertook a joint interview with a DON.

Interviews topics covered included:

- impact of the Rehabilitation Program on workloads
- partnerships and referral processes with other agencies/GPs
- accessibility of the Program
- resources and support for the Program including availability of medical and allied health staff, equipment etc
- future of the Program and
- recommendations for other rural regions wanting to establish a similar type of program.

The interview questions are included as Appendix 1. Other feedback regarding the Program was obtained through attendance at regional Planning Committee meetings.

2.2 Findings

2.2.1 Referral processes and access to the Program

Participants reported that GPs were generally aware of the Rehabilitation Program and were making referrals to it. It was considered important that GPs were involved as they were able to provide important information about clients and were sometimes aware of issues that indicated that the client was not suitable for rehabilitation. One GP, however, did not make referrals to the Program and was a barrier to access for their patients. At the time of the phase 3 interviews, surgeons were more routinely referring to the Program than in the earlier stages of the Program.

For smaller hospitals in the region the Program was reported to have had a limited impact and there were few referrals from smaller sites to rehabilitation beds at PDHS and WDHS. The smaller hospitals viewed their role as providing community based and ambulatory care support and stabilization of clients. If intensive time-specific rehabilitation was required, their role was to refer to the Rehabilitation Program for admission to inpatient beds. There was mixed feedback about whether or not this was an issue. Some indicated that the smaller hospitals needed to see some positive outcomes for their clients before they would readily refer clients. Some reported that rehabilitation staff needed to be physically attending the smaller sites to keep the Program in their minds. Alternatively, it was suggested that someone in each hospital needed to be a driver of the Program as the DON did not always have capacity on top of their existing workloads to promote the Program. Heywood hospital did not have much involvement and indicated that the Program would not have a significant impact on their service. It was reported that Heywood hospital patients who had been

admitted to the Program had usually been admitted via another hospital⁴. Smaller hospitals did acknowledge the need for rehabilitation beds in the region and even if they rarely needed to make referrals, they felt that it was important that they could make referrals if the need arose. There were some discrepancies between interviewees in relation to the number of referrals being made and whether referrals were being made when needed. Coleraine Hospital becoming part of WDHS was reported by WDHS staff as fostering collaboration between Coleraine and Hamilton Base Hospitals and improving referral pathways between the two.

2.2.2 Enablers

A number of factors were identified as facilitating the success of the Rehabilitation Program.

Support from key stakeholders

The most frequently cited enabler was having an enthusiastic and committed Program leader from the commencement of the Program. Introduction of the Program required many role changes and left some allied health staff feeling isolated from the Program with little control. The Program leader managed this well and brought everyone together. Having a sub-regional Program leader and OT also enhanced consistency in protocols and approaches.

Steering Committee meetings have promoted partnerships between sub-regional health services. Having two medical officers involved in the Program who were supportive and promoted a team approach to care has been crucial. GPs generally have good communication with the medical leaders. The Program has been effective in getting GPs involved in case management for individual patients.

Promotion of the Program

Promotion of the Program through a variety of strategies was also important. Strategies included:

- radio and newspaper articles
- presentations to health services
- Program information on the Health Services' Intranet
- reports delivered through head of departments
- working group meeting minutes disseminated to all health services
- SGG rehabilitation brochure and
- contact with medical officers in the sub-region.

Mentoring and Inter-hospital visits to established rehabilitation programs

Staff indicated that visiting other hospitals and talking to other experienced rehabilitation staff was vital to their professional development and to the success of the Rehabilitation Program.

Involvement in the ROAST Program

Involvement in the Rural Organisation of Acute Stroke Teams (ROAST) was seen as useful for skill development in the Rehabilitation Program and moving towards self management. ROAST is a multi-centred collaborative project that includes site visits, email, a website and telephone calls to allow networking and exchanging of ideas regarding the care of stroke and the formation of successful stroke units in rural areas. ROAST aims to stimulate continuous professional development. Involvement in the ROAST Program provided support for

⁴ Findings from Phase 2 of the evaluation found that there were cases where clients were transferred from inpatient rehabilitation in Portland to Heywood for continuing care, inconsistent with the comment made here.”

implementing dysphagia training for nurses due to the lack of speech pathologists at the WDHS. The success of the ROAST Program was also attributed in part to the existence of the Rehabilitation Program.

Involvement in the external evaluation and DHS support

Involvement in the external evaluation was reported as having some positive impact on program development. For example, in Phase 2 of the evaluation, action research meetings facilitated by NARI researchers raised issues that may not have been identified if the meetings had been facilitated by someone working internally on the Program. At the commencement of the Rehabilitation Program, staff were attending working group meetings but these ceased after the Program was underway. Involvement in the action research meetings in Phase 2 demonstrated the need for working group meetings to continue on an ongoing basis. DHS support was also seen as extremely positive.

Coleraine Hospital becoming part of WDHS

Referrals and networks between Coleraine Hospital and Hamilton Base Hospital were facilitated through Coleraine Hospital becoming part of the WDHS. It was also perceived that the Rehabilitation Program helped bring the two services closer together. Coleraine Hospital benefited from resources and expertise provided by the Hamilton Base Hospital, in particular in the areas of occupational therapy, physiotherapy and speech therapy.

2.2.3 Obstacles

There were few obstacles raised in relation to the implementation of the Rehabilitation Program. Most barriers related to (i) resource availability; (ii) attracting staff with appropriate skills in rural areas; and (iii) staff resistance to change.

Funding uncertainty

Many staff were concerned about whether funding for the Program would continue and felt that uncertainty about this had been an obstacle for getting the Program running. Some reported concerns about implementing an intensive rehabilitation program for the same costs as acute care.

Not having dedicated rehabilitation beds in PDHS

Although it was reported that not having specific beds allocated for rehabilitation in Portland was an obstacle for nursing staff, it was also seen as positive as it allowed greater flexibility in service provision.

Unmet demand for services

There was evidence of unmet demand for services with Hamilton Base Hospital having an average of two people on the waiting list at all times for inpatient rehabilitation, with a waiting period of up to one week. Demand for services outside the SGG also had an impact on client care. For example, lengthy waiting times for limb replacements in Ballarat meant that patients have to travel back and forth for surgery in Ballarat, rehabilitation in Hamilton, limb fitting in Ballarat and then further rehabilitation in Hamilton after the limb has settled. There was also limited availability of allied health services in the home. Community rehabilitation was generally provided in the hospital.

Some indicated concerns about the lack of access to longer-term rehabilitation for those over 80 years of age.

Difficulty recruiting some disciplines

Although the Program was seen as instrumental in increasing recruitment of allied health staff, there were still a number of disciplines where additional staff were required including podiatry, geriatrics, neuropsychology, psychiatry/psychology, speech pathology at WDHS and radiography in PDHS. A specific need was raised for psychological testing for depression for people post-stroke and amputation.

High OT workload

The workload of the dedicated OT was raised as an issue. The OT needed to be very organised to manage the workload across five sites (although the majority of her work was at PDHS and WDHS). There was a perception that the OT work was “spread too thinly” and created a barrier to providing intensive rehabilitation. There was also lack of clinical support, particularly for a relatively new graduate working in the position. Although PDHS and WDHS both had two days per week dedicated OT, in reality Portland lost four hours of their two days due to travel time as the OT was based in Hamilton. The Allied Health Assistant’s (AHA) role was vital for maintaining OT work throughout the week. During Phase 3 of the Rehabilitation Program evaluation, the sub-regional OT resigned from this position and a new approach was being trialled. PDHS is trying to recruit a full time OT with 0.2 EFT of their role being covered by the Rehabilitation Program. This will enable PDHS to regain the four hours of service previously lost through travel time.

Heywood had employed an OT to carry out any occupational therapy required in Heywood Hospital which has reduced the need for the Rehabilitation Program OT to visit this site.

Staff attitudes and barriers to skill development

Staff attitudes to change and a lack of a rehabilitation culture in the hospital and in the community were often raised as an obstacle to establishing a rehabilitation program. There were a number of barriers to encouraging staff to undertake training including a larger number of areas of expertise than number of staff available to be trained. This was considered a particular issue in the smaller hospitals where there were fewer staff available to specialise in specific areas. Learning to use assessment instruments that were rarely used was also a challenge for staff in smaller hospitals. It was felt that staff needed to use them on a regular basis to become adept at using them. However, there were many reports that attitudes were changing and care was shifting more towards getting patients moving and independent in hospital.

Lack of equipment and resources

Staff did not generally raise lack of equipment as a barrier to the Program. When prompted a few suggestions were made including having better OT equipment such as walking and lifting apparatus and more up to date equipment. The inpatient units were both reported to need more comprehensive ADL areas. Staff at Hamilton Base Hospital suggested a custom-built inpatient rehabilitation unit was required to ensure that all facilities were located in close proximity. The proposed unit would include an assisted living skills kitchen, an activity area and an outside therapy area. Lack of community transport was also raised as a barrier for clients, particularly for attending follow-up sessions.

Placement in residential care

There was a perception amongst a number of respondents that clients from the smaller hospitals were too readily admitted to residential aged care without trying other community-based supports such as Community Aged Care Packages (CACP). One staff member indicated that this was due to relatives living in Melbourne who felt less concerned about

their parent if they knew they were being cared for in a residential setting rather than at home. Another indicated it was due to a lack of community services, particularly CACPs. This was considered a barrier to rehabilitation as clients were admitted to residential care without attempting to improve function and independence so that the person could return to their home. The need to keep residential aged care beds full was also considered an obstacle to promoting rehabilitation.

2.2.4 Positive outcomes of the Program

The Program was described as having a range of benefits for clients and family members.

Enhancing provision of client centred care

The Program promoted client empowerment through client centred goal setting. Family meetings were introduced where issues such as level of function required for the client to go home were discussed. The PC-PART assisted in establishing what was important to the client and therefore assisted client centred goal setting. Primary carers are involved in careplanning, have access to education and their concerns and goals are taken into consideration. The more coordinated approach to care meant that clients had a careplan and knew what is expected of them and what to expect of the team. For planned orthopaedic surgery, clients were educated prior to admission about rehabilitation, including the importance of diet and medications. Staff reported that the Rehabilitation Program has kept “local people local” and has improved access for family and friends by having rehabilitation provided in a closer hospital.

Team approach and enhanced communication

The team approach was reported to enhance communication across disciplines improving awareness of broader issues for medical staff and therefore client outcomes. Case management has led to better patient and carer advocacy.

Improving discharge planning and reduced lengths of stay

Discharge planning was reported to be more effective as Program staff had better local knowledge of services and their limitations. This has possibly led to better suitability of discharge location as well as reduced residential aged care admissions, reduced hospital length of stay and reduced unplanned readmissions.

Improving skill development, recruitment and retention of staff

The Program has also facilitated recruitment and retention of allied health staff as it provides greater diversity in their work. Employing an AHA in Portland has assisted the OT to manage her workload and has also led to a more coordinated approach to the Community Rehabilitation Program⁵. The Rehabilitation Program has provided additional education opportunities for staff. The following training was undertaken:

- thirty-two staff from all disciplines attended a two day program at the McKellar Centre in Geelong
- seven nurses undertook a post graduate certificate in rehabilitation through Ballarat University
- eight nurses completed an introduction to rehabilitation and case management at LaTrobe University
- one OT completed a post graduate unit in rehabilitation

⁵ The Community Rehabilitation Program (CRC) established at the PDHS was not funded as a Community Rehabilitation Centre. It was funded through redeploying rehabilitation funds into a program with a model similar to a CRC.

- ten nurses completed a three day dysphagia training course
- stroke seminars were attended by numerous staff from a variety of services and organisations
- twenty-four nurses completed a foot care course
- One Division 2 nurse completed an AHA course

As with any new program requiring a change in routine practice, there have been obstacles to establishing a rehabilitation culture. However, there is also evidence of practice changing and a new rehabilitation culture forming. For example, there have been increases in referrals to the Program, changing attitudes of nursing staff in regard to where inpatient rehabilitation beds are located, and the Rehabilitation Program has been included in organisational strategic planning reports.

Improving resource sharing across sites

It was reported that the Program has been instrumental in bringing hospitals across the region closer together, in addition to sharing resources and services such as payroll management and workforce strategies. Having one manager across different sites has reduced duplication of documents, policy and assessment. Strategies that work in one organisation can be shared with another organisation. Links between acute and community rehabilitation have also been improved.

2.2.5 Future challenges for the Program

Various challenges were identified for the future of the Rehabilitation Program.

Recruitment and retention of skilled staff

Ongoing recruitment and retention of appropriately skilled staff was a commonly reported obstacle for the Program. Providing ongoing training, mentoring and professional support were also major issues. Concerns were raised about replacing medical leaders and nursing staff who were approaching retirement.

Ongoing promotion of the Program and strengthening the rehabilitation culture

Ongoing promotion of the Program and entrenching a rehabilitation culture within hospitals and the broader community were also future challenges for the Program, along with further developing partnerships across hospitals in the SGG. One respondent suggested implementing a SGG regional plan to foster partnerships across the region.

Managing future needs of the SGG population

The need for the service to grow as the population ages was also acknowledged along with improving access and outreach for those who are more isolated in the community. Respondents wanted to see further development of chronic disease self management programs with closer links to the Rehabilitation Program, as well as growth in community based rehabilitation, including rehabilitation in the home and funding for a Community Rehabilitation Centre in Portland. A respondent from one of the smaller hospitals reported that their hospital's would become more involved in the Program as the focus of it shifted towards community rehabilitation:

Once this initial program of establishing bed-based services is completed, as a smaller hospital in the sub-region we see it as one of our on-going and important roles to increase resources and levels of service provision into the community for rehabilitation and ambulatory care support.

Having only a three-bed unit at WDHS was considered insufficient as it was not enough beds to have dedicated nursing staff. Nurses therefore had competing demands in the acute wards where patients were not medically stable. It was recommended that a six-bed unit be built which could combine Geriatric Evaluation and Management (GEM) and rehabilitation (i.e. 3-4 beds for rehabilitation and 2-3 beds for GEM). The high demand for the service and waiting list indicated the need for additional access to rehabilitation beds. This would enable nursing staff to be dedicated to the GEM/rehabilitation unit. It would also allow for more time to be allocated caring for stroke patients. Current short lengths of stay in the rehabilitation unit were considered to partly reflect the high demand for beds and a shorter length of rehabilitation than was ideal for stroke patients. There was no access to GEM beds in the region and this was raised as an unmet demand that needed to be addressed. Ideally the unit would be custom built with close proximity to all relevant facilities.

Undertake an economic evaluation

The current funding received by Hamilton Base Hospital was considered inadequate as it usually ran over Weighted Inlier Equivalent Separation (WEIS) targets. It was reported that to run a six bed unit at 90% occupancy for \$406 per bed day would cost over \$800,000 just for inpatient rehabilitation in Hamilton, more than current funding for the SGG Rehabilitation Program. It was recommended that an economic evaluation of the Program be undertaken to accurately assess the resources required for the Program to run effectively.

Further develop IT systems

Information technology was considered an area where further development was required and could assist the Program to run more efficiently, for example, virtual assessments and professional support and mentoring with health professionals at other sites.

Implementing an appropriate cognitive assessment tool

The need to identify and implement an appropriate cognitive assessment tool to be incorporated into the suite of standard assessment tools used was recognised. The Mini-Mental Status Examination (MMSE) was used but was not seen as comprehensive enough for people with specific cognitive impairment issues.

