

HACC Active Service Model

Active Clients, Active Workers Project

**Melton Shire Council
Maribyrnong City Council
Brimbank City Council**

Final Evaluation Report

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Executive Summary

The Home and Community Care (HACC) Program provides services to frail older people, people with disabilities and caregivers. Government policy supports the desire of those people to remain living as independently as possible in their own homes, which therefore impacts on the demand for home and community care services.

The HACC Active Service Model (ASM) initiative is a service enhancement strategy which seeks to increase the effectiveness of the Victorian HACC Program in maximising client independence through supporting the development of more person-centred, restorative and capacity building approaches to service delivery.

Throughout 2006 and 2007, a limited number of active service model pilot projects focused on integrating this approach within existing practice have been implemented in Victoria. The aim of the pilot projects was to ascertain whether a more active and restorative approach could result in improvements to client function and therefore reduce reliance on HACC services in the longer term.

Four HACC ASM pilot projects have been evaluated in a previous report: *HACC Active Service Models* (HDG Consulting Group, Feb 2007). This earlier evaluation found that three of the original four pilot projects had achieved success in meeting their stated project objectives and demonstrating the outcomes expected of an active service model approach.

This report provides an evaluation of the fifth active service model pilot project: the *Active Clients Active Workers* project implemented collaboratively by the Melton, Maribyrnong and Brimbank Councils. Victoria University took responsibility for analysis of client level outcomes, which is reported separately.

HDG Consulting Group took primary responsibility for evaluation at the overall project and organisational level. This involved conducting focus groups with HACC community care workers from Melton, Maribyrnong and Brimbank Councils, and interviews with project management staff including assessment workers, Council management, a staff member from Victoria University and the project exercise physiologist. This document describes and examines the main evaluation outcomes at the organisational and system interface level.

Project summary

This pilot project involved developing and implementing tailored individual physical activity plans for up to 16 clients each from the Melton, Maribyrnong and Brimbank local government areas (42 clients). The client objective was to increase the physical activity and health of HACC eligible clients by providing education, information, support and encouragement to increase physical activity. Following client assessment and design of a physical activity plan, community care workers provided clients with motivational support during their home care visit in implementing their activity plans on an ongoing basis.

Project objectives also included indirectly motivating an increased commitment in community care workers to engage in regular physical activity, and improved service interface and coordination between allied health professionals and HACC workers.

Victoria University was responsible for analysing client level outcomes. Data provided indicated positive client function outcomes for some clients, though the majority of clients recorded little overall variance between pre and post-intervention functionality outcomes. The client group was smaller than anticipated (pre intervention and six months post-intervention data for 13 clients) and client numbers were insufficiently large to verify a statistically significant improvement in client functionality as a result of the intervention.

The objective of increasing the commitment of community care workers to their own program of physical activity was most evident at Maribyrnong Council. Qualitative feedback from community care workers was that they benefited from project involvement in terms of role extension, enhanced client-worker relationships, and transfer of practical knowledge. The objective of improving service interface and coordination between allied health staff and HACC workers was considered less developed.

As can be the nature of a pilot project, due to a mix of organisational, project - related and client factors, this pilot project did not generate conclusive evidence. The HACC active service model approach is within the conceptual development phase. As with previous pilot projects, information from this project evaluation will contribute to the body of knowledge and understanding of the practice implications and implementation potential for active service models in Victoria.

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1. Introduction

1.1 Context

A key policy direction of the Victorian government is to maximise the independence of elderly people by supporting them to remain at home, in control of their lives and connected to their communities. This has included proactive approaches whereby service interventions are designed to assist older individuals to maintain their confidence, stay active and healthy and to strengthen their capacity to adapt to changing life circumstances.

Within this context, the HACC active service model initiative is a service enhancement strategy that seeks to increase the effectiveness of the Victorian HACC Program in maximising client independence by supporting the development of more person centred, capacity building and restorative approaches to service delivery.

The active service model approach is different from traditional HACC service models, in that individuals are proactively engaged, for example, by active involvement in interventions to increase their functional and social capacity. Active service model approaches offer short term, targeted, intensive service provision to increase independence and reduce ongoing reliance on the service system.

Throughout 2006 and 2007, a limited number of active service model pilot projects focused on integrating this approach within existing practice have been implemented in Victoria. The aim of the pilot projects has been to ascertain whether a more active and restorative approach could result in improvements to client function and therefore reduce reliance on HACC services in the longer term. Four of these pilot projects were evaluated in an earlier report: *HACC Active Service Models* (HDG Consulting Group, Feb 2007). The evaluation found that three of the pilot projects had achieved success in meeting their stated project objectives and demonstrating the outcomes expected of an active service model approach. As would be anticipated, the pilot projects had evolved through a process of trial, error and learning. Preliminary conclusions and recommendations from the initial evaluation provided a background for the current report.

This evaluation report relates specifically to the Active Clients, Active Workers HACC ASM pilot project implemented by the Melton Shire Council, Maribyrnong City Council and Brimbank City Council.

1.2 Project overview

This pilot project involved developing and implementing tailored individual physical activity plans for up to 16 clients each from the Melton, Maribyrnong and Brimbank local government areas (42 clients). The client objective was to increase the physical activity and health of HACC eligible clients by providing education, information, support and encouragement to increase physical activity.

Following client assessment and design of a physical activity plan, community care workers provided clients with motivational support during their home care visit in implementing their activity plans on an ongoing basis. Project objectives also included indirectly motivating an increased commitment in community care workers to engage in regular physical activity, and improved service interface and coordination between allied health professionals and HACC workers.

1.3 Evaluation framework

An overall evaluation framework was developed for all the HACC ASM pilot projects, including the Active Clients, Active Workers project discussed in this report. The evaluation framework incorporated client level information, organisational and project process information.

Underpinning the design of the evaluation framework was the desire to capture the broad level similarities between the projects as well as take account of and reflect the diversity of the individual pilot projects. Whilst there were some broad similarities between the pilot projects, such as the general target group of HACC eligible clients, the differing nature of each project meant that an identical evaluation could not be used with each project. Thus the evaluation framework was designed to include some standard evaluation features across the pilot projects as well as evaluation features specific to each individual project.

Four core domains were developed to be applied to client level evaluation across the pilot projects: characteristics of the client group, function and independence, motivation and confidence, and satisfaction with service.

