

HEARTMOVES

An integrated model linking health professionals and the fitness industry in the promotion of low to moderate intensity physical activity

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Physical activity for 'at-risk' populations

Cardiovascular disease (CVD) accounts for a large proportion of all deaths in Australia, and the most prevalent population risk factor for CVD is insufficient physical activity. There is a strong relationship between increased physical activity and decreased risk of hypertension, hyperlipidaemia, diabetes and obesity or overweight.

Additionally, physical activity interventions in individuals discharged from hospital with a cardiovascular diagnosis have been shown to reduce mortality and morbidity from cardiovascular disease. In the Hunter region of NSW, there is an estimated 2,500 such discharges per year from public hospitals. Patients who have been hospitalised with a cardiac event usually have the opportunity to participate in rehabilitation programs. However, there are limited maintenance programs available, despite the overwhelming evidence that regular sustained exercise is beneficial in the post rehabilitation phase of cardiovascular disease. Many of these patients are not compliant with recommendations to continue with an exercise program without the ongoing support from a group leader and social motivation of

group participation. In addition to this group of clients, the increasing rates of obesity, diabetes, sedentariness and falls in the elderly highlights the need for general low to moderate intensity exercise options, which are safe and appropriate.

Why the fitness industry?

Fitness centres were identified as an appropriate community setting to provide a low to moderate intensity exercise program, such as **Heartmoves**. Fitness centres have an acknowledged role in the provision of physical activity programs, with the advantages of central location and being serviced by public transport. Fitness leaders were considered appropriate as **Heartmoves** leaders, due to their distribution in the community, established expertise in delivering exercise programs, and their current cardio-pulmonary resuscitation accreditation. Additionally, fitness leaders are registered with a state authority (fitnessnsw) that provides professional indemnity insurance and requires accredited continuing education to retain registration. Fitness leaders can additionally deliver programs in community venues outside fitness centres.

Links to general practitioners

Health professionals and in particular general practitioners (GPs) were identified as key stakeholder groups for **Heartmoves** due to their responsibility for providing medical clearance to exercise, managing secondary prevention of CVD, and increasing involvement in chronic disease management. Since 80% of the population visit their GP at least once a year, well-informed GPs have the potential to opportunistically screen for physical inactivity among patients as well as to prescribe physical activity for the management of chronic illnesses such as CVD and diabetes. Currently, there is under utilisation of fitness centres as a referral option for physical activity by GPs. This may be due to a history of poor perceptions in both sectors, which have impeded the useful flow of expertise, referrals and communication.

Identified barriers to participation by the 'at risk' group in fitness centre programs

- 'Lycraphobia'.
- Lack of per session payment options.
- Only for 'the young, the fit and the beautiful'.
- GP concerns about safety, risk management and litigation risk.
- Concerns about exercise intensity (with industry promotions such as 'Go Hard or Go Home' and 'Body Combat').
- Lack of accredited specialised training for fitness leaders.
- Lack of screening tools.
- Concerns about adverse events and litigation.

Aim and objectives

The aim of the **Heartmoves** project was to develop and implement a sustainable exercise program, which was open to everyone, but which met the specific needs of clients with CVD or with risk factors for CVD. The objectives of the **Heartmoves** project were to:

- 1 Evaluate the **Heartmoves** intervention in terms of its quality and safety, acceptability, reach, and retention.
- 2 Determine the intervention's effectiveness in increasing the proportion of fitness centre clients with CVD risk factors by 5% from baseline to follow-up.
- 3 Determine the intervention's effectiveness in increasing the proportion of low to moderate intensity exercise classes offered by the fitness centres in the Hunter region from baseline to follow-up.

The intervention

The intervention was designed through a consultative process with key stakeholders in the health and fitness sectors. The components were designed to address the identified barriers to participation by the 'at risk' group in fitness centre programs (see Box 1) and included:

Heartmoves specialised training and accreditation course for fitness leaders

- **Heartmoves** leader training manual
- **Heartmoves** safety guidelines
- **Heartmoves** training workshop for fitness leaders delivered by a team of health professionals.

Heartmoves leader resources

- pre-exercise assessment form (PEAF)
- feedback form to referring health professionals
- class attendance log
- safety protocols.

Workshops

- general practitioners (CME)
- Allied Health professionals workshop (post rehabilitation maintenance)
- fitness centre managers.

Marketing

- public launch during Heart Week
- demonstrations at Seniors Expo
- direct promotion to GPs
- newspaper articles
- poster and pamphlets
- fridge magnets and t-shirts.