2.2.6 Recommendations for other rural regions wanting to establish a rehabilitation program

A number of suggestions were made for other regions wanting to establish a similar program. Most of the suggestions related to managing culture change and improving acceptance amongst staff and the community. It was seen as essential to have a champion for the Program in each hospital as well as a motivated and enthusiastic program manager and support from management. Keeping all stakeholders informed from the beginning and on an ongoing basis was important and this should be facilitated through regular working group meetings. The model should be flexible to adapt to the different needs and cultures within each hospital. Having staff with rehabilitation skills and providing various avenues for staff to access training was also seen as important. Promotion of the program throughout the community, including Aged Care Assessment Teams (ACAT) and local councils, was considered vital and needed to be conducted on an ongoing basis, not just at the commencement of the program. An external evaluation was seen as assisting in providing an alternative perspective and encouraging staff to reflect on the program. One respondent suggested that it would be better to secure initial funding for 3-4 years rather than 1-2 years. One to two years is very little time to get the program running and to provide evidence of effectiveness for ongoing funding. Having 4-6 months to set up procedures such as policies, protocols, guidelines and training before commencing the program would be useful.

2.3 Summary

Interviews with the planning committee identified a range of barriers and enablers to the implementation of the Program and recommendations for other rural regions considering establishing a similar program. Key enablers for the Program's success included having a dedicated and enthusiastic leader as well as an OT who both work across the region. This has assisted in the development of consistent policies and protocols and has helped foster partnerships across hospitals. Support from the two medical leaders and their communication with GPs in the region has also been crucial. Keeping key stakeholders informed throughout the establishment and ongoing running of the Program has been vital and has supported the move towards a rehabilitation culture within the hospitals. Having dedicated rehabilitation beds located within the hospital appears to be a major facilitator for acceptance of the Rehabilitation Program and culture, where staff can see the benefits of the Program on a regular basis. There have been many reported benefits for clients including having rehabilitation closer to home, having a more coordinated approach to care, better discharge planning, reduced unplanned readmissions and more client and family involvement in care. Staff have also benefited through increased training opportunities. The Program has also been instrumental in attracting more allied health staff to the region. Some of the smaller hospitals, however, perceive the Program to have less relevance for their clientele. Future challenges for the Program include securing ongoing funding, maintaining an adequately skilled team of staff, continuing to promote the Program and meeting expected increased demand as the population ages. Other challenges include further developing rehabilitation services in the community and chronic disease self-management programs.

3. Consultation with allied health and nursing staff involved in the Rehabilitation Program

3.1 Data collection

A survey was distributed to all nursing and other allied health staff ($N=22$) in the SGG sub-region (See Appendix 2). The purpose of this survey was to gather feedback about the Rehabilitation Program from the point of view of staff who have been directly involved in the implementation of the Program. The survey consisted of nine questions. It was sent to 22 staff and returned by 14 staff, giving a 64% response rate.

Surveys were initially sent electronically, and after two weeks they were delivered by hand to those who had not responded to the initial request. Respondents were asked to mail the surveys to ensure confidentiality. Stamped envelopes were enclosed to encourage completion of the survey. Participants were followed up with two reminder emails.

There were six respondents from Hamilton, five from Portland, two from Penshurst and one who worked across Hamilton, Coleraine and Penshurst hospitals. The respondents included nurses, physiotherapists, social workers, dieticians, speech pathologists, nurse unit managers, and care co-ordinators. Out of 14 respondents, three were 'always' involved in the delivery of services to clients in the Rehabilitation Program, eight were 'regularly' involved, two were 'occasionally' involved and one was 'sometimes' involved in the delivery of services to clients.

3.2 Findings

3.2.1 Involvement in planning the implementation of the Rehabilitation Program

The majority (92%) of staff participants were involved in planning the implementation of the Program in varying degrees. Four of the 14 respondents were 'regularly' involved and eight respondents were 'occasionally' or 'sometimes' involved in planning the implementation of the Program. One participant was never involved in this process.

When asked, '*What, if any, changes do you think have occurred in the operation of rehabilitation service in the district as a result of new Rehabilitation Program*' most respondents expressed their satisfaction with the new Rehabilitation Program. In their view the new Rehabilitation Program had resulted in: (i) improved outcomes for individual clients, (ii) improved service co-ordination, (iii) improved assessment of individual needs, (iv) improved referrals, (v) improved confidence of the community, (vi) improved links between hospital and outpatients, (vii) better co-operation with departments, (viii) greater acceptance among GPs, physicians, surgeons and (ix) strengthened ties between departments, allied health and acute care. As summarised by one staff member:

'A major change to occur in the operation of acute service was the introduction of the Community Rehabilitation Program at Portland District Health Service.'

The fact that there was previously no Rehabilitation Program in the region was also stressed:

‘Before the current Rehabilitation Program, we had no form of rehabilitation in our area. Inpatients would have to be transferred to the nearest inpatient rehabilitation facility, which is one hour away. Inpatients and outpatients now have extensive rehabilitation options that can be adjusted to suit their needs.’

‘Previously there was no rehabilitation in the country. Now practitioners have a better understanding of the concept of the WHO’s ICF⁶ guidelines to address handicaps.’

A greater collaboration between hospital, allied health services and clients was one of the positive aspects of this Program:

‘Greater links between hospital and outpatient rehabilitation services and increased awareness of need for rehabilitation for clients in the region.’

Some staff were somewhat critical of the new Rehabilitation Program expressing doubts about communication and staff shortages:

‘Workload has increased significantly in an already stretched service and has created extra pressure. No efforts were made to adapt Program to suit local area therefore several communication break downs resulted in confusion with staff.’

3.2.2 Impact of the Rehabilitation Program

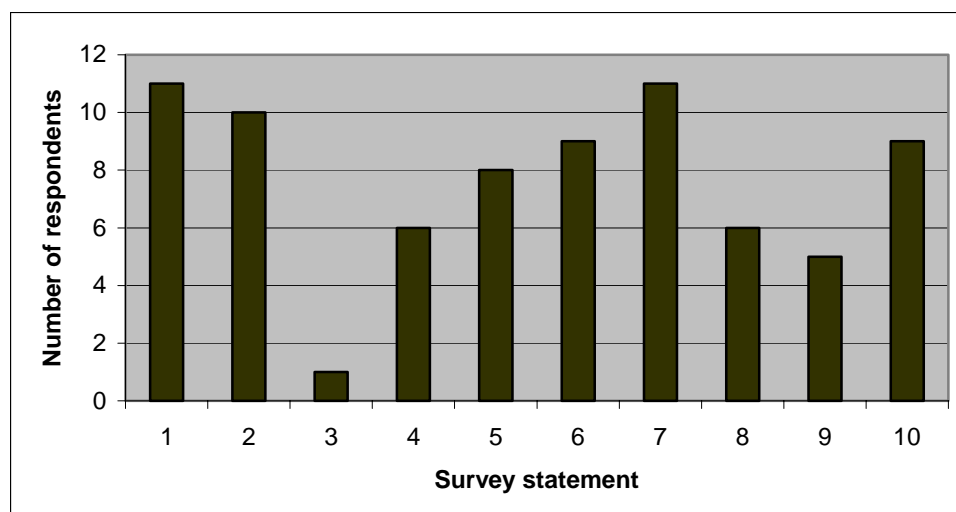
Participants were asked to express their agreement or disagreement with 10 statements associated with the Rehabilitation Program:

1. Improved communication between staff involved in the provision of rehabilitation services
2. Helped teamwork between rehabilitation staff
3. Not made any difference to my work
4. Improved my enjoyment of my work
5. Improved my ability to make appropriate referrals for rehabilitation
6. Increased my participation in multi disciplinary care planning and coordination
7. Increased client and carer involvement in setting goals for rehabilitation
8. Provided me with more opportunities for training and education
9. Improved my access to a medical consultant
10. Improved the health and well-being of patients under my care

The number of respondents who ‘strongly agreed’ or ‘agreed’ to each statement are summarised in Figure 1 below.

⁶ WHO ICF = World Health Organisation’s International Classification of Functioning, Disability and Health

Figure 1: Staff perceptions of the impact of the Program.



The majority of respondents indicated that the Program improved communication between staff, helped teamwork between rehabilitation staff, improved their ability to make appropriate referrals for rehabilitation, increased participation in multidisciplinary care planning and co-ordination, and increased client and carer involvement in setting goals for rehabilitation. Only one participant agreed that the Program did not make any difference to his/her work. Less than half (43%) of respondents agreed that the Program provided them with more opportunities for training and education.

Lack of staff and resources were concerns expressed by one respondent;

'The Program has potential to make a difference but needs to be better resourced and staffed full time.'

Communication and teamwork were also stressed:

'The Rehabilitation Program has not necessarily changed my work practice except for communication and team work.'

3.2.3 Enablers

Respondents were asked to comment on factors that enabled the health service to make workplace changes required for implementing the Rehabilitation Program. A range of factors were reported including:

- Provision of education and training:

'Education-visiting existing rehabilitation units in other areas.'

'Staff familiar with rehabilitation in other places (previous experience to learn from).'

- Having a capable Program manager and effective guidelines were described as important features:

'Excellent Program manager, good guidelines in place.'

'Rehabilitation co-ordinator is very approachable and accessible.'

- Multidisciplinary input and teamwork were also important:

'Team approach and good multidisciplinary input.'

'Regular meetings with all professionals.'

- The employment of an allied health assistant was also recognised as an enabling factor:

'The hiring of an allied health assistant has helped in co-ordination of patient appointments.'

- Involving all staff in communication was also considered important:

'Improved communication involving all staff just not department heads of individual services.'

3.2.4 Obstacles

Respondents were also asked to comment on factors that hindered workplace changes. Staff identified limited staff as an obstacle:

'With limited individual staff, and relieving medical consultant not as effective as permanent doctor managing rehabilitation patients.'

Lack of information and support was reported as a barrier to implementing the Rehabilitation Program, for example:

'Lack of information/support from other staff, lack of resources i.e., all staff do not have IT services.'

Not having the rehabilitation separated from other units was cited as a barrier:

'Location of rehabilitation unit- should be separated from other units.'

'Location of rehabilitation unit in normal ward with no definition.'

Another respondent wrote:

'Not enough 'therapy' provided in patients' residential dwellings and distance driving to destination is a problem.'

There was also some evidence that there was still some staff resistance to the establishment of a rehabilitation culture within SGG hospitals:

'Negative attitude towards 'rehab'-perception that clients are no better off.'

'Staff, particularly senior ward staff attitude-still not always favourable.'

'Staff attitudes-not receptive to the Program initially.'

'All staff who are not involved in rehabilitation do not appreciate the Rehabilitation Program.'

Workplace disruptions and cancellations were also reported to be barriers:

'Workplace disruptions-closing ward-opening another.'

'Many meetings were promised to discuss Rehabilitation Program but all got cancelled.'

In response to the later comment, the Rehabilitation Program Leader reported that there had been working group meetings held at the two larger sites and emails were sent to staff at smaller sites inviting them to attend. Some meetings were cancelled but minutes from meetings that did occur were sent to rehabilitation working group members.

Limited support from some senior staff was also reported:

'Poor co-operation from medical unit manager.'

'Non supportive NUM⁷.'

3.2.5 Suggestions to help improve the Rehabilitation Program

Respondents were asked to identify what they thought would improve the Program. They made a number of suggestions to improve the rehabilitation service:

- Increase staff:

'A full time co-ordinator⁸ would be good.'

'Increased allied health staff.'

- Provide further opportunities for education and training:

'Continue education within the hospital and community about what rehabilitation can provide.'

'More education for non rehabilitation unit staff.'

'More awareness from management that rehabilitation unit is different to normal ward.'

'Include all staff/departments in setting up and writing guidelines and circulate to all prior to making available to all staff on website.'

- More equipment and funding support:

⁷ NUM-Nurse Unit Manager

⁸ The coordinator of the Program is employed in this role full time but across multiple sites. It appears that some staff believe that she is only part time as they do not see her at their hospital on a daily basis.

'More extensive physiotherapy equipment, i.e. walking machines, hydrotherapy pool.'

'More funding for areas such as Coleraine.'

'A good kitchen facility to make tea and coffee and meal preparation.'

- Better co-ordination of the service:

'Advertising of service for GPs.'

'Better co-ordination.'

'Referrals from other disciplines rather than just physiotherapy would help.'

- Some wanted to have access to additional beds and to remove gender mixes in rooms:

'More beds (single sex rooms).'

'Single rooms for patients or improved division among the sexes⁹.'

'More beds in rehabilitation unit including GEM beds.'

3.2.6 Recommendations for other rural regions wanting to establish a rehabilitation program

Respondents were asked to make some suggestions that need to be taken into account for other rural regions planning to implement a similar program. Many suggestions related to co-ordination, consultation and communication:

'Co-ordination needs to be full time rather than two days/week'

'More staff for constant daily programs and activities that will prepare for home and community life'

'Establish regular team meetings to enhance communication'

'Extensive consultation with existing services'

'Better communication between local GPs and health professionals'

'Regular rehabilitation meetings to determine rehabilitation goals for individual patients and to get an overview of the program'

'Formalised referral system that works in with pre-existing systems'

⁹ During Phase 3, a question was added to the client satisfaction survey asking about preferences in relation to single sexed or mixed rooms. Although findings from this revised version of the survey are not reported in this report, according to the Program Leader, results favour single-sex rooms. At least six people have refused rehabilitation due to mixed rooms, however, there have also been relationships formed between male and female clients who were initially reluctant to share.

Education and training were identified as important in the establishment of the Program:

'Involve all nursing staff and educate all staff on advantages of rehabilitation'

'Staffing experienced in rehabilitation'

'Visit and view and discuss with staff as many other places as possible to gain better ideas'

'Training allied professionals how to work with AHAs'

Other areas also need to ensure that they get commitment by staff and are able to promote effective teamwork:

'Team work is a necessity'

'Involving all staff for initial set up'

'Commitment from all staff to support the program'

'Inclusion of all staff/departments from planning stage onwards'

3.3 Summary

In summary, feedback about the Rehabilitation Program from 14 allied health and nursing staff, predominately from PDHS and the WDHS, was generally positive. All respondents except one reported being involved in the planning and implementation of the Program. Staff identified improved outcomes for clients including having access to rehabilitation closer to home and improvements in coordination of care, assessment and referrals. They also reported improved links between hospitals and between departments, allied health and acute care. Satisfaction was highest in relation to improved communication and teamwork, and increased client and carer involvement in goal setting. Training, peer support, visiting other sites that provided rehabilitation, a multidisciplinary approach, involvement of all staff, an approachable Program leader and provision of an allied health assistant were all considered enablers to the implementation of the Program. Obstacles to the Program included negative attitudes of staff towards rehabilitation and lack of support from middle management. One staff also reported lack of a full time coordinator as a barrier, however, the coordinator is employed in this role full time. Perhaps the respondent preferred to have a coordinator at their site on a full time basis. Disruptions such as opening and closing wards were also reported as an obstacle. The need for more equipment and facilities was reported including; IT access for more staff, kitchen facilities, designated areas for rehabilitation, preferably with gender specific rooms, more extensive physiotherapy equipment, and a hydrotherapy pool. Staff also reported that there was still a need to promote a rehabilitation culture, and that further training was required, particularly for non-rehabilitation staff. A small proportion of respondents mentioned negative aspects of the Program, including increased workloads and lack of communication. The employment of more staff was recommended. Recommendations made by staff for other regions planning to establish a similar program emphasised full time coordination, staff training, team work, involving all stakeholders in the planning stages, regular meetings and visiting other rehabilitation sites.