For the Active Clients, Active Workers project, Victoria University was responsible for client level evaluation. Client level evaluation protocols included physical activity uptake and adherence, and resultant health effects. Client surveys were conducted pre-intervention, at a three-month and six-month intervals. The survey instruments used were the Stanford Health Assessment Questionnaire (HAQ), and the Transtheoretical Stages of Change Exercise Questionnaire. Victoria University's academic ethics approval required adherence to confidentiality protocols. These limited HDG Consulting Group's access to client level evaluation data, although Victoria University was able to provide HDG Consulting Group with grouped, de-identified data on the 'function and independence' sub-scale of the Stanford HAQ. Victoria University's independent report outlining client outcomes is available separately.

The evaluation framework required organisational and project data to be collected in relation to individual client outcomes, service model implementation, agency impact, service system impact, the extent to which the project achieved its goals and objectives, and barriers and challenges to achieving goals and objectives. This data was collected through secondary data sources and conducting focus groups with HACC community care workers from Melton, Maribyrnong and Brimbank Councils, and interviews with project management staff including assessment workers, Council management, a staff member from Victoria University and the project's exercise physiologist.

2. Evaluation: Active Clients, Active Workers

2.1 Project development¹

The Active Clients, Active Workers pilot was established as an extension of the Well for Life program. Well for Life had been implemented by Melton Shire Council and Brimbank Council with the aim of improving the health and wellbeing of frail older people by improving nutrition and increasing levels of physical activity. Drawing on lessons learned from Well for Life program implementation, the Active Clients, Active Workers project was developed as a trial project to increase the physical activity levels of targeted HACC clients in the local government areas of Melton, Brimbank and Maribyrnong. The Active Clients, Active Workers project specifically aimed to trial the roles and measure the benefits of using: a) community carers to mentor participants to be involved in physical exercise; and b) exercise physiologists with HACC recipients.

Victoria University was nominated to partner with the Councils in the project, as a result of their expertise on rehabilitation of older people. Specifically, Victoria University had engagement in the *Active Script* program, which encourages Victorian General Practitioners to provide advice to their clients on physical activity.

2.2 Project description

The project involved developing and implementing tailored individual exercise plans for 48 clients in total, comprised of 16 clients each from the Melton, Maribyrnong and Brimbank local government areas. Following client assessment and design of an exercise care plan, trained community care workers supported clients to implement their activity plans on an ongoing basis. Through supporting an increase in the activity levels of clients, an increased commitment to engaging in regular physical activity was expected to accrue to community care workers.

Table 1: Program logic

Goal	To pilot an active service model designed to increase the physical activity and health of HACC eligible clients and community care workers.
Rationale	That by providing education and information to assessment officers and community care workers, HACC workers will effectively encourage their clients to increase their physical activity. This will assist to improve client functioning and capacity and thereby reduce the need for current or future support services. Further, by participating in the project, community care workers will be motivated to commit to personal programs of regular physical activity.
Objective 1	Improved or maintained physical functioning and independence of participants.
Objective 2	Increased physical activity and healthy lifestyles, through implementation of a physical activity plan.
Objective 3	Improved community connectedness through the provision of information and links with community care workers.
Expected outcomes	Improved or maintained functioning and independence of clients leading to a reduction in future demand and a more flexible service response.

¹ Text adapted from project submission.

Target group

- Existing HACC clients
- HACC community care workers.

Intervention

- Training and recruitment of HACC assessment officers and community care staff to the project
- Recruitment and assessment of clients
- Development of physical activity plans for clients
- Motivational support for clients to carry out the physical activity plan by HACC community care workers
- Service system interface and coordination between HACC staff and allied health professionals.

Period of intervention

- Six months.

As shown in Table 2, the actual sample size for clients and community care workers was less than originally anticipated. Of an anticipated 48 clients, 31 clients were recruited to commence the pilot project.

Table 2: Sample size

Council	Anticipated sample size	Actual sample size	
		At commencement	At 6 months
Melton	Clients: 16 Community care workers:8 Assessment officers: 1	Clients: 9 Community care workers:8 Assessment officers: 1	Clients: 8 Community care workers:8 Assessment officers: 1
Brimbank	Clients: 16 Community care workers:8 Assessment officers: 1	Clients: 15 Community care workers:8 Assessment officers: 1	Clients: 6 Community care workers:8 Assessment officers: 1
Maribyrnong	Clients: 16 Community care workers:8 Assessment officers: 1	Clients: 7 Community care workers:8 Assessment officers: 1	Clients: 1 Community care workers:8 Assessment officers: 1
Total	Clients: 48 Community care workers:24 Assessment officers: 3	Clients: 31 Community care workers:24 Assessment officers: 3	Clients: 15 Community care workers:24 Assessment officers: 3

Source: Victoria University. Client participation at six months was determined by return of the six month post-intervention surveys. Community care worker participation numbers appear to refer to agreement to engage in the project; they do not reflect actual numbers of worker-client partnerships. Note that the figure of 15 clients at the six month interval is more than the figure of 13 clients for which six month data was recorded.

2.3 Project and organisational level evaluation measures

2.3.1 Overall project participation measures

In accordance with the evaluation framework the project was required to collect overall participation measures regarding the number of referrals and the number of pilot project clients for the total project period. This information is provided in Table 3 below.

As shown, Melton, Maribyrnong and Brimbank councils received 1,384 referrals for HACC home care during the project period.

Of these, 82% (n=1,136) received a home care service. The anticipated pilot project sample group of 48 clients, or actual sample group of 31 clients at commencement and 11 at the six month interval, represents a small proportion of these, suggesting that the anticipated sample size was not unreasonable. A longer recruitment period may have assisted with achieving the sample size.

Table 3: HACC Community Care referrals and ASM project participation measures

Item	Melton	Maribyrnong	Brimbank
Number of new referrals received for HACC home care services during the project period	209	287	888
Number of new referrals received for HACC home care services during the project period who received a home care service	130	262	744
Number of people who sought and did not receive a standard HACC service during the project period (ie. were either not eligible for HACC services OR were eligible but not considered a priority in comparison to others)	29	Not available	105
Number of people referred and assessed as suitable for the HACC ASM project	10	Only recruited volunteers	8
Number of people referred and either assessed as not suitable OR who did not agree to participate in the HACC ASM project during the project period	0	0	5

Source: Data provided by Brimbank, Melton and Maribyrnong Councils.