The evaluation

Surveys

Fitness Centre Managers' Survey

To determine **Heartmoves** effectiveness in increasing the proportion of low to moderate intensity exercise classes offered by fitness centres in the Hunter, a baseline survey of fitness centre managers was conducted with a follow-up survey conducted one year later. The baseline survey provided information about the initial nature of fitness centres in the Hunter and the follow-up measured any changes after the launch of the **Heartmoves** program. The surveys were conducted by telephone and included questions about characteristics of the fitness centre, staff profile, types of programs offered, and procedures for health risk screening.

Fitness Centre Clients' Survey

A baseline and follow-up survey of all clients exercising in all fitness centres in the Hunter region on a randomly selected day was conducted to determine the intervention's effectiveness in increasing the proportion of general fitness centre clients with CVD risk factors. The questionnaire collected information about sociodemographic characteristics (including age, gender, marital status, education, employment, and country of origin), and it also collected information about cardiovascular risk profile including participation in physical activity, smoking status, body mass index (BMI), family history of CVD and previous history of CVD risk factors.

Process level indicators

Quality and safety

- ability of training course to gain endorsement and accreditation
- adherence to **Heartmoves** guidelines – two quality assurance (QA) audits
- adherence to pre-exercise screening procedure – audit of PEAfFs.

Acceptability

- the proportion of **Heartmoves** trained fitness leaders establishing a class
- enrolments in **Heartmoves** and satisfaction survey of clients
- proportion of fitness centres adopting **Heartmoves** and managers' attitudes.

Reach

A number of indicators provided information about reach to, and through:

- Heartmoves participants
- fitness centre managers
- telephone line referral
- GPs and Allied Health professionals
- media coverage.

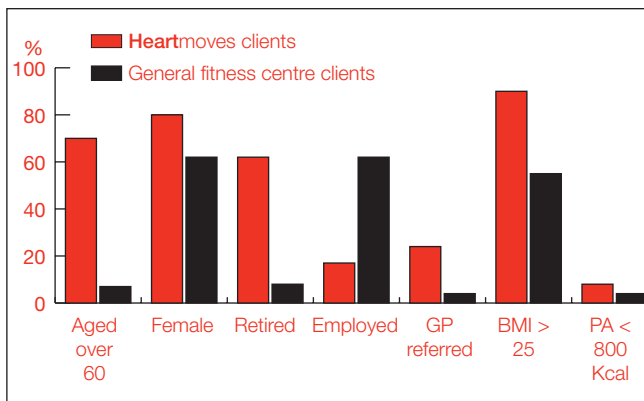
Retention

Audit of PEAFs and class attendance records of Heartmoves participants to determine retention rate at six months.

Results

Heartmoves attracted the target group it was designed for, older Australians and particularly those who either have or are at risk of developing heart disease or diabetes. Heartmoves clients were found to be significantly different from the general fitness centre client group (see Figure 1). Additionally, ten percent of Heartmoves participants reported having attended a cardiac rehabilitation program in the preceding year, and an additional 14% reported having attended a diabetes education program (indicating that 24% of the participants had existing and recent cardiovascular disease or diabetes).

Figure 1. Comparison of Heartmoves participants to fitness centre clients

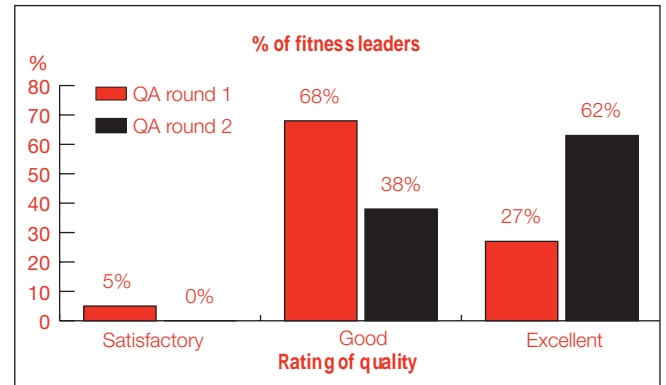


Quality and safety, acceptability, reach and retention

Quality assurance and safety were fundamental components of the Heartmoves program:

- the leader training course content was endorsed by NHFA and accredited by fitnessnsw (15 CECs)
- the quality of the classes conducted by Heartmoves leaders were assessed by the Clinical Nurse Consultant (CNC) for Cardiac Rehabilitation to be of a high standard (see Figure 2)
- the majority of Heartmoves clients (93%) had a completed PEAf.