4. Consultation with Clients and their Families

There were two approaches through which feedback was sought from clients and their families. Face to face interviews, conducted by the NARI research team were undertaken with 20 people living in the SGG sub-region who had been admitted to any hospital in the 2005-06 financial year with a condition considered conducive to rehabilitation. This methodology replicated that used in Phase 1, prior to the implementation of the Rehabilitation Program. The second approach involved distributing a satisfaction survey to clients admitted to the Rehabilitation Program over the past 12 months. This approach was also used in the 2004-05 financial year and therefore enabled us to compare satisfaction of clients in the first year of the Rehabilitation Program with that of clients in the second year of the Program.

Section 4.1 reports findings from the interviews with 20 clients and their carers, Sections 4.2 and 4.3 examine satisfaction survey responses for clients admitted to the Rehabilitation Program at PDHS and WDHS respectively.

4.1 Interviews with SGG Rehabilitation Program clients and their families

4.1.1 Data Collection

Interviews were undertaken with clients and carers who lived in the SGG sub-region and had been admitted to an SGG hospital and/or South West Health Service (SWHS) in Warrnambool with a condition conducive to rehabilitation during the 2005-06 financial year. UR numbers were extracted from the VAED using the conditions and postcodes shown in Appendix 3 and 4. Health Information Managers at the relevant hospitals identified client details for each UR number and sent letters asking clients to take part in an interview. Clients who expressed an interest in participating were interviewed in their own homes with a carer present if the client and carer agreed. The aim of the interviews was to document clients' and carers' experiences about rehabilitation services since implementation of the new Rehabilitation Program.

4.1.2 Findings

A total of 19 interviews were completed with 20 clients and eight carers. Most carers were the client's spouse, although one client requested a health service advocate to be present and another had their parents present. One parent of this client had also received rehabilitation in the past 12 months. Eleven of the clients were male and nine were female. The average age of clients was 70 years, ranging from 36-88. Nine participants lived alone (five males and four females) and eight lived with their spouse. Three lived with their children, including one who also lived with their spouse. The diagnostic conditions and length of stay are included below in Table 2.

Table 2: Condition and length of stay of participants.

Condition	Length of stay
6 orthopaedic (5 TKR and 1 THR)	8-14 days
6 asthma	3-10 days
3 neurological	6 days to 4 months
5 diabetes related	1-5 days (including cataract surgery)

Eight clients had been admitted to Portland hospital, five to Hamilton Base Hospital and three to South West Health Service (SWHS) in Warrnambool. Another four clients had been admitted to two different hospitals, either Portland or Hamilton as well as either Casterton, Coleraine, Grace McKellar or Royal Melbourne Hospital. Most clients had one or two admissions in the 12-month period, with two having three admissions and one having twelve admissions.

Pre- and post-discharge planning

Most participants felt confident about returning home from hospital and felt that their home was well set up for their arrival home. Those who had planned admissions such as total knee replacements usually reported having had their home assessed and set up prior to being admitted for the operation.

Yes, the hospital set it up. So it was all ready. And a pole for the bed and then I got a chair for the shower and the toilet. They arranged all that, it was all set up when I got home. There was no cost for any of it.

Some reported apprehension about going home but that the availability of services and knowledge of who to call alleviated their concerns.

Yes I was worried about it coming home, but I knew not to panic because I knew there were services out there and help and I know about them now. I've got all those numbers and know where to go straight away.

One participant indicated that living alone meant it was even more important that support was arranged for when they arrived home:

Everything was first class and wonderful and my family was so grateful too, my daughter teaches, it wasn't holidays and they couldn't get over the care. Especially when you're on your own... I felt confident afterwards, I knew where to go if I needed anything else. When you live on your own you have to be bit more independent. You have to work ahead.

Almost all participants reported being offered a range of services for their discharge home. Most of the participants also reported not needing to access these services. For some they were able to get additional support from their spouse and children, some of whom took time off work to care for their relative. Some reported moving in with their children for a short period after discharge until they were ready to manage things themselves. For many it was important to manage on their own and to maintain their independence:

I managed showers on my own. I told them I was right. It wasn't that they didn't want to do anything for me. I believe the older you get the more you should do for yourself and the longer you'll last... I got Meals on Wheels for a week and then stopped it because I thought somebody else might want it. I was just being greedy was my way of thinking.

One participant was offered services prior to having a knee replacement but didn't feel that she would need them:

When I booked in, she said ‘Will you have home help?’ and I said ‘I don’t need it’ and she said ‘Well you’re going to have it whether you like it or not’ and it was good because (co-resident carer) had four heart attacks. I was quite happy. She said ‘don’t be silly and knock it back, you’re entitled to it, take it’. I’m pretty independent, but I was glad. I couldn’t have done it.

Some participants indicated that the hospital wouldn’t discharge them home until they were certain that family carers had arrived to provide assistance. Participants appreciated when the hospital gave them a follow-up call a day or so after discharge.

Location of services

Participants reported benefits of having services provided within the SGG catchment including:

- reduced travel,
- not having the long waiting times for appointments which tends to occur at the larger regional hospitals,
- closer to family,
- opportunities to make friends with locals and
- more convenient for carers.

One participant from Hamilton had an arthroscopy in Melbourne ten years ago. They described the travel as a ‘nightmare’ and that it was ‘wonderful’ that they could now have the procedure done in their local hospital. One participant was grateful they could have a total hip replacement in Portland rather than having to travel to Warrnambool. Remaining in the local area when unwell was important to them so they could have friends and family visit.

One participant may have been able to have had their second knee replacement in their local hospital but preferred to travel to Warrnambool to have the same surgeon who successfully undertook his first knee replacement.

One participant had been involved with services at Portland and Warrnambool. They found that there had been some disagreement between the two hospitals and they ended up having to go to Warrnambool for care. They felt that they were in the middle of “politics and issues” between the two hospitals, but that it all worked out for the best in the end.

Rehabilitation

Participants varied in the extent to which they accessed rehabilitation. Some did not really feel they received any rehabilitation although most received some allied health.

Some described benefits of having rehabilitation in hospital, such as getting to know other people. Having access to rehabilitation in the community was appreciated by a number of participants. In particular, learning different ways to do things and learning about equipment and other services were reported as beneficial.

After orthopaedic surgery, one participant asked the surgeon whether they could have rehabilitation after discharge but the surgeon said it was not necessary. The participant believed that the surgeon’s approach was to extend the length of stay so that no further rehabilitation was required after discharge. They were satisfied with the rehabilitation provided in hospital:

In hospital, I had physio and OT. You walk up steps, sit down, you virtually have to learn to walk again, learn how to get in and out of cars. You change the way you do all that. They had all the facilities and equipment.

One participant compared physiotherapists at two different hospitals and preferred when they were not left to do exercises on their own, as they were not sure whether they were doing them correctly.

One participant who had had a stroke required speech therapy before being discharged home from Hamilton. As the speech therapist was on annual leave at the time the hospital staff were trying to delay discharge. The participant wanted to go home so agreed to go to Warrnambool to see a speech therapist to assist with swallowing problems.

Chronic disease management and health promotion

Participants with chronic conditions such as asthma and diabetes generally felt that their care was well managed with routine reviews by their GP and specialists. One participant highly valued access to an eight week respiratory course with guest speakers, talks on health, how to cope, getting back into the community, incontinence and light exercises:

“It was really terrific, and we got little certificates. They gave us a number to ring there, and they will get you into the doctors straight away... Really good, really helpful, we wanted to keep going but we couldn’t because there was another class.”

Although usually seen by the diabetes nurse in Portland, one participant had to travel to Warrnambool from Portland to see an endocrinologist. When care was altered, staff travelled to Warrnambool with the participant to learn how to undertake the new procedure for providing insulin, to provide back-up support locally. The diabetes nurse’s support was valued as she was contactable through email, phone and a support line.

Another participant living in one of the smaller towns in the sub-region appreciated the ongoing support of the local bush nursing service. This service was important in helping the participant maintain their independence at home. Some of the features that were valued included having nurses available on the weekend if needed, providing transport, arranging ambulances, arranging appointments and providing access to video conferencing for psychiatrist appointments.

Three participants mentioned the benefits of attending local health promotion programs including speakers on issues relevant to ageing, eating well and exercise programs. They were pleased that these services were available and they appreciated that these services were “keeping us informed and helping us to look after ourselves”. One participant also reported social benefits of making new friends through local exercise groups. However, he was also frustrated that it was difficult to get men to come along to groups and to get them motivated.

Dissatisfaction with services

Thirteen participants interviewed had one or two concerns with the health care system, not usually in relation to rehabilitation. The issues were diverse and included:

- Lack of information about programs available in the community (in particular regarding an incontinence service)
- One participant who had been on the hospital fundraising committee for many years felt that the hospital general meeting at an expensive hotel was a waste of money

- One participant reported not having their bed linen changed for nine days
- Being moved around and put into maternity ward
- Disrupted sleep from other patient in ward

Some concerns related to problems with a particular staff member. Some examples included:

- Racist comments and general criticisms (which lead to a depressive episode for the participant)
- A nurse in casualty who twice refused to get a doctor for a patient as it was a Saturday (nurse has since left)
- Poor service from an ambulance that arrived with one officer who could not provide assistance to the client who later required hospitalisation (this occurrence has deterred the client from ringing an ambulance in the future).

One participant and their carer were very dissatisfied with their experience at Portland Hospital during an episode of pneumonia. They reported having to wait another three days to see a doctor after first seeing one on admission. They reported that the nurses did not encourage him to walk and that he became deconditioned whilst in hospital. They were also dissatisfied with the physiotherapy received that focussed on arms and chest and did not help him to get walking again. He was then discharged into a residential facility but was readmitted to hospital after only four days and required six bags of fluid to re-hydrate.

Satisfaction with services

The majority of participants reported satisfaction with their care in hospital and the community. Participants reported that services were “*marvellous*”, “*I couldn’t complain at all*”, “*it couldn’t have been improved, it was just fantastic*” and “*They are the most wonderful people I know. They’ve always been terrific to me. I can’t fault it.*” Some comments suggest that living in a rural area participants were grateful for any services they got:

When you’re living in the country, you’re lucky you’ve got a hospital. Like Heywood has been scaled down, really, it’s 100km between every city, so you’ve got to be satisfied with what you’ve got. We can’t complain. There are lots worse off. I think we’re covered pretty well. We get specialists from Melbourne. We’re lucky to have visiting doctors from Warrnambool and Hamilton.

Aspects of care that participants reported satisfaction with included:

- Frequent supervision in hospital
- Being able to contact the doctor at any time
- Good food
- Providing information, e.g. regarding medications
- Provision of services once discharged
- Staff meetings.

Most participants reported that services had been provided at no cost or for a small fee. None of the participants reported that costs were not manageable.

Suggestions made for improving participants' care included: having fresh air in the hospital, having a diabetes specialist in Portland and having more frequent podiatry after discharge (client attends clinic every three months but needs the care every 8-10weeks).

Interpretation of the data requires some caution as it became evident that the importance of access to health services in these rural areas was very important to participants. It is possible that clients believed their positive feedback would be instrumental in maintaining or increasing access to health services generally.

Case Study 1

Jack had a major stroke and spent the first month recovering in a SGG hospital. At this stage he was seen by a physiotherapist but did not feel well enough to receive therapy so soon after the stroke. He then was transferred to a regional hospital outside the SGG for another three months of rehabilitation. He was told he needed to be transferred to the regional hospital to "get better". Here he accessed physiotherapy, hydrotherapy, occupational and speech therapy on a daily basis. As his wife had to stay in the regional centre, finding affordable and comfortable accommodation was difficult. She would have liked better accommodation to be available for carers/spouse travelling from rural areas. Jack and his wife would have preferred to have had the rehabilitation entirely in their local hospital so that they were closer to home where there would have been familiar faces, but the lack of facilities, particularly a suitable hydrotherapy pool and some physiotherapy equipment prevented this. Jack reported that the pool used in the SGG hospital for hydrotherapy was not suitable, as it had no handrails and was too crowded in summer. He also reported that the parallel bars were not long enough and that they did not have the plastic hurdles that he had found useful in the regional hospital.

On discharge from the regional hospital to home, Jack's house was modified to improve his mobility. They met with the Rehabilitation Program Leader who discussed what services and therapies were available to him. Community services were offered, but Jack and his wife felt they could manage without. They felt well informed. The physiotherapist in the regional hospital sent a report through to the SGG hospital but the OT did not. Jack felt that it would have been beneficial for the SGG hospital OT to have received a better hand-over from the OT in the regional centre. Jack's walking aide was altered as the single point stick was suitable for walking in hospital but not for the rough terrain around Jack's property.

Jack commenced community rehabilitation through the SGG hospital. He has been accessing this Program for over six months and does not know how he would have managed if this service was not available. He regularly attends hydrotherapy, OT and physiotherapy through this Program. Jack and his wife felt that the Program was excellent, although perhaps some of the facilities could have been improved. Jack's wife felt that Jack would not have progressed as well without the Program and she felt it was important that the Program continue for people in their local community. She found that the therapists were always able to suggest new strategies for performing tasks and that: *"It would be horrible to think of others not having the Program. And I think we'll be there for a while. The longer the more beneficial. It is good to know there is a back-up, we can ask what to do"*.

Case Study 2

David had a major accident and was taken by ambulance to an SGG hospital and then transferred to a metropolitan hospital for intensive care. After just over a week he was transferred to an SGG hospital for rehabilitation. He and his carer were satisfied with the coordinated approach to care with family meetings keeping everyone involved informed. The Rehabilitation Program Leader “*had the whole team working. It was spectacular to see how things were flowing*”. When David was discharged home, an assessment of the home was undertaken and modifications made. He commenced on the Community Rehabilitation Program in another SGG hospital. Having the community rehabilitation close to home was very important as driving was very stressful for David who had post traumatic stress disorder after being involved in the accident. The Rehabilitation Program was important for getting David back into routine life and ultimately back into the workforce.