2.3.2 Project governance, management and staffing

The governance structure for the project comprised a reference group involving an Aged and Disability/Diversity Manager from each of the Councils, as well as a Senior Lecturer (Musculoskeletal rehabilitation) and an exercise physiologist contracted by Victoria University. The reference group was chaired by the Shire of Melton, and met monthly over the period of the project.²

A project officer from each of the Councils was responsible for coordination within each specific council. In addition, one or more assessment officers from each of the councils resourced the project.

² A project journal was not kept for the project. Councils provided minutes from four project meetings as a basis for extrapolating the project process.

Training was provided to 24 community care workers and three assessment officers to assist them to identify physical activity need, and plan, implement and support physical activity with HACC clients. The training package was developed and delivered by an accredited exercise physiologist contracted by the Victoria University Exercise Rehabilitation Unit.

2.3.3 Project implementation and processes

Project objectives

The project submission stated the objectives of the project included the following:³

- Enhance community care workers' understanding of the importance of physical activity for both themselves (enhance their fitness) and for clients to maximise clients' independence
- Involve staff and clients in the development and implementation of physical activity plans for HACC clients
- Build on the intake and assessment pathways and other service provision frameworks of participating Councils
- Identify referral pathways, processes and procedures for clients requiring physical activity plans
- Develop a client centred process to support clients to identify their physical activity needs, and plan physical activities they a) want to undertake and b) feel they can undertake with the supervision or assistance of their community care workers
- Establish mechanisms for involving allied health staff in the referral and assessment of clients.

Project timeline

The overall project timeline and key activities are illustrated in Table 4.

Table 4: Indicative timeline of key activities

Month	Activity
March 2006	Submission to DHS
April 2006	Project planning and design
May 2006	Notification of funding
June 2006	Recruitment of community care workers and assessment officers
August 2006	Training of community care workers and assessment officers
August 2006	Recruitment of clients by HACC staff
August 2006	Consent form process (administered by VU)
Nov 2006	Pre intervention survey of clients
Nov 2006	Assessment and physical activity plan development
Nov 2006 – May 2007	Implementation of physical activity plans
Feb 2007	Three month intervention survey of clients
May 2007	Post intervention survey of clients

³ Text adapted from project brief supplied by project worker

Project implementation

Council project officers identified community care workers to participate in the project. Decisions on selection were commonly based on having good communication skills, demonstrating motivation and commitment in their work, caring about clients and being experienced HACC carers. 'We picked the best people we had'. Community care workers were invited to participate and given a briefing of the project.

In July and August 2006, Victoria University provided four full days of training over four weeks to participating community care workers from the three councils. The purpose of the training was to provide community care workers with relevant information on developing exercise programs and the mechanics of the body. Training included information on possible activities ranging from chair based activities to more rigorous activities (such as netball, swimming and walking), general anatomy and relevant considerations such as diabetes and hip and heart health. Take home notes and reference folders were provided to participating staff.

Community care workers rated the training highly, and many considered it the highlight of the project as they found it informative and a rare opportunity to meet and exchange information with workers from other councils. Nonetheless, some workers and council management staff noted that some exercise demonstrations (eg. netball, swimming) were inappropriate for the target client group and impractical for the community care workers to implement. Several staff stated that there was room in the training to more comprehensively demonstrate the process of developing and writing up tailored physical activity plans. Trainers noted that an improved package would have included training pitched to the assessment officer.

Following training, community care workers identified clients to participate in the pilot project. Each community care worker was permitted to approach two to three clients from their existing clientele (which typically consisted of 20-25 people). Formal selection criteria were not applied. Rather, clients were selected on the basis of existing relationships, client willingness to participate and community care workers consideration of their client's capability and the likely health benefit. Community care workers presented the pilot project as an exercise program for clients that could be carried out both with workers and also independently. Training was not provided to clients, other than informally through community care workers.

After clients were recruited, they were required to complete the Stanford HAQ and Transtheoretical Stages of Change Exercise Questionnaire surveys. Due to the involvement of Victoria University, client consent to participate was also required. Formalisation of consents resulted in a time lag of approximately eight weeks between completion of training and implementation of exercise plans. Some community care workers at Brimbank and Maribyrnong stated that they, and their clients, were disheartened by the delay and that project enthusiasm waned as a result of this time lapse.

The 'physical activity plan' which recorded client activity goals formed a central feature of the pilot project. At one stage there was confusion about whose role it was to develop these plans – ultimately Assessment officers, community care workers and the exercise physiologist collaborated on the development of them.

The intention of each plan was to describe the moderate increases in client-selected physical activity that would contribute to improved fitness, flexibility and functionality. Chair based exercises, walking, stretching exercises, water based activities and gardening were common examples of activities listed in plans. Table 5 provides examples of actual physical activity plans developed in the project.

Table 5: Example physical activity plans

Example Physical Activity Plan #1	
Goals	<ul style="list-style-type: none"> To become more mobile, and to maybe lose some weight by increased physical activity To ease back pain by increased physical activity Eventually to be able to walk with the frame for 15 minutes with confidence
Concerns	<ul style="list-style-type: none"> By being inactive, this may be adding to the back pain experienced. Weight is of concern, being overweight is not good for health. No real concerns about increased activity (walking) as long as taken slowly and gradually. Little hesitant to go by self at start and would welcome the home care worker walking with me first couple of times.
Suggested plan	<ul style="list-style-type: none"> Increased walking. First off, will try to walk six houses up the street and back. Each walk may increase by one house depending on feeling.
Progressions	<ul style="list-style-type: none"> February 2007: client progressing well. Has lost 2 kgs. Has continually walked every week.
Transport	<ul style="list-style-type: none"> None needed.
People who contributed to and agree to this plan	<ul style="list-style-type: none"> Client HACC worker
Date of commencement	<ul style="list-style-type: none"> November 2006
Example Physical Activity Plan #2	
Goals	<ul style="list-style-type: none"> To become physically active To increase levels of motivation To be able to enjoy life with family To be able to play more often with grandchildren
Concerns	<ul style="list-style-type: none"> Level of motivation are not good Did not do any exercise for about 20 years Health issues: hip operation
Suggested plan	<ul style="list-style-type: none"> Going for short walks with purpose of increasing progressively. Initially 10 minutes To join a physical activity program in the community To try to work more often in the garden Breathing exercises
Progressions	<ul style="list-style-type: none"> February 2007: So far client has been doing physical activities since November 2006 by going for daily walks starting with 10 minutes and now 20 minutes. Joined the gym for aqua aerobics 2-3 times per week since November 2006. Now would like to start doing the seniors pump program and will speak with case manager about this.
Transport	<ul style="list-style-type: none"> Client drives own car and is able to use public transport.
People who contributed to and agree to this plan	<ul style="list-style-type: none"> Client Assessment officer
Date of commencement	<ul style="list-style-type: none"> November 2006

Once designed, physical activity plans were forwarded to the exercise physiologist for approval. The roll out stage involved community care workers discussing and demonstrating exercise programs with clients, and then encouraging and facilitating clients to maintain their physical activity plan during their ongoing two-hour fortnightly community care visits.