Figure 2. Comparison of overall scores for fitness leaders on Quality Assurance (QA) Audit



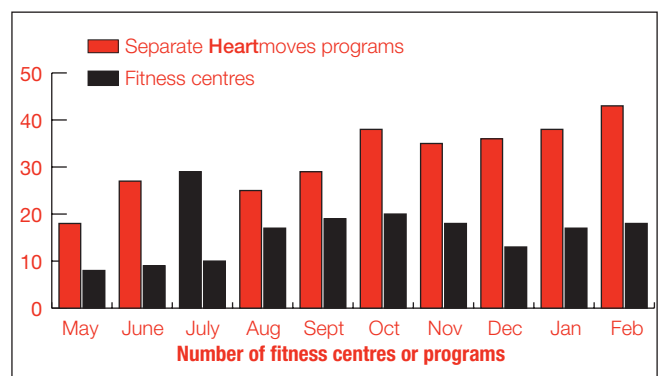
Acceptability of the Heartmoves program to fitness leaders, participants, and fitness centre managers was very encouraging:

- 63% of leaders trained subsequently offered Heartmoves classes
- 93% of Heartmoves clients reported satisfaction with their leaders' understanding, safety, and music
- 95% of participants reported being satisfied with the price
- 94% of managers perceived Heartmoves as having the potential to grow and 67% to become a core program in the fitness industry
- 35% of managers perceived Heartmoves as a good investment for the fitness industry.

Reach and retention of the Heartmoves program:

- 78% of fitness centres in the Hunter offered Heartmoves nine months after launch (see Figure 3)
- 400 people enrolled in Heartmoves, of which 80% were retained at the six months audit
- 137 health professionals attended the workshops
- engagement of GPs was largely through their client's requests for clearance (21% of PEAfs). However there were some proactive referrals instigated by GPs (5% of PEAfs)
- 15 newspaper and three television items about Heartmoves were recorded
- 37% of participants found out about Heartmoves from family and friends.

Figure 3. Fitness centres offering Heartmoves



Proportion of general fitness centre clients with CVD risk factors

There were 1,831 participants in the fitness centre clients' survey at Baseline and 1,666 at Follow-up (60% and 72% response rate respectively). The results indicate that the characteristics and cardiovascular profile of fitness centre participants at follow-up were not significantly different from baseline.

Proportion of low to moderate intensity exercise classes offered by fitness centres

After the **Heartmoves** intervention, a significantly higher proportion of fitness centres were offering low to moderate intensity classes. This would suggest that **Heartmoves** not only engaged fitness centres to provide **Heartmoves**, but may have influenced other low to moderate intensity programs.

Conclusions

The results of this study suggest that **Heartmoves** has the potential to become a core program within the fitness industry. Combined with other dissemination components, it can provide a capacity building model for delivering safe, appropriate and accessible physical activity resources to the local community. The acceptability of **Heartmoves** to health professionals suggests that **Heartmoves** has the potential to be utilised as an appropriate referral option for area health service rehabilitation programs as well as by GPs in managing chronic conditions and in developing Enhanced Primary Care plans. There is also a need to develop tools and resources to enable health professionals, particularly GPs to take a more proactive role in referring clients to appropriate and safe exercise options.

However further work is required to identify barriers to 'transition' from medically supervised to community based exercise programs among clients. Future success of **Heartmoves** is reliant on the commitment of the fitness industry, and strengthened referrals from health professionals.

Recommendations

From the **Heartmoves** project a number of recommendations to inform future physical activity projects targeting older adults, particularly those with CVD or its associated risk factors, can be made:

- 1 Fitness centres are an appropriate setting for the provision of specialist physical activity programs. However, marketing strategies to engage the fitness industry should focus upon the financial viability and potential of such programs in fitness centres.
- 2 Further strategies, aside from workshops and script pads, to engage GPs in referral to physical activity programs need to be investigated.

- 3 The linkages between **Heartmoves** and other health professional programs (such as Enhanced Primary Care planning, Chronic Disease Management Programs, diabetes education and falls prevention initiatives) need to be explored.
- 4 Social marketing strategies to promote specialist physical activity programs should be multi-component to ensure wide coverage and include a centralised listing of such programs.
- 5 Collecting data about participants' reasons for 'dropping-out' of programs would provide valuable information.
- 6 Collecting data about successful launches of the program as well as the reasons for discontinuing such programs would provide valuable information.

Heartmoves Demonstration Project team

The **Heartmoves** project was managed by a multi-disciplinary team, which reflected a collaborative partnership between the health and fitness industries. Funded by a NSW Health Physical Activity Demonstration Grant, the initiative built on the strong partnership already established between the Hunter Area Health Service and the National Heart Foundation Australia (NSW Division, Hunter Branch).

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A copy of the full report on this project is available from NSW Health Website: www.health.nsw.gov.au
For further Heartmoves information contact mail@Heartmoves.com.au

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