4.2 PDHS Satisfaction Survey Results

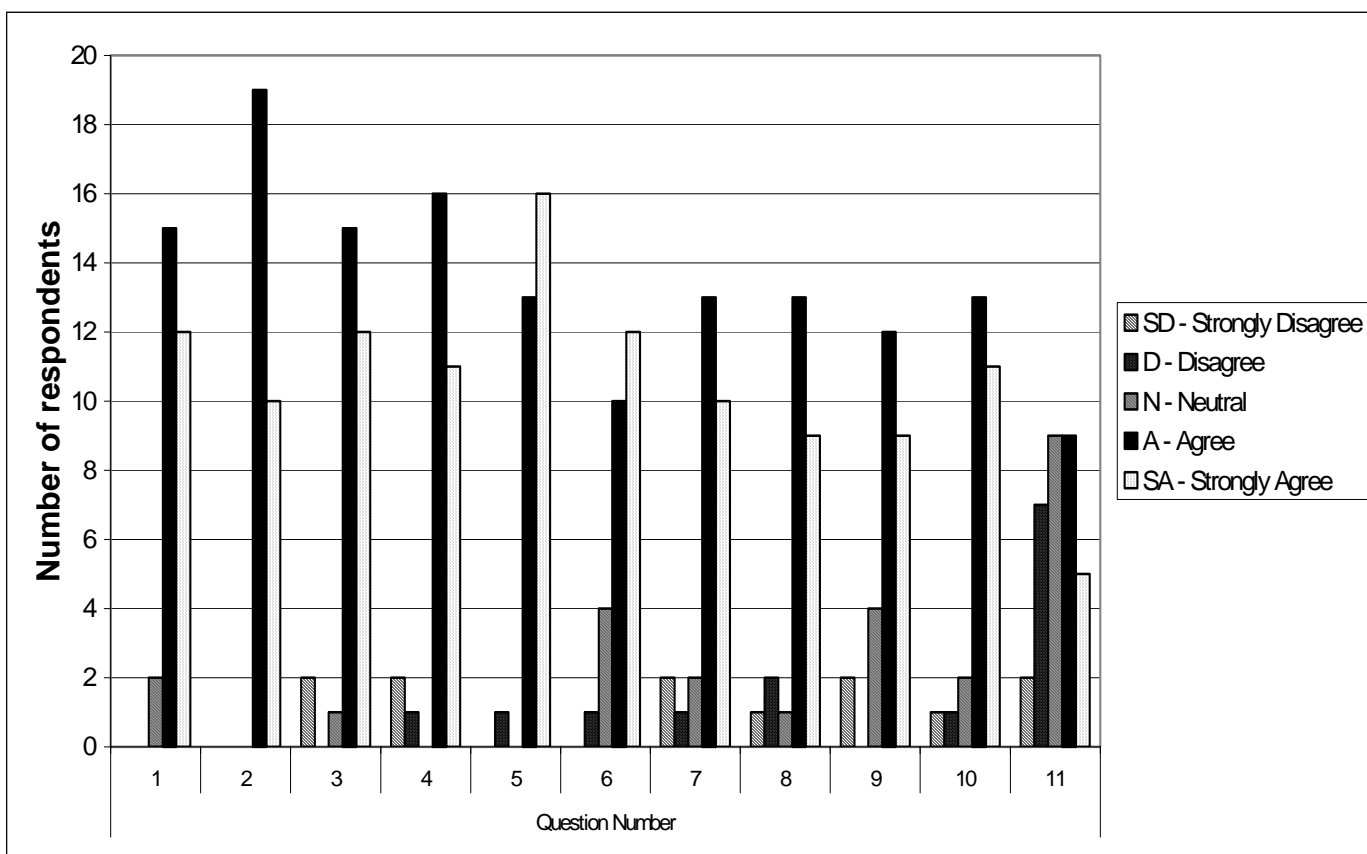
Sixty one satisfaction surveys were sent to clients admitted to the Rehabilitation Program between June 2005 and June 2006 at the PDHS. Thirty surveys were returned giving a response rate of 49%. Nine (30%) respondents were male and 21 (70%) were female. The mean age of respondents was 72.5 years (SD =11.5 years; range=53-93 years). Five diagnoses were recorded of which orthopaedic was the most common (67% including 9 total knee replacements, 8 total hip replacements and 3 fractured neck of femur). Three patients (10%) had a neurological diagnosis (i.e. stroke). The remaining seven clients had other conditions.

Participants were asked to select one of five response categories (strongly agree to strongly disagree) for the following statements:

1. ‘I have been treated with kindness and respect by the rehabilitation staff’,
2. ‘I felt able to talk to the staff about any problems I might have had’,
3. ‘I have received sufficient information about the causes and nature of my illness’,
4. ‘I have had all the medical attention I need while in rehabilitation’,
5. ‘I was satisfied with the type of care the nurses have given me’,
6. ‘I was satisfied with the type of treatment the therapists have given me (e.g. physiotherapy, occupational therapy, speech therapy)’,
7. ‘I have received enough therapy’,
8. ‘I was given sufficient information about the allowances and services I needed after rehabilitation finished’,
9. ‘I found rehabilitation helped me to settle back into my family and community life’,
10. ‘Things were well prepared for my home (ie aids such as rails and wheelchairs had been organised if necessary)’,
11. ‘I have received adequate follow up from the Rehabilitation Program’.

The survey included 10 Responses to the client satisfaction survey are summarised in Figure 2 below.

Figure 2: PDHS client survey response July 2005- June 2006 (N=30).



For all questions except number 11, the majority of respondents agreed or strongly agreed, indicating satisfaction with the Rehabilitation Program. The statement; *‘I have received adequate follow up from the Rehabilitation Program’*, received a mixed response with 37% of participants either disagreeing or strongly disagreeing with the statement. It was also the statement that had the highest number of neutral responses. Respondents most frequently ‘strongly agreed’ to the statement *‘I was satisfied with the type of care the nurses have given me’*. There was also consistent agreement with the statement, *‘I felt able to talk to the staff about any problems I might have had’*.

Participants were also asked to rate how good or bad they felt the Rehabilitation Program was overall (global satisfaction score) on a scale from 0 (worst possible) to 100 (best possible). Overall satisfaction was high with a mean global satisfaction score of 87 out of 100. Satisfaction ranged between 30 and 100. Eight respondents recorded complete satisfaction with a score of 100. Twenty respondents rated their satisfaction with the service at 90 or above. Only one respondent rated poor satisfaction with the service with a score of 30/100.

Figure 3: Satisfaction Survey, PDHS, July 2004-June 2006.

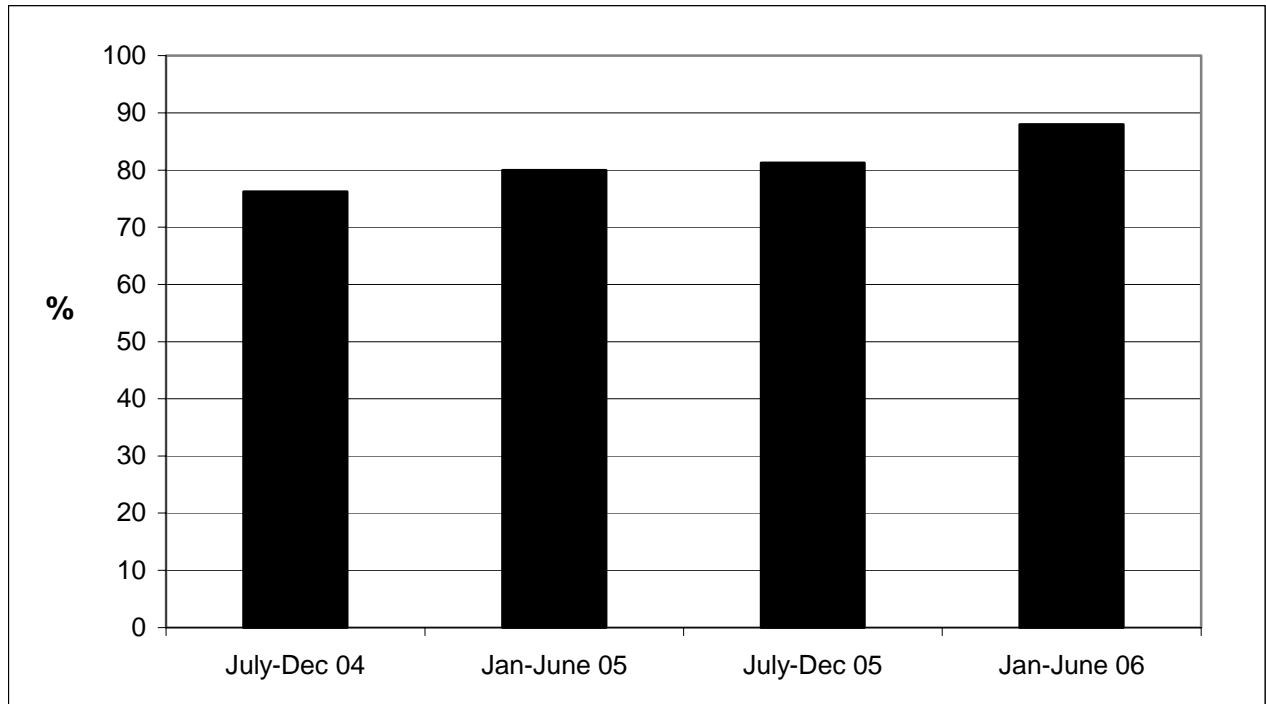


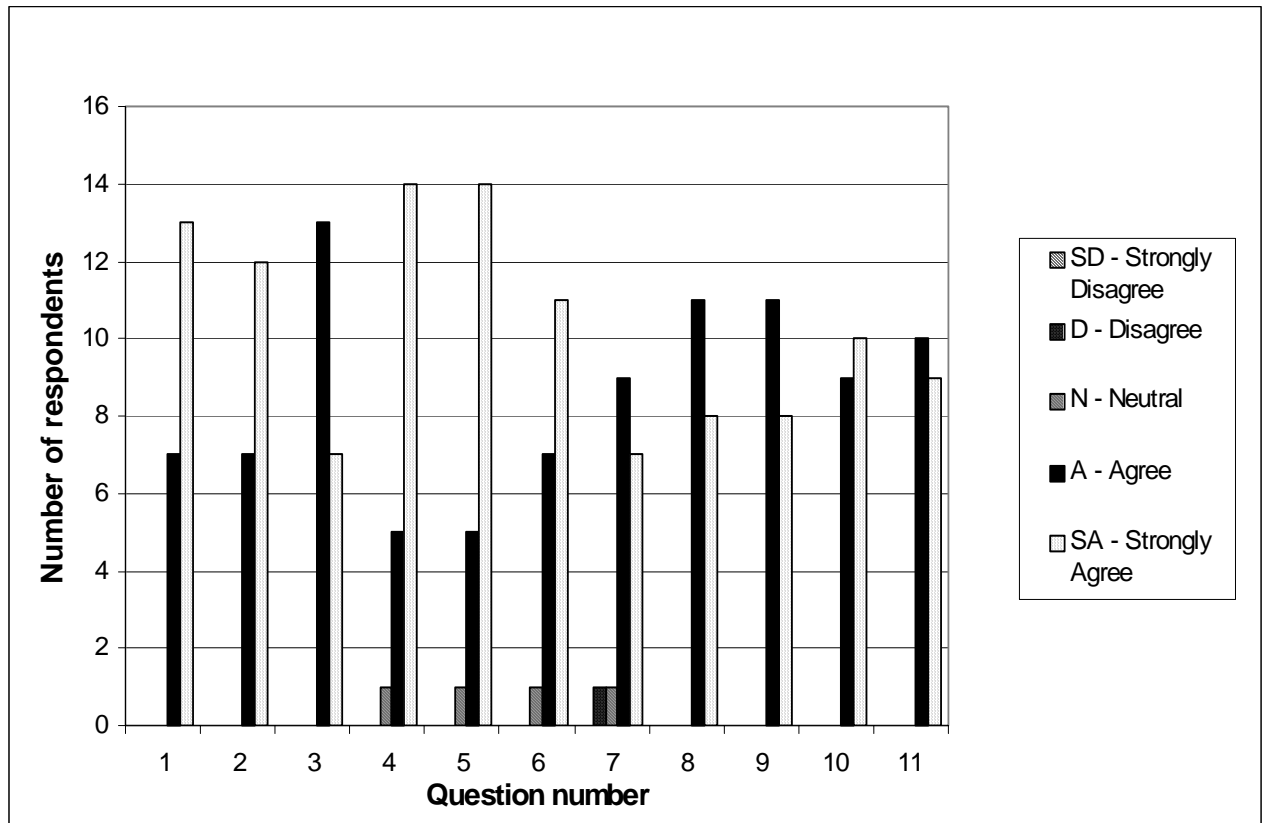
Figure 3 shows that satisfaction with rehabilitation service in Portland has increased over the period of twelve months from July 2005 to June 2006. The overall satisfaction increased from 76% in the second half of 2004 to 80% in early January and it reached 88% by June 2006. For the 2005-06 financial year, however, wording of items 3, 7 and 8 were changed from negative to positive, which may have influenced reporting.

4.3 WDHS Satisfaction Survey Results

During the period of June - July 2006, 48 satisfaction surveys were distributed and 21 were returned giving a response rate of 44%. The respondents were 67% female and 33% male. Mean age of respondents was 70.4 (range 27-98 years). Multiple diagnostic conditions were recorded such as back pain, breathing problems, stroke, total hip and knee replacements and fractured neck of femur (NOF). The 11 survey statements are reported in Section 4.2.

Figure 4 shows client satisfaction with the rehabilitation service during the period of July 2005 and June 2006.

Figure 4: WDHS client survey response July 2005- June 2006 (N=21).



The majority of respondents either ‘agreed’ or ‘strongly agreed’ with all statements. Only one respondent reported disagreement with any of the statements, item number 7 ‘*I have received enough therapy*’. Fourteen respondents (67%) ‘strongly agreed’ with item numbers 4; ‘*I have had all the medical attention I need whilst in rehabilitation*’, and item 5, ‘*I was satisfied with the type of care the nurses have given me*’.

On the global satisfaction scale, 52% of respondents in the 2005-06 financial year recorded 100% satisfaction. Seventeen respondents (80%) recorded 90 or above, three recorded 80 and one participant recorded 65/100.

Figure 5: Satisfaction Survey, WDHS, July 2004-June 2006.

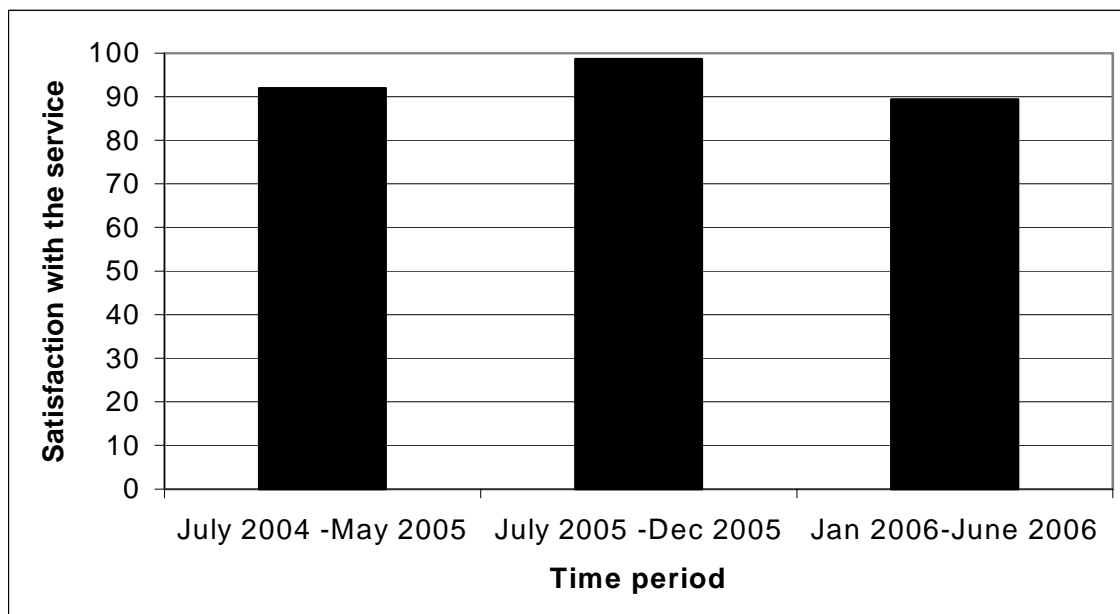


Figure 5 shows that client satisfaction with the rehabilitation service has declined slightly in the recent phase of the survey. During the period of July 2004 and May 2005, the average satisfaction with the service was 92%, which was increased to 98% in the second quarter of 2005. In the first part of 2006 (Jan –June 2006), satisfaction dropped to 89%, still indicating overall satisfaction with the Program. As described for PDHS, during the 2005-06 financial year the negatively worded questions on the survey were altered to positively worded questions and may have impacted on responses.