Project implementation was substantially similar across the three Councils. Variances in implementation included the following:

- Maribyrnong Council selected community care workers who were known to be physically fit, the logic being that they would more readily be able to coach activity. This was not a priority for other councils.
- Melton Council held fortnightly meetings to allow participating community care workers to share experiences, ask project related questions, and for the Project and Assessment Officers to reinforce messages. These meetings were minuted, which was considered important to maintain the profile of the project and accountability of staff.
- Maribyrnong Council had a change-over of assessment officer during the project.
- The Melton Council project officer had extended leave during the project, during which time the assessment officer oversaw the project.

2.3.4 Project costs

A total of \$26,500 was budgeted on direct costs for the project including the training, evaluation and secondary consultations provided by Victoria University, and the costs of community care workers' salaries during extra time for training. Table 6 provides a breakdown of the project budget.

Table 6: Submitted budget for Active Workers, Active Clients

Budget item	Cost
Curriculum development	\$5,000
Training and materials @ \$60 per hour	\$3,000
Software, existing tool establishment costs	\$1,000
Algorithms – adaptation of existing tools	\$3,000
Assessment officer milestone reviews – 3 and 6 month	\$3,000
Training 30% of community care workers salaries	\$4,500
Exercise physiologist – secondary consultations	\$2,000
Evaluation and report by Victoria University	\$5,000
Total	\$26,500

Table 6 and Table 7 exclude in kind costs that were borne by the participating Councils. The pilot project submission estimated in kind costs to be \$25,000. This included additional client hours, providing facilities for training, project management and administration costs, and catering. All participating councils noted that in kind costs exceeded initial expectations, particularly for project management oversight.

Table 7 details the service delivery hours attributed to the project (excluding in kind service provision, project support activities and management time).

Table 7: Service delivery hours and associated costs per client

Task	Position/item	Description	Time (hours)	Cost
Assessment	Assessment officer	All assessment related functions (ie. home visit, report, case discussions)	Melton: 40 @ \$69.97 p/h M/nong: 16 @ \$69.97 p/h B/bank: 10 @ \$75 p/h	\$2,798 \$1,120 \$750
Exercise care plan	Exercise physiologist	Document care plans, set goals and instruct care workers	Melton: 20 x \$69.97 p/h	\$1,399
Intervention visit 1	Community carer	Role modelled physical activity plan	Melton: 5 @ \$29.77 p/h M/nong: 4 @ \$29.77 p/h B/bank: no extra time allocated	\$149 \$119
Intervention visit 2	Community carer	Exercise program	Melton: 1.5 @ \$29.77 p/h M/nong: 14 @ \$29.77 p/h B/bank: no extra time allocated	\$45 \$417
Total				\$6797

Source: Data provided by councils. Note: Melton report \$8931 and \$2679 respectively for intervention visit 1 and 2 however figures calculate at \$149 and \$45.

Table 8 details other resource costs attributed to the project.

Table 8: Other resources

Item	Description	Time (hours)	Cost
Management time	Time of manager spent in project meetings	Melton: 100 @ \$80 p/h M/nong: 40 @ \$100 p/h B/bank: 40 @ \$48 p/h	\$8,000 \$4,000 \$1,920
Supervision time	Time of manager and worker spent in supervision	Melton: 60 @ \$69.97 p/h; + \$1786 M/nong: 11.33 @ \$69.97 p/h; + \$278 + \$476 B/bank: 48 @ \$35 p/h	\$5,984 \$1,547 \$1,680
Vehicle	Mileage/vehicle costs	Melton: 450kms @ \$0.68 p/km M/nong: 990 kms @ \$0.87 p/km B/bank: \$235	\$306 \$864 \$235
Corporate overheads	Phone, power, office, equipment, etc	Melton: 22% applied to all programs M/nong: 22% applied to all programs B/bank: 22% applied to all programs	
Training	Training	Melton: 192 @ \$29.77 p/h; 24 x \$69.97 M/nong: 252 @ \$29.77 p/h; 31.5 x \$69.97 B/bank: @ \$ p/h	\$7,395 \$9706
Total			\$41,637

Source: Data provided by councils

The total project cost was therefore \$48,434 (ie. \$6,797 plus \$41,637), excluding corporate overheads and payment to Victoria University (training curriculum development, training delivery and materials, software, algorithm development – refer submitted budget in Table 6: Submitted budget for Active Workers, Active Clients).

Based on the 23 clients at the three month interval, this equates to approximately \$2,000 per client. Based on the eleven clients who had shown one more stages of improvement and the three month interval this equates to approximately \$4,400 per client. However it should be noted that a portion of the intervention, which could occur during normal home-care service delivery time (ie. encouragement to complete an exercise program), would not necessarily generate additional costs for the organisation.

2.4 Client level evaluation data

2.4.1 Characteristics of the client group

The project recruited and collected baseline data for 31 clients. Of these original clients, 23 participated in the project up to the 3 month interval, and 13 participated in the project for the entirety of its six month duration.

The average age of the 31 original participants was 70 years. Sixty-seven percent of participants were Australian born, while 33% were born overseas. The majority of participants (83%) were women, and 46% of participants lived alone⁴. All except for two clients had previously used HACC council services – primarily home care.

2.4.2 Individual client outcomes

Victoria University was contracted to collect and analyse client level data through the survey tools of the Stanford HAQ and Transtheoretical Stages of Change Exercise questionnaires.