4.4 Summary

Clients of the Rehabilitation Program who responded to the satisfaction survey reported high levels of satisfaction with the Program. For PDHS, over the two years of the Program overall satisfaction has increased from 76% to 88% whereas at WDHS it has gone from 92% to 98% and then back to 89%, consistently indicating high levels of satisfaction with the Program. Of the 11 items on the survey, respondents at PDHS were less satisfied with follow-up from the Rehabilitation Program. At WDHS, only one respondent reported disagreement with any of the statements, *'I have received enough therapy'*. Given the response rate of less than 50% (49% at PDHS and 44% at WDHS) it is not possible to generalise these findings to all SGG rehabilitation clients.

Interviews with clients and family members suggested that participants were satisfied with the Program and with particular aspects of care including; i) pre admission assessment, ii) post discharge follow-up, iii) home assessment and modification and iv) coordination of care. Some issues were reported, such as one participant who was not encouraged to keep active during an admission for pneumonia, which left him deconditioned and not able to walk. A number of instances were also reported where staff were not responsive or sensitive to the needs of participants. Participants appreciated initiatives such as a respiratory course in Hamilton, diabetes management and health promotion presentations. Case studies highlighted the importance of a coordinated approach to care and for clients to have access to services closer to home, particularly for long-term community based rehabilitation. The commencement of community rehabilitation at Portland was considered very important to those accessing it.

5. Consultation with Medical Practitioners

5.1 Data Collection

Surveys were sent to seven ($N=7$) medical practitioners in the SGG region both electronically and by mail. After three reminders by email and two telephone calls, two practitioners responded to our request and one declined to participate.

5.2 Findings

The two respondents had different views regarding the accessibility and impact of the Rehabilitation Program. When asked about their knowledge of the Rehabilitation Program, one respondent stated:

'I am not familiar with this Rehabilitation Program. I am aware that Western district health services offer rehabilitation but have found it difficult to access from the more regional location'

The second respondent was a surgeon who described himself as part of the Rehabilitation Program and referred his patients to the Rehabilitation Program through a Division 1 nurse. The other stated:

'Regarding WDHS, with great difficulty and many roadblocks which made me reluctant to keep trying to send patients for rehabilitation. Communication has been poor with little information being passed onto me as a treating GP involved in rehabilitation of patients'

Both medical practitioners seem to have some understanding of the admission criteria to the rehabilitation unit. One said that:

'For an orthopaedic surgery, concerned patients are referred following joint replacement and spinal surgery'

The other practitioner stated:

'It is available for i.e., after orthopaedic surgery or after cardiovascular event'

Regarding changes in the operation of rehabilitation services, one practitioner stated that from his viewpoint, not much has changed. The other respondent indicated that the service has been improved by the provision of a physiotherapy aide and a dedicated part time nursing sister. If the Rehabilitation Program ceased, *'it would be detrimental to post operative recovery'*. If the Rehabilitation Program continues, *'it needs more assistance from the disciplines of physiotherapy and occupational therapy'*. The other respondent stated that:

'More information to the remote GPs, more contact from Rehabilitation Program co-ordinators regarding structure, progress of patients etc'

5.3 Summary

Due to the poor response rate to this survey no conclusive statements can be made regarding practitioners' opinions of the Program. The two respondents provide contrasting perspectives of the Program with one practitioner who regularly refers to the Program and finds it a beneficial service for his patients. Concerns mentioned by the second respondent highlight some obstacles that should be addressed, even if they only impact on a small number of GPs. Issues raised included poor communication from the Rehabilitation Program to the GP about patient progress and access barriers due to the remote location of the GP.

6. Health Service data collection

This chapter considers quantitative data obtained from the Victorian Admitted Episodes Dataset (VAED) as well as client data for all clients admitted to the Rehabilitation Program in the 2005-06 financial year. The VAED analysis considers general admission patterns, length of stay and discharge destinations for people living in the SGG sub-region with conditions conducive to rehabilitation. To consider general trends before and after the Program, data is broken down by financial years for the two years prior to the Rehabilitation Program (2002-03 & 2003-04) and the two years since inception of the Program (2004-05 & 2005-06). Monitoring data collected for clients focuses on the second year of the Rehabilitation Program (Phase 2 includes data from the first year of the Program), although some comparisons between the first and second year are drawn for key outcomes. Scores on the Barthel Index are also examined in relation to statewide patterns. Monitoring data has been analysed according to location of inpatient beds (Section 6.2 refers to WHDS data and Section 6.3 refers to PDHS data).

6.1 VAED data

6.1.1 Data Collection

One of the aims of the new Southern Grampians Glenelg Rehabilitation Program was to reduce the need for out-of-area admissions for people living within the catchment area of the five participating hospitals who had conditions considered responsive to rehabilitation. This issue is examined using the Victorian Admitted Episodes Dataset (VAED) comparing the two years prior to the commencement of the Rehabilitation Program (2002-03 and 2003-04) with the two years since the commencement of the Rehabilitation Program (2004/05 and 2005-06).

VAED data were examined to determine whether there had been any changes in the patterns of out-of-area admissions for conditions considered responsive to rehabilitation. The diagnoses included:

- Asthma
- Chronic Obstructive Pulmonary Disease (COPD)
- Diabetes
- Fracture neck of femur (NOF)
- Multiple Sclerosis
- Parkinson's Disease
- Stroke
- Total Hip Replacement
- Total Knee Replacement

(see Appendix 3 for more detail)

The data collected included all postcodes for the Southern Grampians Glenelg sub-region (see Appendix 4). To protect confidentiality of clients in the region, where figures in tables are less than five, the actual number has been replaced with '<5'.

There are a number of limitations with the data and the analysis should be interpreted with caution. One limitation is that it is not possible to determine whether patients were discharged from the recorded episode of care into rehabilitation, as rehabilitation transfers

are part of a category of discharge that includes acute care. Therefore the data available from VAED cannot answer the question of whether there has been a reduction in out-of-area admissions for rehabilitation.

Another limitation of the data is that it does not include clients who may have received rehabilitation in an SGG hospital but who live outside the catchment. It also does not include SGG clients who may have been admitted to hospitals outside of Victoria. For example, people in Casterton may be admitted into hospital at Mount Gambier in South Australia, as it is a similar distance to Hamilton.

Caution in interpretation is also required given the small number of clients reported for some of the data, such as when reporting specific conditions. Changes from year to year may reflect only a small change in numbers of clients.

6.1.2 Findings

As illustrated in Table 3 below, there has been a reduction in the number of admissions within the Program’s catchment area overall for conditions considered responsive to rehabilitation along with a small increase in the proportion of out-of-area admissions for these condition across the two years before and two years after the Rehabilitation Program commencement mid-2004. The majority of SGG clients with conditions responsive to rehabilitation were admitted to hospitals within the SGG catchment.

Table 3: Number of admissions by financial year.

	2002-03 N (%)	2003-04 N (%)	2004-05 N (%)	2005-06 N (%)
Admissions in SGG hospitals	552 (89.3)	537 (88.8)	434 (86.5)	431 (85.2)
Admissions to hospitals outside SGG	66 (10.7)	68 (11.2)	68 (13.5)	75 (14.8)
Total Admissions	618 (100.0)	605 (100.0)	502 (100.0)	506 (100.0)

Table 4 indicates that the total combined length of stay for all clients admitted with conditions conducive to rehabilitation. Consistent with admissions, the total length of stay for clients admitted to hospitals outside the region has remained consistent over the four years. The total length of stay for clients admitted to SGG hospitals has been reduced substantially since inception of the Program.

Table 4: Total length of stay by financial year.

	2002-03 N (%)	2003-04 N (%)	2004-05 N (%)	2005-06 N (%)
Length of stay in region	5150 (93.7)	5575 (92.8)	2906 (87.4)	3201 (89.7)
Length of stay out of region	349 (6.3)	431 (7.2)	420 (12.6)	369 (10.3)
TOTAL	5499 (100.0)	6006 (100.0)	3326 (100.0)	3570 (100.0)

Tables 5 and 6 show the breakdown of admissions and length of stay according to diagnosis. Decreases in the proportion of admissions (in and outside the SGG) from before the Rehabilitation Program (2003-04) to the second year of the Program (2005-06) were largest for Stroke (31% reduction), COPD (28% reduction) and asthma (23% reduction).

Table 5: Number of admissions by diagnosis.

	2002-03		2003-04		2004-05		2005-06	
	SGG	Outside SGG	SGG	Outside SGG	SGG	Outside SGG	SGG	Outside SGG
Asthma	86	<5	99	5	79	5	70	10
COPD	180	<5	153	7	123	<5	112	<5
Diabetes	130	32	112	30	100	21	106	29
Fractured NOF	22	<5	21	<5	21	<5	27	<5
Multiple Sclerosis	6	<5	<5	<5	9	0	10	<5
Parkinson's disease	<5	<5	<5	0	<5	<5	6	<5
Stroke	68	10	89	11	49	15	60	9
Total hip replacement	24	6	28	9	23	14	19	10
Total knee replacement	32	6	30	<5	27	6	21	7
Total	552	66	537	68	434	68	431	75

Table 6: Total Length of stay by diagnosis.

	2002-03		2003-04		2004-05		2005-06	
	SGG	Outside SGG	SGG	Outside SGG	SGG	Outside SGG	SGG	Outside SGG
Asthma	273	16	291	5	207	8	203	17
COPD	1659	25	1432	71	813	12	930	13
Diabetes	1153	96	1090	143	554	146	490	143
Fractured NOF	368	12	535	8	255	13	389	36
Multiple Sclerosis	57	13	25	5	32	0	37	<5
Parkinson's disease	58	40	37	0	11	15	78	<5
Stroke	829	77	1413	132	525	123	712	45
Total hip replacement	359	36	385	49	241	77	164	69
Total knee replacement	394	34	367	18	268	26	198	40
Total	5150	349	5575	431	2906	420	3201	369

Figure 6 shows that there has been an overall reduction in length of stays for clients admitted to SGG hospitals for conditions considered responsive to rehabilitation since commencement of the Rehabilitation Program.

Figure 6: Average length of stay by diagnosis for patients admitted to SGG hospitals.

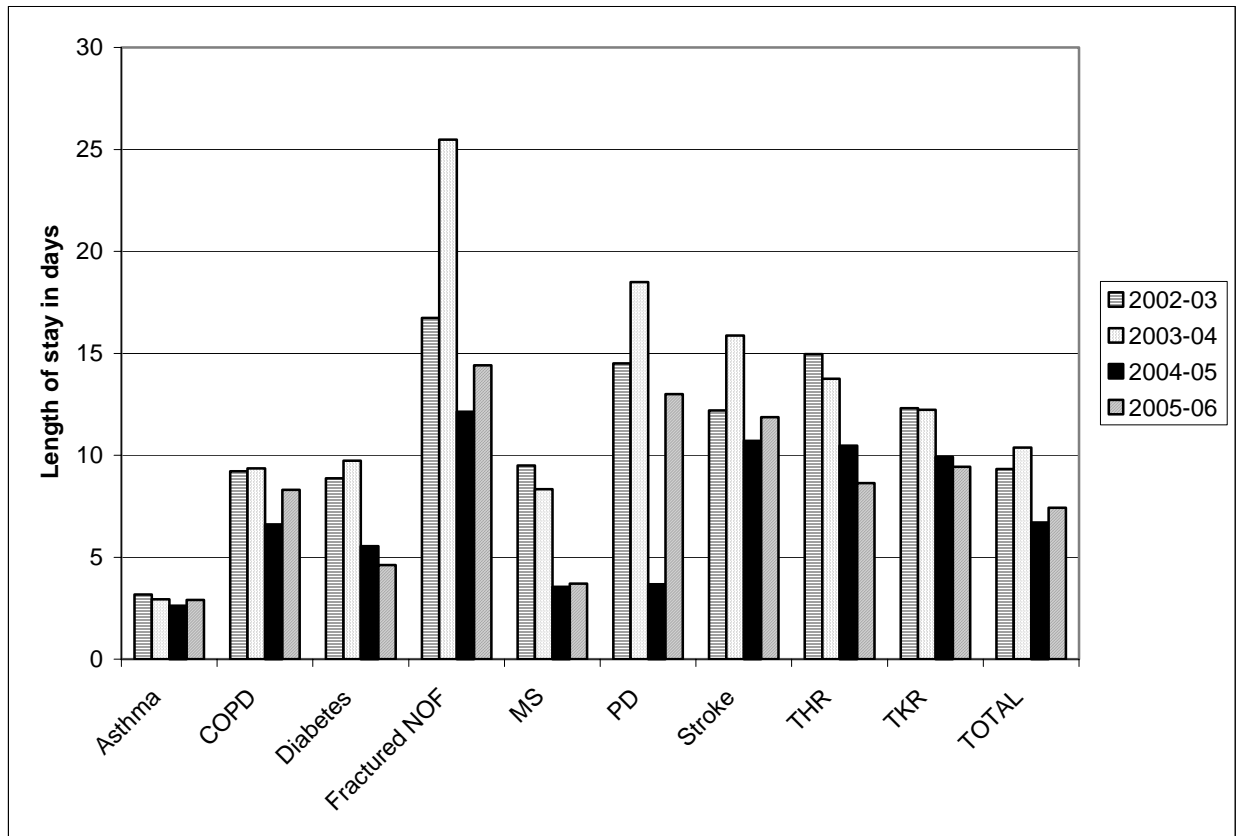


Figure 7 shows that since implementation of the SGG Rehabilitation Program there has been a shift in separation modes for patients admitted to SGG hospitals. There appears to be a reduction in the proportion of patients being transferred to another acute/extended care setting but an increase in the proportion classified as a “statistical separation” indicating that the patient has been assigned a new episode of care whilst staying in the same hospital. This suggests that the Program has led to a shift towards reducing the proportion of clients being transferred to hospitals outside the SGG region for care. This should be interpreted with some caution given that it is not known whether the transfers to other acute or extended care settings were to SGG hospitals or to hospitals outside of the region. Figure 7 also shows that after the Program commenced in the 2004-5 financial year there was a reduction in the proportion of clients transferred to a residential aged care facility. However, in the 2005-6 financial year this returned to the trend of 2002-3 and 2003-4.

Figure 7: Separation mode for clients admitted to SGG hospitals by financial year.

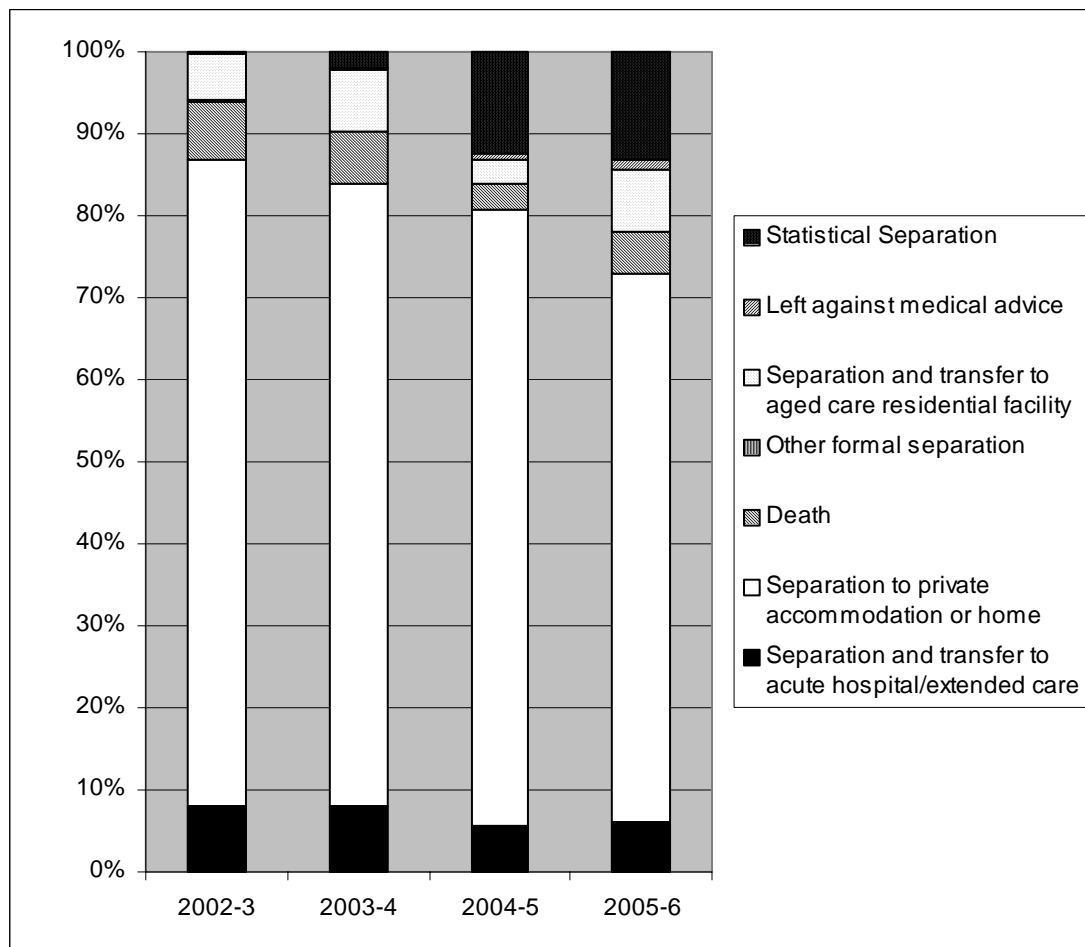


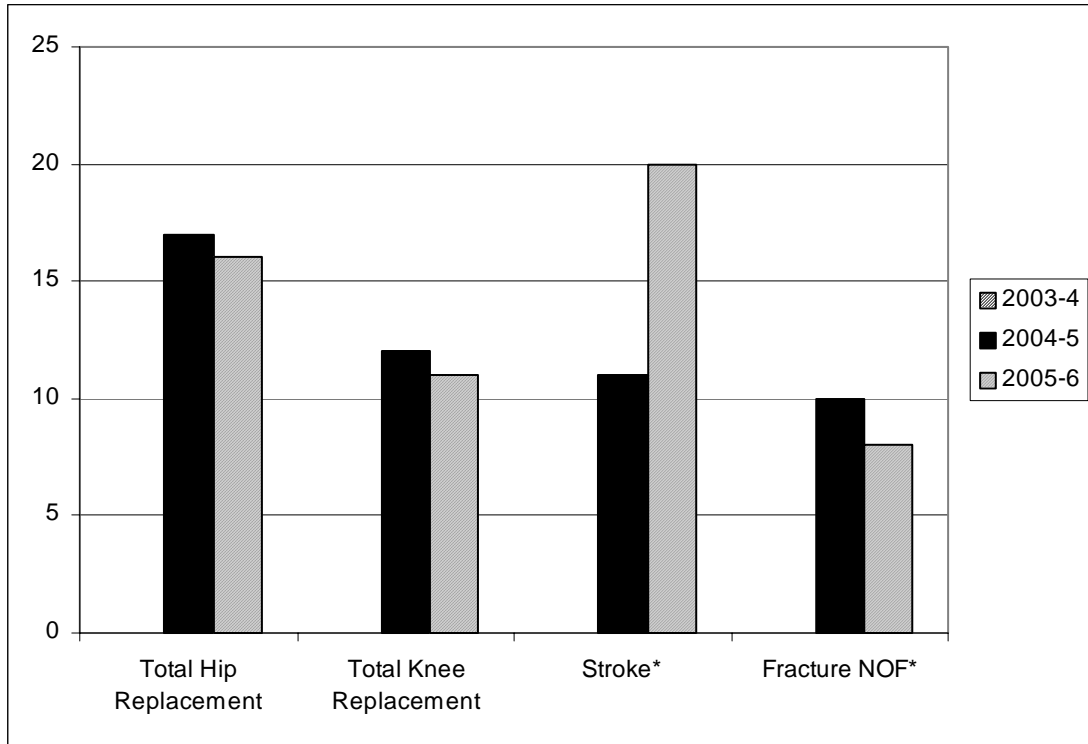
Table 7 (see landscape page) provides more detail regarding the separation modes of patients and includes the number of separations for each separation mode, according to financial year and whether or not the patient was being discharged from an SGG hospital or a hospital outside the SSG. Key points from Table 7 are:

- most patients are discharged to private accommodation/home
- a higher proportion of SGG patients admitted to hospitals outside the SGG were transferred to other hospitals than patients admitted to hospitals in the region. This possibly reflects clients being returned to a hospital closer to home for rehabilitation and transition back to home. In support of this, a higher proportion of clients admitted to SGG are discharged home, compared to those admitted to hospitals outside the SGG
- overall, there has been a reduction in deaths both in absolute numbers and as a proportion of separations, i.e. 2002-03=42 deaths (6.8%), 2003-04=37 deaths (6.1%), 2004-05=17 deaths (3.4%), 2005-6=24 deaths (4.7%)
- since the Rehabilitation Program commenced, there has been a substantial increase in the number and proportion of patients in SGG hospitals being transferred to a new episode of care within the same hospital.

Figure 8 provides further details regarding the conditions in which statistical separations occurred. For total knee and hip replacements and fractured NOFs, the

figures have stayed consistent in the two years the Rehabilitation Program has been running. However, the number of stroke patients assigned a new episode of care within the same hospital stay has almost doubled from the first year of the Program to the second.

Figure 8: Separations for SGG patients admitted to SGG hospitals with a change of care type within the same hospital (Statistical separation).**



*There were separations for the 2003-04 financial year for stroke and fractured NOF but they are not shown in the figure as there were fewer than five separations. There were no separations in the 2003-04 financial year for total knee or hip replacements.

** No statistical separations reported in the 2002-3 financial year.

Table 7: Number of separations by separation mode.

	2002-03		2003-04		2004-05		2005-06	
	SGG N (%)	Outside SGG N (%)	SGG N (%)	Outside SGG N (%)	SGG N (%)	Outside SGG N (%)	SGG N (%)	Outside SGG N (%)
Separation and transfer to another hospital (acute or extended care)	45 (8.2)	13 (19.7)	43 (8.0)	16 (23.5)	24 (5.5)	13 (19.1)	26 (6.0)	11 (14.7)
Separation to private accommodation or home	434 (78.6)	43 (65.2)	407 (75.8)	38 (55.9)	326 (75.1)	36 (52.9)	288 (66.8)	49 (65.3)
Death	39 (7.1)	<5	35 (6.5)	<5	14 (3.2)	<5	22 (5.1)	<5
Other formal separation	<5	6 (9.1)	<5	<5	<5	<5	<5	<5
Separation and transfer to aged care residential facility	30 (5.4)	<5	40 (7.4)	<5	13 (3.0)	<5	33 (7.7)	<5
Left against medical advice	<5	<5	<5	<5	<5	<5	5 (1.2)	<5
Change in care type within the same hospital (assigned when a new episode of care occurs within the same hospital stay)	<5	<5	10 (1.9)	12 (17.6)	54 (12.4)	14 (20.6)	57 (13.2)	11 (14.7)
Total	552 (100.0)	66 (100.1)	537 (100.0)	68 (100.0)	434 (100.0)	68 (100.0)	431 (1000.0)	75 (100.0)

Note: Less than 5 may indicate no separations to prevent calculation of the exact number.

6.2 WHDS Monitoring data

6.2.1 Inpatient Rehabilitation

At WDHS, there were 60 admissions between 14/06/2005 and 19/06/2006. The average length of stay (LOS) in the Program was 14 days (SD=9.4, range=2-41 days). The average age of clients was 75.7 years (SD= 13.9, range 26-98 years). This is consistent with the first year of the Program's operation when 57 clients were admitted with an average LOS of 12 days. The length of stay, however, is considerably shorter than the statewide average for Level 2 rehabilitation clients of 22.3 days.

At WDHS, half of the clients were admitted for orthopaedic conditions with neurological conditions being the second most frequent diagnosis (23%) (see Table 8). Eight patients were admitted for other rehabilitation conditions and five patients were diagnosed with functional decline. This differs slightly to the first year of the Program (2004-05) where 58% of clients had an orthopaedic diagnosis and 14% had a neurological diagnosis.

Table 8: Diagnostic groups (WDHS).

Diagnosis	N (%)
Orthopaedic surgery	30 (50.0)
Neurological/Stroke	14 (23.3)
Other rehabilitation conditions	8 (13.3)
Functional decline	5 (8.3)
Amputation	3 (5.0)
Total	60 (100)

As illustrated in Table 9, most clients (55%) were discharged home to their usual residence. Twelve (20%) went to residential aged care facilities such as the Grange Residential Care Service and five (8%) went to transitional care, and four (7%) were transferred to acute care or an Aged Care Unit (ACU).

Table 9: Discharge Destinations (WDHS).

Destination	N (%)
Home	33 (55.0)
Residential Aged Care	12 (20.0)
Transitional Care	5 (8.3)
Transfer to acute/Aged Care Unit	4 (6.7)
Queen Elizabeth Centre, Ballarat	2 (3.3)
Rehabilitation Unit	1 (1.7)
Transferred acute and then residential care	1(1.7)
Interim care and then home	1(1.7)
Unknown	1 (1.7)
Total	60 (100)

Discharge destinations for Victorian Level 2 rehabilitation clients in the 2005-06 financial year indicated that a larger proportion of Victorian clients than WDHS clients were discharged home (70%). A substantially larger proportion of WDHS clients were discharged to residential aged care compared to the statewide proportion of six percent.

WDHS clients showed a significant improvement on function during their rehabilitation episode. On admission the average Barthel Index (BI) score was 51.9 (SD=23.7, range 10-99), and on discharge the average BI score was 73.9 (SD=23.5, range 19-100), with an average improvement of 22.0 (P<0.001). This shows a slightly lower level of improvement in the second year of the Program compared to the first where clients BI scores improved from an average of 51 to 82 points. However, it is consistent with statewide data for Level 2 rehabilitation clients who improved by 22.3 points.

All except one client were admitted to inpatient rehabilitation from hospital. One client was admitted directly from home.

6.2.2 Community Rehabilitation

Twenty-five of these inpatient clients (42%) went on to community rehabilitation. Another four clients were admitted to community rehabilitation without being admitted to the inpatient Rehabilitation Program (average age 81.5 years, SD=26.6). Three of these clients had functional decline and the fourth an orthopaedic condition. Length of stay and outcome data was not routinely recorded for community rehabilitation. For the 29 clients admitted to community rehabilitation, the average age was 70.8 (SD=17.1).

6.3 PDHS Monitoring data

6.3.1 Inpatient Rehabilitation

At PDHS, there were 52 inpatient admissions between 26/05/2005 and 31/05/2006. The average length of stay (LOS) was 13.5 days (SD=14.5, range 2-77 days). The average age of clients was 72.2 (SD=14.3, range 17-95 years). As for WDHS, this is consistent with the first year of the Rehabilitation Program where 57 clients were admitted to the Program at PDHS with an average length of stay of 10 days. Again the length of stay is considerably shorter than the state average of 22.3 days.

The majority of clients were admitted to the PDHS Rehabilitation Program with orthopaedic conditions (67%), see Table 10, followed by eight clients with neurological conditions including stroke (15%). Three clients were admitted with functional decline and six with other rehabilitation conditions. Compared with the first year of the Program, there has been a similar proportion of clients with orthopaedic and neurological conditions (2004-05: 56% and 14% respectively).

Table 10: Diagnostic groups (PDHS).

Diagnosis	N (%)
Orthopaedic surgery	35 (67.3)
Neurological/Stroke	8 (15.4)
Functional decline	3 (5.8)
Other rehabilitation conditions	6 (11.5)
Total	52 (100)

The majority of clients (77%) were discharged home from PDHS and two were discharged home after interim care (4%) (Table 11). Six clients were discharged to residential care (11.5%). Compared with the 2004-05 financial year, there has been a small increase in the proportion of clients being discharged home, as 61% of clients were discharged to home or a hostel in the first year of the Program.

Table 11: Discharge Destinations (PDHS).

Destination	N (%)
Home	40* (76.9)
Interim care to home	2 (3.9)
Residential Aged care	6 (11.5)
Rehabilitation	2 (3.9)
Transitional care	1 (1.9)
Not known	1 (1.9)
Total	52 (100)

*Four clients discharged home with comprehensive rehabilitation

Discharge destinations for Victorian Level 2 rehabilitation clients in the 2005-06 financial year indicated were similar to that of PDHS for discharge home (70%) and discharge to residential care (6%). A higher proportion of Victorian clients were discharged to other health services (21%).

PDHS clients also showed a significant improvement in function during their rehabilitation episode. On admission the clients' average BI score was 55.4 (SD=21.7, range 10-95) and on discharge the average BI score was 87.2 (SD=17.8, range 29-100), with an average improvement of 31.8 (P<0.001). This is similar to the previous year where the average BI average score increased from 54 to 91 during the rehabilitation episode. This improvement is greater than the state average improvement for Level 2 rehabilitation clients of 22.3 points on the BI.

All clients were admitted to the inpatient Rehabilitation Program from hospital.

6.3.2 Community Rehabilitation

There were a total of 16 community admissions to the Program in the PDHS of which seven were discharged from the inpatient SGG Rehabilitation Program into the community-based program. The average age of PDHS community rehabilitation clients was 71.6 (SD=10.8, range 54-88 years). The average length of stay in the community Rehabilitation Program was 53.4 days (minimum 24 days and maximum 133 days).

The nine clients who did not access the inpatient Rehabilitation Program had an average age of 73.2 (SD=9.0, range 60-88). Two had a neurological diagnosis, three functional decline and four did not have a condition reported. For the seven clients who were admitted through the inpatient Rehabilitation Program one each had an orthopaedic diagnosis or functional decline, three had a neurological diagnosis and two had other rehabilitation conditions.

6.4 Summary

Findings from the VAED analysis show that there has been a reduction in the number of admissions, total length of stay and average length of stay for clients admitted to SGG hospitals with conditions considered conducive to rehabilitation since the introduction of the Rehabilitation Program. The number of clients admitted to hospitals outside the region has remained constant across the four years examined. This overall reduction in length of stay and admissions may reflect positive outcomes of the Program and other initiatives in the region where there has been a shift in focus towards health promotion, earlier assessment and intervention, and improved community support.

The separation modes for clients admitted to SGG hospitals with conditions considered conducive to rehabilitation indicate that since the Rehabilitation Program has started there has been an increase in the proportion of clients staying in the SGG hospital they were admitted to, and fewer clients being transferred to other hospitals. In comparison, SGG clients admitted to out of area hospitals were more likely to be transferred to another hospital. This may mean the client was transferred to a hospital in the SGG region but it is not possible to decipher this from the data provided. In summary, it appears that the VAED data does not indicate that there has been a decrease in admissions to out of area hospitals for clients with rehabilitation conditions since the Rehabilitation Program has commenced. However, it appears that if admitted to an SGG hospital, clients may be more likely to commence a new episode of care, possibly rehabilitation, within the same SGG hospital rather than being transferred to another hospital.