Adherence to ethics confidentiality protocols limited Victoria University's ability to disseminate raw data, other than grouped de-identified data on the functional and independence subscale of the Stanford HAQ (Appendix A) and Transtheoretical Stages of Change data set summary (Appendix B). The commentary below is therefore limited to analysis based on the information provided. Victoria University's independent report, including analysis of client outcomes based on survey responses, is separate to this report.

Summary analysis of functional and independence subscale of the Stanford HAQ

The data (Appendix A) shows that most clients' functional self-assessments remained relatively static over the duration of the project. A micro assessment of the data nonetheless reveals that some clients did report improved functionality post-intervention, while others reported functional deterioration.

Table 9 provides survey feedback from two examples of such clients. Therefore, it is difficult to affirm an overall correlation between the project intervention and functionality outcomes, as other contributing variables would be relevant, such as the trajectory of a client's health. Indeed, several clients dropped out of the project due to health considerations, reverting to rehabilitation programs, or finding the summer heat incompatible with a new exercise program.

⁴ Maribyrnong data not received

Table 9: Individual examples of Stanford HAQ client functional and independence index scales, pre- and post-intervention

Ease of...	Client A (functional improvement)		Client B (functional deterioration)	
	Pre intervention rating	Post intervention rating	Pre intervention rating	Post intervention rating
Dressing and grooming	1	0	3	5
Arising (from bed, chair)	0	0	2	3
Eating	4	1	4	9
Walking	1	2	3	5
Attending to hygiene	3	2	7	8
Reaching	1	2	5	5
Gripping	0	0	6	6
Attending to activities (ie. shopping)	3	4	7	7

Note: See the Stanford Health Assessment Questionnaire for detailed scoring protocols. In summary, 0 = able to do without any difficulty while each additional score adds an increment in the level of difficulty, so that 7 = unable to do plus client requires a special device and help from another person.

Client numbers were insufficiently large to verify a statistically significant improvement in client functionality as a result of the intervention. Nonetheless, as a snapshot, the provided data shows little overall variance between pre and post-intervention self-reported functionality outcomes.

Transtheoretical Stages of Change

The questionnaire survey utilises six categories to reflect stages of physical activity: pre-contemplation nonbeliever, pre-contemplation believer, contemplation, preparation, action, and maintenance.

The summary data provided (Appendix B) at the three month interval indicates that of 31 clients for whom base line data was collected:

- Three clients progressed from contemplation to action, showing improvement
- Four clients progressed from action to maintenance, showing improvement
- Three clients progressed from contemplation to equal action/maintenance (ie. returned equal scores for both sub scales), showing improvement
- One client progressed from pre-contemplation to contemplation/action, showing improvement
- Seven clients remained at the contemplation stage (no movement)
- Three clients remained at the maintenance stage (no movement)
- Two clients declined from action to pre-contemplation or contemplation
- Eight clients did not return data.

Data available at the six month interval indicates that:

- The three clients who had progressed from contemplation to action at the three month interval remained at the action stage at the six month interval
- Data was not returned for the four clients who had progressed in the previous from action to maintenance at the three month interval

- The three clients who had progressed from contemplation to equal action/maintenance at the three month interval were at the maintenance stage at the six month interval
- Data was not returned for the one client who had progressed from pre-contemplation to contemplation/action at the three month interval
- The seven clients who remained at the contemplation stage at the three month interval also remained at contemplation at the six month interval
- Data was not returned for the three clients who remained at the maintenance stage at the three month interval
- Data was not returned at six months for the two clients declined from action to pre-contemplation or contemplation at the three month interval
- Eight clients did not return three month interval data or six month interval data.

Hence at the six month interval, full data was available for 13 of the initial 31 clients. Of these 13 clients:

- Six had shown improvement - three had moved from contemplation to action, and another three had moved to maintenance, thus showing improvement
- Seven had shown no change, remaining in the contemplation stage.

Of these clients the most successful in terms of the project objectives would appear to be the three clients who moved from pre-contemplation or contemplation to action to maintenance during the course of the project.

Staff feedback regarding client outcomes

Staff feedback in focus groups, and client feedback in post-intervention surveys (conducted independently by Council) provided examples of positive outcomes for some clients who had maintained their participation throughout the project. Direct client impacts were reported to include healthy weight loss and improvements in fitness and functionality. Community care worker staff stated that the staff-client interaction in the project provided some clients with the motivation and confidence to adopt incremental lifestyle changes that improved their well-being ('they just needed a push and some encouragement'). Staff provided examples of clients who had been motivated through their participation in the project to join the gym, commence swimming, and start using an exercise bike.

Staff noted that other clients had discontinued the project because they required more intensive encouragement and oversight than staff were able to provide within the timeframe of their two-hour fortnightly visits ('It had little impact on the client because she only exercised on the days that I was there.')

Case study examples of successful project outcomes were drafted by Councils, and are provided below.

Case Study 1: Melton Council

Anna is aged 62 and has been receiving one hour of Community Care per fortnight since 2005. She lives alone in a two bedroom unit with a small court yard. In 2005, Anna had an operation on her right hip and left foot. Following surgery, Anna undertook physiotherapy exercises to assist with her recovery. Anna was recruited to the ASM pilot project in October 2006 by her community care worker. Anna's exercise plan included aqua aerobics once a week and taking her dog for half-hour morning walks. She now attends aqua aerobics two to three times weekly and has also started gardening. Anna was also referred to a walking group in February 2007.

Case Study 2: Maribyrnong Council

Prior to starting on the ASM pilot project, Pauline experienced daily asthma, limited mobility and sleeping problems. Following participation in the project, Pauline reported that she can breathe deeper and longer, and experiences asthma now only fortnightly. Her mobility has improved and she is now able to walk around the supermarket and do her own shopping. She reports less pain and tension in her shoulders and back. Pauline's sleeping problems persist, but she is now able to stay in bed to relax for an hour doing yoga relaxation. Pauline has lost five kilograms while on the program and reports that she has never felt better in her life.

Case Study 3: Brimbank Council

Active as a young person, Mary enjoyed hockey at school and social tennis as an adult. Mary had three sons and childbirth increased her back problems. Mary and her husband moved to a retirement village six years ago. Her husband recently passed away and her sons live interstate so her primary supports are friends and neighbours in the retirement village. When she was 77 years old she had a laminectomy, after which she had relief from back pain for some time. Mary has vertigo and often feels dizzy, and uses a pick up stick. Mary has a small garden which she attends to, drives her automatic car locally, does her own shopping, cooking and personal care. She receives community care fortnightly to assist with vacuuming, mopping and bathroom cleaning. Mary had two falls in recent weeks, both times landing on her shoulder, which has also caused pain in the past. Mary now finds she is unable to raise her right arm above her shoulder.