Due to the limitations associated with the data, conclusions should be interpreted with caution. For example, clients admitted to hospitals outside Victoria and clients from outside the region being admitted into SGG hospitals are not included in the analysis. There is no capacity to examine where clients were admitted when transferred to another hospital, nor to examine whether a new episode of care meant admission to the Rehabilitation Program. When breaking data down to diagnoses and separation modes, the number of clients in each category is often small, which means that a large change in percentage may only relate to two or three clients. In addition, no data were available regarding community rehabilitation in the region, which was reported by Program staff to have had a significant impact on the availability and provision of rehabilitation in the region, particularly in Portland.

A total of 128¹⁰ clients were admitted to the Rehabilitation Program during the 2005-06 financial year. Of these, 67 clients were from PDHS and 61 clients were from WDHS. Most clients were admitted to inpatient rehabilitation post orthopaedic surgery (50% in WDHS and 67% in PDHS) with the next most frequent diagnostic category being neurological conditions (23% in WDHS and 15% in PDHS). The average age of clients was slightly higher in Hamilton (75.7 years) than in Portland (72 years). The average length of stay was similar at both inpatient sites (Hamilton=14 days; Portland=13.5 days).

In comparison to statewide data for Level 2 rehabilitation clients, clients in the SGG Rehabilitation Program had a substantially shorter length of stay (13.5-14 days compared to the statewide average of 22.3 days). Improvements on the BI were consistent with statewide averages at WDHS and larger improvements than the statewide average were reported at PDHS.

Home discharge was the most common discharge destination both in Hamilton and Portland health services (57% in Hamilton and 81% in Portland). Residential aged care was the second most common discharge destinations for both sites. Twenty-nine clients at Hamilton and 16 in Portland were admitted to community rehabilitation.

¹⁰ Updated total based on Program Manager's report on inpatient admission until the end of 2006.

7. Summary and Conclusions

The aim of the third phase of this project was to provide a summative evaluation of the implementation of a new model of rehabilitation service integration and delivery within the SGG district. This is examined according to the four project objectives below.

7.1 Objective 1

Objective 1 was to determine whether the Program has been implemented as planned. In particular, to investigate whether the service redevelopment has been completed according to the revised Program plan developed by the SGG Planning Committee in July 2004. Tables 12 and 13 summarise the ‘necessary ingredients’ and the ‘fundamental program activities’ as identified in the Figure 7 in the Phase 2 report, identifying key elements of the revised Program plan. Whether an ‘ingredient’ or ‘activity’ has been achieved and the data source that supports or doesn’t support its’ achievement is reported in the two tables.

Table 12: Necessary Ingredients (all sites).

Necessary Ingredient	Achieved?	Comment	Evidence
Consistent management support.	Partially	Managers from all sites support the Program. Some staff reported limited support from middle management.	Managers from all sites participated in Phase 3 of the evaluation. Section 3.2.4
Designated on-site Rehabilitation Managers.	✓	Each site has a designated rehabilitation manager.	Designated on-site Rehabilitation Managers from all sites participated in Phase 3 of the evaluation
Project Leader to facilitate action.	✓	The Project Leader has been instrumental in promoting the program, getting various stakeholders involved, implementing protocols and practices and establishing a rehabilitation culture in the hospitals.	Section 3.2.3
People who have the enthusiasm and will to bring about change individually and collectively.	Partially	There has been a gradual shift towards a rehabilitation culture. Some staff are proactive but there is still some need for change in attitudes.	Sections 2.2.3, 3.2.3 and 3.2.4

Necessary Ingredient	Achieved?	Comment	Evidence
Consistent Medical input.	✓	Medical Leaders have been proactive in the program and have good communication with referring GPs. Some evidence of a small number of GPs in the region not referring to the Program and facing obstacles when referring to program.	Sections 2.2.1, 2.2.2 and Chapter 5
Availability of allied health staff.	✓	The program has assisted in recruiting, retaining, and thus increasing availability of allied health staff. There are still some disciplines needing to increase numbers.	Sections 2.2.3, 2.2.4, 3.2.3, 3.2.5 and Chapter 5
Continuing formal and informal education opportunities for staff.	✓	A broad range of formal and informal training has been conducted.	Sections 2.2.3 and 2.2.4
Dedicated separate unit for rehabilitation.	Partially	WDHS has a dedicated rehabilitation unit. PDHS has a flexible approach to allocating beds for rehabilitation.	Sections 2.2.3 and 3.2.4
External facilitation of problem solving meetings to facilitate reflective practice and continuous improvement.	✓ (not ongoing)	Evaluation team from NARI facilitated action research meetings in Phase 2 to reflect on practice. This led to reintroducing regular staff meetings within the team, which is perhaps a more sustainable approach.	Section 2.2.2

Table 13: Fundamental program activities.

Program activity	Achieved?	Comment	Evidence
Establish planning committee to oversee program implementation.	✓	The Planning committee continues to meet on a routine basis (every 2-3 months).	Project staff attended meetings and received minutes
Establish rehabilitation units in major hospitals.	Partially	WDHS has a dedicated rehabilitation unit. PDHS has a flexible approach to allocating beds for rehabilitation.	Sections 2.2.3 and 3.2.4
Produce and disseminate written policies and procedures to key participants and referrers.	✓	Program Leader has been proactive in promoting the program and disseminating written policies and procedures.	Sections 2.2.2 and 2.2.4

Program activity	Achieved?	Comment	Evidence
Introduce common assessment instrument to measure functional gains.	✓	Barthel Index (BI) and Personal Care - Participation Assessment Resource Tool (PC-PART) introduced. Outcomes for BI reported in Program monitoring data.	Monitoring data in Chapter 6
Train staff to work in rehabilitation program.	✓	A broad range of rehabilitation training has been conducted including 2-3 day programs as well as post-graduate level courses.	Section 2.2.4 and 3.2.3
Appoint Medical Leaders in large sites to manage medical care of rehabilitation clients.	✓	Medical Leaders engaged and involved in PDHS and WDHS.	Chapter 2
Establish care planning and monitoring processes that are inclusive of clients and carers.	✓	Establishment of family meetings, development of careplans, more involvement of clients and families.	Section 2.2.4, Chapters 3 and 4
Develop strategy for staff recruitment and retention for SGG district.	✓	Strategy developed and has helped recruit allied health staff, although this is an ongoing challenge and there are still some disciplines where additional staff/expertise is required.	Sections 2.2.3 and 2.2.5
Establish links with external networks/ individuals to ensure people with progressive conditions get ongoing access to rehabilitation over time.	Partially. Future direction	Information concerning the extent to which external networks have been established for progressive conditions is limited. However, clients reported satisfaction with chronic disease management programs provided and the Program Leader reported benefits of involvement in the Rural Organisation of Acute Stroke Teams (ROAST) program.	Section 2.2.2, 2.2.5, 3.2.1 and Chapter 4
Develop pathways for community clients in need of rehabilitation.	✓	Clients can now access community rehabilitation services through various avenues through the community without requiring an SGG inpatient admission.	Section 3.2.1 and Chapter 4 Case Study 1.

7.2 Objective 2

The second objective consisted of four parts concerned with assessing the effectiveness of the Program in achieving its' stated aims.

7.2.1 Objective 2, Part 1

The first part of objective 2 was concerned with improving consumer access to sub-acute rehabilitation services where most needed. The establishment of the Rehabilitation Program in the region means that clients now have more accessible sub-acute rehabilitation.

However, smaller hospitals were reporting less need for making referrals to the Program and were seeing fewer successes to encourage involvement in the Program.

7.2.2 Objective 2, Part 2

Part 2 of objective 2 was concerned with achieving consumer utilisation. In the first two years of the Program 240 clients were admitted. GPs and surgeons are now aware of the Program and are more frequently referring to the Program. Physiotherapists are also alerting GPs to clients who may benefit from referral to the Program. There were several GPs, however, who were not referring to the Program.

7.2.3 Objective 2, Part 3

Improving health outcomes for clients was the third part of objective 2 and was supported by a mix of quantitative and qualitative data. Assessments of all clients indicated a substantial overall improvement on the Barthel Index. VAED data indicated a reduction in admissions and length of stay for people with conditions considered conducive to rehabilitation. Staff and Program leaders also reported numerous benefits for clients that would assist in improving health outcomes for clients including; better coordination of care, case management, more client centred goal setting, improved discharge planning and reduced unplanned readmissions. There were also reports by staff that there had been a shift in culture with a stronger focus on rehabilitation in hospital, particularly in the larger hospitals.

7.2.4 Objective 2, Part 4

Part 4 of objective 2 related to satisfaction with the Program. Generally, it appears that satisfaction has been high. Clients and carers reported high levels of satisfaction in both the satisfaction survey and client and carer interviews. Clients appreciated pre-admission assessments and home modifications for orthopaedic surgery as well as support services offered on discharge. Having rehabilitation available close to home was appreciated, particularly for community-based rehabilitation where travel was required for each session and usually for a longer period of time. Participants valued the health promotion and chronic disease management programs, such as diabetes management and a respiratory course. Clients raised some issues but these related to more general concerns regarding hospital care and not specifically the Rehabilitation Program. Lower satisfaction with follow-up from the Program reported in the satisfaction survey by clients at PDHS warrants investigation.

Establishment of the Rehabilitation Program has increased diversity for staff in their work, which has also assisted in recruitment and retention of staff to the Program. Staff have had increased opportunities for training, developing skills, and for accessing mentors. Staff reported the most satisfaction with improved teamwork and communication.

Managers have also generally been satisfied with the Program as it has improved partnerships with other hospitals, and has provided opportunities to share resources, expertise and protocols, for example payroll and workforce recruitment strategies. There has

been concern, however, about ongoing funding of the Program. Smaller hospitals reported fewer benefits for both the hospitals and their clients.

7.3 Objective 3

Objective 3 was to identify and document the main factors that hindered or helped in the implementation of the Program. The main barriers to the implementation of the Program included:

- staff attitudes and lack of rehabilitation culture in the hospital and general community
- recruiting and retaining staff with appropriate skills
- uncertainty about funding
- unrealistic expectation to provide intensive rehabilitation at the same cost as acute care
- lack of equipment (eg, kitchen area, some physiotherapy and OT equipment, walking equipment, hydrotherapy pool)
- conflicting roles for nurses working on wards with combined acute and rehabilitation beds – they need to prioritise acute patients first
- no allied health available to clients in their own home
- high demand for services at WDHS
- too great a workload for one OT to work across all sites. To try to address this issue, PDHS is trying to recruit a full time OT with 0.2 EFT of their role being covered by the Rehabilitation Program. This will enable PDHS to regain the four hours of service previously lost through travel time
- smaller hospitals did not use assessment instruments on a frequent basis and therefore do not become adept at using them
- difficult to motivate staff to undertake training, particularly when there is a small staff base and many areas to specialise in
- some instances of limited support from middle management
- lack of longer term rehabilitation for older clients (80+ years old)
- disruptions due to ward closures and openings
- lack of transport for follow-up sessions.

Factors that facilitated implementation of the Program included:

- having a dedicated, enthusiastic Program leader
- Having a Program Leader and OT that covered the sub-regional and improved consistency in protocols and practices
- the active promotion of the Program in community through multiple avenues, and including all stakeholders
- organising steering committee meetings that promoted partnerships between sub-regional hospitals
- having supportive medical officers
- involvement in the ROAST program
- involvement in the external evaluation
- Coleraine becoming part of WDHS
- employment of an allied health assistant, which was particularly useful for the coordination of the community Rehabilitation Program in PDHS.

7.4 Objective 4

Objective 4 was to make recommendations about the potential application of this Program in other rural areas. Recommendations for other rural areas planning to implement a similar program were to:

- set aside 4-6 months to establish policies, protocols, and guidelines training before commencing the program
- involve of all stakeholders in the planning stages of the program
- have a champion/driver in each hospital as well as support from all levels of management
- develop a flexible model that adapts to the different needs and cultures within each hospital
- provide extensive and ongoing promotion of the program to all stakeholders, including GPs, nursing and allied health staff, local community care services such as ACAT and local government. This not only includes informing people about the program but also involving them in the planning of the program
- secure funding for 3-4 years. One to two years is insufficient time to get the program running and to provide evidence of effectiveness for ongoing funding
- establish regular rehabilitation team meetings to enhance communication
- have a full time, sub regional coordinator
- ensure adequate staff levels to provide intensive rehabilitation
- have staff experienced in rehabilitation, supplemented with training of existing staff at various levels. For example, post-graduate education for rehabilitation staff, as well as general training for non-rehabilitation staff regarding the role of the rehabilitation program, the importance of a rehabilitation culture and referral processes to the program
- establish peer support and ongoing mentoring from other hospitals. For example, site visits to established rehabilitation programs and meeting with experienced rehabilitation staff
- formalise the referral system and ensure it ties in with existing systems
- undertake an external evaluation to provide an alternative perspective and encourage staff to reflect on the program.

7.5 Limitations of the study

Findings from the study need to be considered in context to some of the limitations of the methodology. Data obtained from qualitative interviews represent views from individuals and may not represent views of all staff involved in SGG Health Services and in the Rehabilitation Program. Perceptions of existing work practices and attitudes are likely to differ among participants. Although most of the key stakeholders were consulted during Phase 3, it should be noted that no more than two people from each of the smaller hospitals were consulted. Their views may not represent others within the same hospital. There was also a small level of engagement of GPs in the region despite numerous telephone, email and mail follow-up. There were also a number of limitations associated with the VAED data. Clients admitted to hospitals outside Victoria and clients from outside the region being admitted into SGG hospitals were not included in the analysis. There was no capacity to examine where clients were admitted when transferred to another hospital, nor to examine whether a new episode of care meant admission to the Rehabilitation Program. When breaking data down to diagnoses and separation modes, the number of clients in each category was often small, reducing generalisability of the data. In addition, no data were available regarding community rehabilitation in the region, which was reported by Program

staff to have had a significant impact on the availability and provision of rehabilitation in the region.

7.6 Conclusion

The development and commencement of the SGG Rehabilitation Program has been a major undertaking involving extensive commitment from staff and stakeholders across the SGG sub-region. Findings from all three phases of the evaluation has identified areas for further development as well as a range of positive outcomes for the region including positive functional and quality of life outcomes for clients with conditions conducive to rehabilitation and a more coordinated and client centred approach to care. The Program has supported staff development and appears to have increased staff satisfaction, recruitment and retention. As with any major organisational change, implementation of the program has involved a major shift in practice and organisational culture and has been faced with a number of attitudinal and resource obstacles. Barriers to implementation of the Program have been acknowledged and managed. The ongoing dedication and consistency of the Program Leader appears to have assisted in the successful change management process. Whilst there is still a range of challenges to be met, the Program appears to be viable and of benefit to the population of the SGG sub-region. Future challenges for the Program include meeting increased population demands, maintaining adequate levels of allied health and medical staff to support the Program, and improving rehabilitation facilities and equipment.

Appendices

Appendix 1: Interview questions for SGG Rehabilitation Program Managers, Medical Leaders, Nursing and Allied Health Staff

Impact of the Program on existing work

1. What impact has the Rehabilitation Program had on your work role and workload?
2. What do you see as the benefits of the Rehabilitation Program?
3. What do you see as the drawbacks?

Referral and partnerships with other agencies

4. Do you have any concerns or issues associated with referring to other services or receiving referrals from other services (e.g. documentation)?
5. Can you describe your and your health service's working relationships with other health services in the Rehabilitation Program?