Mary commenced on the pilot project at the beginning of December 2006. She was given chair exercises and standing exercises to stretch her calves. She also throws a ball to assist with her coordination. At the four week interval, Mary reported feeling supported and happy with the program. Her community care worker spent time with her and encouraged her engagement with her exercise program on each visit. Mary fulfilled sitting and standing exercises, usually attempting each movement 6 times. At the eight week interval, the number of exercises done each time had increased to 10-12 repetitions for each movement attempted. Mary has maintained motivation to continue these exercises, and feels supported by the program. She is happy that others care. Mary feels that she is walking faster and does not use her stick in the house now and generally feels stronger in the legs. Unfortunately recent falls have affected Mary's ability to raise her arms, especially the right one. Mary has been referred to physiotherapy to help with this injury.

Brimbank Council offered the following example of a less successful project outcome.

Case Study 4: Unsuccessful project outcome

Rita is a divorced 70 year old woman. Born in Europe, Rita migrated to Australia in 1965. The only family Rita has in Australia are her daughter and her brother. Her daughter is not involved in her mother's care and Rita has a strained relationship with her brother. Rita lives alone, has financial difficulties and lives on an Aged Pension. Rita currently accesses a number of Council services including Personal Care assistance, Home Care, Meals on Wheels, Planned Activity Group and Lawn Maintenance. Rita has a number of medical complaints including depression, arthritis, heart disease, asthma, hypertension, right knee replacement, and gastrointestinal problems. She is self administering her medication, however due to the amount of tablets and clients declining eye sight she has reluctantly agreed to use of a dosette box.

Rita agreed to take part in the activity program, and was keen to reduce her pain and improve her mobility.

She commenced with a small range of seated exercises involving arm movement (throwing a ball). Some exercises were designed to improve her ability to go from a sitting to a standing position safely and with confidence. Rita and her community care worker commenced the program together. The worker assisted with activities after attending to Rita's personal care needs, and Rita was encouraged to complete exercises by herself. A follow up visit four weeks later by the assessment officer found that Rita had stopped engaging with her exercise plan. Rita stated that she was not motivated to do activities, did not feel well at times, and had limited time. The worker stated that she did not always have time to fulfil personal care and provide exercise encouragement, and could not stay after hours. As at March 2007, Rita had independently commenced weekly physiotherapy. She reported attending to physical activities when she remembered or was reminded by her carer.

2.4.3 Service system impact

The intended areas of service system impact: improved client function and independence leading to a reduction in future service demand; community care worker impact through role extension and increased physical activity, and improved service system interface and coordination between HACC staff and allied health practitioners.

Improved client function and reduced future service demand

In terms of reducing future service demand, the evaluation question is whether the coaching that could be incorporated into a two-hourly fortnightly visit by a community care workers was a) favourable to motivating a healthful change in clients; that b) lead to increased client functionality and independence; and c) ultimately reduces future service demand.

As discussed in previous sections, the client survey data provided to HDG Consulting Group showed little overall variance between pre and post-intervention self-reported functionality outcomes; and positive physical activity improvement for six clients at the six month data collection interval.

Focus group feedback from community care workers identified that some clients had improved their functionality over the course of the project in a way that was indicative of potential for reduced service demand. For example, one client's plan included doing their own housework every other week when their community care workers was not scheduled. Several clients' plans included an activity of assisting their community care workers with household chores (such as folding washing or dusting).

Community care worker outcomes

There were two intended areas of project impact for participating community care workers: the impact on their service provision role, and self-motivation towards physical activity.

Some managers considered a strength of the project to be the 'empowerment' of community care workers, through increasing their knowledge and autonomy to develop their relationships with clients.

Role extension was considered intrinsically valuable, as well as a way to improve community care worker job satisfaction and retention. 'The project allowed staff the ability to influence, feel valued, not be a 'servant', and have a more meaningful role.'

As stated in Figure 1, this extension reflects the role of community care staff in assisting clients with exercise programs.

Figure 1: Role of community care staff in assisting clients with exercise programs

The HACC New Entrant Development Project undertaken by DHS in 2003 considered the role of community care staff in assisting clients with exercise programs. The role statement subsequently developed indicates that:

- staff need to have personal care training as they are working with people and their body's;
- the exercise or physical activity program needs to be prescribed by a suitably trained professional;
- the exercise or physical activity plan is developed on a consumer specific, non transferable basis under the direction of a suitably qualified professional; and
- that personal care staff must not be taught a standard set of exercises or therapy program to use across the HACC target group as this is outside the scope of a personal care worker's role.

Thus, personal care trained community care staff can work with clients on physical activity programs but only when they are specifically designed for the client by a suitably qualified professional such as a physiotherapist.

In terms of impacts on their roles as carers, community care workers across all Councils commonly reported enjoying the extension and development of their role. Engagement in the tertiary training provided by Victoria University was widely lauded:

- 'It was good to learn. We will pass on that knowledge.'
- 'Got you thinking about the bigger picture - It should be part of orientation.'
- 'We work alone. It was good to get some team building and share experiences with each other and workers from other Councils.'

The role of community care workers in the project was considered an adjunct to their existing role (two hours of home care fortnightly). Community care workers found that this left them limited time to support physical activity plans unless exercises were integrated into routine service provision (ie. clients helping with cleaning). Clients typically prioritised two hours of home care over exercise support: 'When we're there, all clients want done is housework'.

Some staff reported that combining their routine tasks and a role in the project, without extra time, created unwarranted pressure. Community care workers at each Council reported a lack of clarity about over-time allocations for their involvement in the project.

In terms of the project objective of encouraging 'active workers', Maribyrnong community care workers reported the most positive results. Some community care workers stated that as a result of their participation in the project (and particularly training) they had adopted healthier exercise and eating habits. One community care worker reported giving up smoking. Melton and Brimbank staff, however, did not report change in levels of physical activity: 'Our job is already physically demanding.'