Access

6. Are there clients in the SGG district who would benefit from rehabilitation treatment gaining access? (do some groups have difficulty accessing? etc)
7. Are nursing and allied health services (eg OT assessments) being provided to clients at home as required?
8. What strategies have been implemented to reach acute patients/clients in non-acute settings who may benefit from rehabilitation?

Assessment and case management

9. Are clients and their carers included in care planning and case management? Can you provide examples of how this occurs?
10. Do you feel that assessment instruments (for example Barthel Index, PC-PART) adequately meet their purpose? Are there other measures you would like to use?

Support

11. Do you feel there is adequate support for the Rehabilitation Program? If relevant please specify areas where additional resources are required.
12. Have you and/or staff at your health service accessed additional training to support implementation of the Rehabilitation Program? If yes, please describe the type of training, whether it met your needs and whether other training is required.

Medical support

13. Do you have any comments regarding medical input into the Program (GPs, medical specialists, Program Medical Leaders)?

Future of the Program

14. Is there evidence to support a developing rehabilitation culture?
15. In what ways would you like to see the Rehabilitation Program develop?
16. What do you think future challenges will be for the Rehabilitation Program?

Learnings for other areas

17. What have you learnt from the implementation of this Rehabilitation Program that you think would be useful for other rural health services to know?

Appendix 2: Survey for nursing and allied health staff

Staff Feedback Survey

Instructions for completing this survey

You are invited to complete this survey as part of the evaluation of the Southern Grampians Glenelg Rehabilitation Program that is being conducted by the National Ageing Research Institute (NARI). The purpose of this survey is to gather feedback about the new Rehabilitation Program from the point of view of staff who have been directly involved in the implementation of that program. The survey is three pages long and it is expected that it will take between ten and fifteen minutes to complete. You may have completed a similar survey last year. This survey aims to find out whether staff perceptions of the program have changed since then. There is no information on this survey that will enable you to be personally identified and surveys returned by email will be printed off and analysed in a de-identified format.

1. At which Health Service are you located?
Please tick the appropriate box. (for online users, place cursor in tick box, double click, highlight 'checked' in default value box, and click OK)
- Hamilton
- Portland
- Coleraine
- Casterton
- Heywood
- Penshurst

2. To what extent are you involved in the delivery of services to clients in the Rehabilitation Program? *(For online users, place cursor in tick box, double click, highlight checked in default value box, and click OK)*

Always involved	Regularly involved	Sometimes involved	Occasionally involved	Never involved
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. To what extent are you involved in planning the implementation of the Rehabilitation Program?

Always involved	Regularly involved	Sometimes involved	Occasionally involved	Never involved
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. What, if any, changes do you think have occurred in the operation of rehabilitation services in the district as a result of the new Rehabilitation Program?

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5. Please say whether you agree or disagree with the following comments.
(for online users, place cursor in tick box, double click, highlight 'checked' in default value box, and click OK)

Participating in the Rehabilitation Program has:	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Improved communication between staff involved in the provision of rehabilitation services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helped teamwork between rehabilitation staff.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not made any difference to my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved my enjoyment of my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved my ability to make appropriate referrals for rehabilitation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased my participation in multi-disciplinary care planning and coordination.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased client and carer involvement in setting goals for rehabilitation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provided me with more opportunities for training and education.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved my access to a medical consultant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved the health and well-being of patients under my care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Please feel free to make additional comments.

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7. Please comment on anything that particularly influenced (helped or hindered) your Health Service to make the workplace changes initiated by the Rehabilitation Program.

Things that helped

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Things that hindered

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8. Do you have any suggestions to help improve the Program?

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9. If a similar program was to be implemented in another rural area, what suggestions would you have for the staff involved in its implementation?

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Please print off, complete and return this questionnaire by mail to:
The National Ageing Research Institute,
PO Box 31 Parkville,
Victoria, 3052

or by email to Jaya at jaya.pinikahana@nari.unimelb.edu.au by 22/9/2006

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY.

Appendix 3: List of diagnostic groups to be included in analysis

Asthma

J450	Predominantly allergic asthma
J451	Nonallergic asthma
J458	Mixed asthma
J459	Asthma unspecified

COPD

J440	COPD with acute lower resp infection
J441	COPD with acute exacerbation unspecified
J448	Other specified COPD
J449	COPD unspecified

Diabetes (Type 1, 2 and other specified)

E1011	Type 1 DM w ketoacidosis wo coma
E1012	Type 1 DM w ketoacidosis w coma
E1013	Type 1 DM w lactic acidosis wo coma
E1014	Type 1 DM w lactic acidosis w coma
E1015	Type 1 DM w keto/lactic acidosis wo coma
E1016	Type 1 DM w keto/lactic acidosis w coma
E1021	Type 1 DM w incipient diab nephropathy
E1022	Type 1 DM w est diabetic nephropathy
E1023	Type 1 DM w end-stage renal disease
E1029	Type 1 DM w oth spec renal complication
E1031	Type 1 DM w background retinopathy
E1032	Type 1 DM w preproliferative retinopathy
E1033	Type 1 DM w proliferative retinopathy
E1034	Type 1 DM w oth retinopathy
E1035	Type 1 DM w advanced ophthalmic dis
E1036	Type 1 DM w diabetic cataract
E1039	Type 1 DM w oth spec ophthalmic comp
E1040	Type 1 DM w unspec neuropathy
E1041	Type 1 DM w diabetic mononeuropathy
E1042	Type 1 DM w diabetic polyneuropathy
E1043	Type 1 DM w diab autonomic neuropathy
E1049	Type 1 DM w oth spec neurological comp
E1051	Type 1 DM w perph angiopathy wo gangr
E1052	Type 1 DM w perph angiopathy w gangr
E1053	Type 1 DM w diab ischmc cardiomyopathy
E1061	Type 1 DM w spec M/S con tis comp
E1062	Type 1 DM w spec skin & sbc tissue comp
E1063	Type 1 DM w spec periodontal comp
E1064	Type 1 diabetes mellitus w hypoglycaemia
E1065	Type 1 DM with poor control
E1069	Type 1 DM w oth spec complication
E1071	Type 1 DM w multiple microvascular comp
E1073	Type 1 DM w foot ulcer dt mult causes

E108	Type 1 diabetes mellitus w unspec comp
E109	Type 1 diabetes mellitus wo complication
E1101	Type 2 DM w hyperosmolarity wo NKHHC
E1102	Type 2 DM w hyperosmolarity with coma
E1111	Type 2 DM w ketoacidosis, wo coma
E1112	Type 2 DM w ketoacidosis, w coma
E1113	Type 2 DM w lactic acidosis, wo coma
E1114	Type 2 DM w lactic acidosis, w coma
E1115	Type2 DM w ketoa/lactic acidosis wo coma
E1116	Type 2 DM w keto/lactic acidosis w coma
E1121	Type 2 DM w incipient diab nephropathy
E1122	Type 2 DM w est diab nephropathy
E1123	Type 2 DM w end-stage renal disease
E1129	Type 2 DM w other spec renal comp
E1131	Type 2 DM w background retinopathy
E1132	Type 2 DM w preproliferative retinopathy
E1133	Type 2 DM w proliferative retinopathy
E1134	Type 2 DM w other retinopathy
E1135	Type 2 DM w advanced ophthalmic dis
E1136	Type 2 DM w diabetic cataract
E1139	Type 2 DM w other spec ophthalmic comp
E1140	Type 2 DM w unspecified neuropathy
E1141	Type 2 DM w diabetic mononeuropathy
E1142	Type 2 DM w diabetic polyneuropathy
E1143	Type 2 DM w diab autonomic neuropathy
E1149	Type 2 DM w oth spec neurological comp
E1151	Type 2 DM w perph angiopathy, wo gangr
E1152	Type 2 DM w perph angiopathy, w gangr
E1153	Type 2 DM w diab ischmc cardiomyopathy
E1161	Type 2 DM w spec diab M/S con tis comp
E1162	Type 2 DM w spec skin & sbc tis comp
E1163	Type 2 DM w spec periodontal comp
E1164	Type 2 diabetes mellitus w hypoglycaemia
E1165	Type 2 diabetes mellitus w poor control
E1169	Type 2 DM w other specified complication
E1171	Type 2 DM w multiple microvascular comp
E1172	Type 2 DM w features insulin resistance
E1173	Type 2 DM w foot ulcer dt mult causes
E118	Type 2 DM w unspecified complication
E119	Type 2 diabetes mellitus wo complication
E1301	Oth spec DM w hyperosmolarity wo NKHHC
E1302	Other spec DM w hyperosmolarity, w coma
E1311	Other spec DM w ketoacidosis, wo coma
E1312	Other spec DM w ketoacidosis, w coma
E1313	Other spec DM w lactic acidosis, wo coma
E1314	Other spec DM w lactic acidosis, w coma
E1315	Other DM w keto/lactic acidosis wo coma
E1316	Other DM w keto/lactic acidosis w coma

E1321	Oth spec DM w incipient diab nephropathy
E1322	Other spec DM w est diabetic nephropathy
E1323	Other spec DM w end-stage renal disease
E1329	Other spec DM w other spec renal comp
E1331	Other spec DM w background retinopathy
E1332	Oth spec DM w preprolf retinopathy
E1333	Other spec DM w prolf retinopathy
E1334	Other spec DM w other retinopathy
E1335	Other spec DM w advanced ophthalmic dis
E1336	Other specified DM w diabetic cataract
E1339	Oth spec DM w oth spec ophthalmic comp
E1340	Other spec DM w unspecified neuropathy
E1341	Other spec DM w diabetic mononeuropathy
E1342	Other spec DM w diabetic polyneuropathy
E1343	Oth spec DM w diab autonomic neuropathy
E1349	Oth spec DM w oth spec neurological comp
E1351	Oth spec DM w perph angiopathy, wo gangr
E1352	Other spec DM w perph angiopathy w gangr
E1353	Oth spec DM w diab ischmc cardiomyopathy
E1361	Other spec DM w spec M/S con tis comp
E1362	Oth spec DM w spec skin & sbc tis comp
E1363	Other spec DM w spec periodontal comp
E1364	Other spec DM w hypoglycaemia
E1365	Oth spec DM w poor control
E1369	Other spec DM w other spec complication
E1371	Other spec DM w mult microvascular comp
E1372	Oth spec DM w feature insulin resistance
E1373	Oth spec DM w foot ulcer dt mult causes
E138	Other specified DM w unspec complication
E139	Other specified DM wo complication
E1401	Unspec DM w hyperosmolarity wo NKHHC
E1402	Unspec DM w hyperosmolarity, w coma
E1411	Unspecified DM w ketoacidosis, wo coma
E1412	Unspecified DM w ketoacidosis, w coma
E1413	Unspecified DM w lactic acidosis wo coma
E1414	Unspecified DM w lactic acidosis, w coma
E1415	Unspec DM w keto/lactic acidosis wo coma
E1416	Unspec DM w keto/lactic acidosis w coma
E1421	Unspec DM w incipient diab nephropathy
E1422	Unspec DM w est diabetic nephropathy
E1423	Unspec DM w end-stage renal disease
E1429	Unspec DM w other spec renal comp
E1431	Unspec DM w background retinopathy
E1432	Unspec DM w preproliferative retinopathy
E1433	Unspec DM w proliferative retinopathy
E1434	Unspec DM w other retinopathy
E1435	Unspec DM w advanced ophthalmic dis
E1436	Unspec DM w diabetic cataract

E1439	Unspec DM w other spec ophthalmic comp
E1440	Unspec DM w unspecified neuropathy
E1441	Unspec DM w diabetic mononeuropathy
E1442	Unspec DM w diabetic polyneuropathy
E1443	Unspec DM w diab autonomic neuropathy
E1449	Unspec DM w oth spec neurological comp
E1451	Unspec DM w perph angiopathy wo gangr
E1452	Unspec DM w perph angiopathy w gangr
E1453	Unspec DM w diab ischmc cardiomyopathy
E1461	Unspec DM w spec M/S con tis comp
E1462	Unspec DM w spec skin & sbc tis comp
E1463	Unspec DM w spec periodontal comp
E1464	Unspec DM w hypoglycaemia
E1465	Unspec DM w poor control
E1469	Unspec DM w other specified complication
E1471	Unspec DM w mult microvascular comp
E1472	Unspec DM w features insulin resistance
E1473	Unspec DM w foot ulcer dt mult causes
E148	Unspec DM w unspecified complication
E149	Unspec DM without complication

Stroke

I600	Subarach haem, carotid siphon & bifur
I601	Subarach haem - middle cerebral artery
I602	Subarach haem - ant communicating artery
I603	Subarach haem -post communicating artery
I604	Subarachnoid haem from basilar artery
I605	Subarach haemorrhage - vertebral artery
I606	Subarach haem from oth intracranial art
I607	Subarach haem - intracranial artery NOS
I608	Other subarachnoid haemorrhage
I609	Subarachnoid haemorrhage unspecified
I610	Intracerebral haem in hemisphere subcort
I611	Intracereb haem in hemisphere cortical
I612	Intracerebral haem in hemisphere NOS
I613	Intracerebral haemorrhage in brain stem
I614	Intracerebral haemorrhage in cerebellum
I615	Intracerebral haem intraventricular
I616	Intracerebral haem multiple localised
I618	Other intracerebral haemorrhage
I619	Intracerebral haemorrhage unspecified
I620	Subdural haem (acute)(nontraumatic)
I621	Nontraumatic extradural haemorrhage
I629	Intracranial haem (nontraumatic) NOS
I630	Cereb infarct dt thrombosis precereb art
I631	Cereb infarct dt embolism precereb art
I632	Cereb infarct dt occlus precereb art NOS
I633	Cereb infarction dt thrombosis cereb art
I634	Cereb infarct dt embolism cerebral art

I635	Cereb infarct dt occlusion cereb art NOS
I636	Cereb infarct dt cntrl ven thromb nonpyo
I638	Other cerebral infarction
I639	Cerebral infarction unspecified
I64	Stroke not spec haemorrhage or infarct

Multiple Sclerosis

G35	Multiple sclerosis
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Parkinson's Disease

G20	Parkinson's disease
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Fracture NOF

S7200	Fracture of neck femur part unspec
S7201	Fracture intracapsular section femur
S7202	Fx upp epiphysis (separation) femur
S7203	Fracture of subcapital section of femur
S7204	Fracture of midcervical section of femur
S7205	Fracture of base of neck of femur
S7208	Fracture of other parts of neck of femur

Total Hip Replacement

4931800	Total arthroplasty of hip, unilateral
4931900	Total arthroplasty of hip, bilateral

Total Knee Replacement

4951800	Total arthroplasty of knee, unilateral
4951900	Total arthroplasty of knee, unilateral

Appendix 4: Postcodes included in VAED analysis

3289	S. Grampians (S) Bal
3292	Glenelg (S) - Heywood
3293	S. Grampians (S) Bal
3294	S. Grampians (S) Bal
3300	S. Grampians (S) - Hamilton
3300	S. Grampians (S) Bal
3302	S. Grampians (S) Bal
3303	Glenelg (S) - Heywood
3304	Glenelg (S) - Heywood
3305	Glenelg (S) - Heywood
3305	Glenelg (S) - Portland
3309	Glenelg (S) - North
3310	Glenelg (S) - North
3311	Glenelg (S) - North
3314	S. Grampians (S) Bal
3315	S. Grampians (S) - Wannon
3407	S. Grampians (S) - Wannon
3407	S. Grampians (S) Bal