Service interface and coordination

The initial project submission highlighted the participation of allied health professionals as an integral component of the project: one of the two aims of the project was stated as 'to trial the roles and benefits of using exercise physiologists with HACC clients;' another was 'to establish mechanisms for involving allied health staff in the referral and assessment of clients.'

The role of allied health staff was a point of confusion in the implementation of the project. The actual participation of allied health staff in the project was limited to one exercise physiologist contracted into the project by Victoria University. The exercise physiologist was engaged after the original project proposal had been developed. Under the contractual arrangement, the role of the exercise physiologist primarily revolved around assisting in planning and delivery of training, endorsement of physical activity plans, liaison with community care workers, and survey administration and analysis.

Community care workers were initially of the understanding that allied health staff would take responsibility for tailoring physical activity plans to individual clients. However, Victoria University's ethics application stated that the planning of tailored physical activity plans was the role of Council assessment officers. Ultimately, this role became the shared responsibility of community care workers and Council assessment officers, with the project's exercise physiologist taking responsibility for endorsing proposed plans before they were implemented.

Several community care workers were uncomfortable with this arrangement, as they felt they were neither qualified for, nor confident about taking on the role of developing clients' physical activity plans. This was particularly the case for community care workers at Brimbank and Maribyrnong Councils. Brimbank community care workers also noted that some clients were reluctant to engage in the project unless their physical activity plan was personally tailored by a qualified exercise physiologist. Feedback included the following:

- 'I thought there would be more interaction with the allied health staff and follow up on exercises we were giving clients.'
- 'I was expecting more face to face input from a professional.'

Melton Council staff were less concerned about their role in developing physical activity plans, as they viewed themselves as playing a support role.

- 'We weren't prescribing exercise. We were just supporting clients to be a little more active than they were.'

Some staff noted that the project did not provide a sustainable precedent for linking allied health and Council services. Though a qualified exercise physiologist was engaged at 0.1 FTE for the duration of the project, the exercise physiologist was employed through Victoria University, independently of routine service provider interfaces (although the exercise physiologist was employed in another role at a local Health Service). Incorporating allied health services already working with the targeted client base was considered to be a more sustainable approach. Community health was also identified as an appropriate field to engage towards improving service interface between HACC staff and allied health.

Thus a criticism regarded the limited involvement of allied health staff in the project, and a perceived shift of responsibility for physical activity plan development from the exercise physiologist to assessors and community care workers. A perceived lack of communication with community care workers in relation to when the project commenced and finished, was also considered a weakness of the project.

3. Conclusion and recommendations

The aim of the Active Clients, Active Workers project was threefold:

- To develop and implement tailored six-month physical activity plans for 48 clients from three Councils, towards improving or maintaining the physical wellbeing of participants
- To increase the commitment of community care workers to engaging in physical activity, as a result of supporting an increase in the physical activity of clients
- To improve service interface between allied health staff and HACC workers.

The sample size of the project was smaller than anticipated, and less than half of the original 31 participants maintained their participation in the project for its six-month duration. At the six month interval, full data was available for 13 clients. Of these six had shown improvement - three had moved from contemplation to action, and another three had moved to maintenance, thus showing improvement; and seven had shown no change, remaining in the contemplation stage.

While the small number of clients meant that the project was too small to provide conclusive quantitative findings, the qualitative data provided some examples of the project being positively received by some client participants. The most successful client outcomes in terms of the project objectives would appear to be the three clients who moved from pre-contemplation or contemplation to action to maintenance during the course of the project.

The objective of increasing the commitment of community care workers to their own program of physical activity was particularly evident at Maribyrnong Council, although these staff had been selected for involvement in the project due to their already active lifestyles. Realisation of this objective was less evident in other councils, and some community care workers stated they were not aware that this was part of the project's objectives. Nonetheless, staff commonly stated community care workers involvement in the project to be one of its main strengths, in terms of role extension, enhancing client-worker relationships, and building knowledge.

The objective of improving service interface and coordination between allied health staff and HACC workers was widely considered to be underdeveloped in this project.

Project process strengths and challenges⁵ can be summarised as:

- Community care worker training was considered to be a strength of the project. All councils recommended integrating active service model - related training into induction and position descriptions for new staff as part of an ongoing culture change initiative.
- The strength of the relationship between staff and clients was considered integral to client participation in the project and maintenance of their physical activity plan.
- Strong project leadership was considered critical. The momentum was challenged when key staff left the project.
- A commonly stated process difficulty was miscommunication between the tiers of project members. Clarity was required on such issues as roles and responsibilities, project process, and over-time entitlement for community care workers. One Council identified their fortnightly community care worker meetings as playing a key role in providing a forum for re-stating and clarifying project goals and processes, maintaining morale and sharing practice amongst community care workers.
- Several community care workers requested a clearer feedback loop to integrate them into the information chain regarding evaluation outcomes. They felt that they were not as well linked into project information as clients.
- Some community care workers felt pressured to provide their usual service and give time to the pilot project within the same allotted timeframes (ie. two hours of home care fortnightly). Community care workers involvement became an adjunct to existing carer roles, and workers reported that clients tended to prioritise two hours of cleaning rather than exercise support. 'When we're there, all clients want done is housework.'
- Key informants suggested that HACC client selection could have been better targeted. Brimbank council management proposed targeting the project to rehabilitation clients, clients transferring from hospital, and 'motivated' clients. They also recommended starting the project with the assessment process for new HACC clients, and linking with hospitals to integrate exiting clients.
- It was widely agreed that the role of allied health professionals in the project was underdeveloped. Community care workers had anticipated greater 'service interface' between staff and allied health professionals, specifically in the development and implementation of tailored physical activity plans.
- All councils agreed that the project was too small scale to warrant the cost and effort of multi-council coordination. Brimbank and Maribyrnong councils noted that coordination of the partnership took more time than they had anticipated.

⁵ Source: Focus group feedback with community care workers, assessment officers, project officers, Council management, Victoria University, exercise physiologist; project analysis.

Active support model interventions that improve the functional capacity of clients to complete activities of daily living are positive for both individual clients and the service system. Good project planning and management is necessary to maximise the potential of ASM interventions. Although the detail of the project was different to earlier active service model pilot projects, process and management learnings are similar and include the importance of the following:

- A shared vision and understanding about the aims and objectives of the project, preferably by all staff involved, from as early as possible in the planning.
- Inter-agency Memorandums of Understanding where multiple organisations are involved (communication protocols, resource contributions, issues resolution).
- Documentation and promotion of respective roles and responsibilities including managers, project workers, HACCC assessment officers, home care workers and affiliated external parties.
- Partner clarity about expectations and commitments to the pilot project, particularly in light of competing demands for practitioner time and resources (especially in relation to accessing allied health practitioners).
 - Setting suitable targets for sample size that will yield reliable results which cannot be skewed by one or two individual responses.
 - A strategy of over subscribing clients to a pilot project given the nature of the target group and the likelihood that a number of clients will leave during the course of the project.
 - Ensuring motivational strategies are in place for clients and workers.
 - Contingency plans in relation to risk management, such as staff turnover, to mitigate over-reliance on individual positions.

The active service model pilot projects have provided a promising start in terms of trialing the range of potential active service model approaches and interventions. Whilst due to a mix of organisational and client factors, the Active Clients, Active Worker pilot project generated limited data in relation to functional capacity and uptake and maintenance of physical activity, the results and learning will contribute to the body of knowledge and understanding of the practice implications and implementation potential for active service models in Victoria.

Appendix A: Functional and independence subscale Stanford HAQ

Table 10: Pre intervention and six months post-intervention data for 15 HACC clients (n=15)

[Whilst results in the table below are shown as percentages. It is important to note that because this is a small sample size, a change reported by one individual will result in a +/- 6.6% change. However, not all clients answered all questions, meaning that sometimes a change by one individual will result in a greater than +/-6.6% change].

Dressing and grooming - Are you able to:		Pre intervention	6 Months Post Intervention	Change
Dress yourself, including tying shoe laces and doing buttons?	Without any difficulty	40%	53%	+13%
	With some difficulty	27%	20%	-7%
Shampoo your hair?	With much difficulty	7%	7%	0%
	Unable to do	27%	20%	-7%
Arising - Are you able to:				
Stand up from a straight chair?	Without any difficulty	60%	53%	-7%
	With some difficulty	27%	7%	-20%
Get in and out of bed?	With much difficulty	7%	27%	+20%
	Unable to do	7%	13%	+6%
Eating - Are you able to:				
Cut your meal?	Without any difficulty	73%	67%	-6%
	With some difficulty	7%	13%	+6%
Lift a full cup or glass to your mouth?	With much difficulty	7%	13%	+6%
	Unable to do	13%	7%	-6%
Open a new milk carton?	Without any difficulty	13%	7%	-6%
	With some difficulty	7%	13%	+6%
Walking - Are you able to:				
Walk outdoors on flat ground?	Without any difficulty	27%	27%	0%
	With some difficulty	7%	20%	+13%
Climb up five steps?	With much difficulty	40%	20%	-20%
	Unable to do	27%	33%	+6%
Please check any aids or devices that usually use for any these activities:				
	Cane	53%	53%	0%
	Walker	40%	40%	0%
	Crutches	7%	0%	-7%
	Wheelchair	7%	7%	0%
	Devices used for dressing	13%	27%	+14%
	Built up or special utensils	7%	7%	0%
	Special or built up chair	7%	27%	+20%
	Other (please describe)	13%	13%	0%
Hygiene - Are you able to:				
Wash and dry your body?	Without any difficulty	7%	7%	0%
	With some difficulty	7%	7%	0%
Take a tub bath?	With some difficulty	7%	7%	0%

Get on and off the toilet?	With much difficulty	13%	13%	0%
	Unable to do	73%	73%	0%
Reach - Are you able to:				
Reach and get down five pound object from just above your head?	Without any difficulty	20%	20%	0%
	With some difficulty	40%	13%	-27%
Bend down to pick up clothing from the floor?	With much difficulty	13%	47%	+34%
	Unable to do	27%	20%	-7%
Grip - Are you able to:				
Open car doors?	Without any difficulty	80%	60%	-20%
Open jars which have previously been opened?	With some difficulty	7%	13%	+6%
	With much difficulty	0%	13%	+13%
Turn taps on and off?	Unable to do	13%	13%	-13%
Activities - Are you able to:				
Run errands and shop?	Without any difficulty	0%	0%	0%
Get in and out of a car?	With some difficulty	13%	0%	-13%
	With much difficulty	7%	27%	+20%
Do chores such as vacuuming and yard work?	Unable to do	80%	73%	-7%
Please check any aids or devices that you usually use for any of these activities:				
	Raised toilet seat	27%	20%	-7%
	Bathtub seat	33%	33%	0%
	Jar opener	7%	20%	+13%
	Bathtub bar	33%	33%	0%
	Long handled appliances for reach	40%	33%	-7%
	Long handled appliances in bathroom	27%	27%	0%
	Other (please describe)	7%	7%	0%

Appendix B: Transtheoretical Stages of Change

Results: Stages of Change

- Stages: precontemplation (non-believer), precontemplation (believer), contemplation, preparation, action, maintenance (Prochaska & DiClemente, 1998).
- Data categorised into three trends; improvement, stability, decline.

Improvement: n=8

- Forward progression through at least one stage of behaviour change towards more physically active lifestyles.
- 4 participants progressed through 2 or more stages of behaviour change.

Stability (includes withdrawals and missing data): n=18

- Considered stable in their orientation toward exercise and physical activity
- 8 participants reported no change from a stage of behaviour consistent with undertaking regular physical activity (ie: action or maintenance).

Decline: n=5

- Backward movement through at least one stage of behaviour change.

Summary of data set, including examples of data spread.

Tally	Baseline	3 Months	6 Months	Trend	
3	C	A	A	Improvement	Improvement through one stage, data for all time points.
4	A	M	--	Improvement	Improvement through one stage, 6 month data missing.
3	C	A/M	M	Improvement	Improvement through 2 stages, data for all time points.
1	PCN	C/A	--	Improvement	Improvement through 2 stages, 6 month data missing.
7	C	C	C	Stable	Stability demonstrated. Data for all 3 time points.
3	M	M	--	Stable	Stability assumed, 6 month data missing.
8	C	--	--	Stable	Stability assumed. No data after baseline.
2	A	P/C	--	Decline	Decline assumed, 6 month data missing
31	TOTAL				

Note. PCN pre-contemplation (nonbeliever), PCB pre-contemplation (believer), C contemplation, P preparation, A action, M maintenance. Dashes represent missing data. Forward slash between two categories indicates that the participant returned equal scores for both subscales.