Community programs to improve cardiovascular health and cancer prevention

A preliminary review of programs in rural Australia

Volume 2: Program Summaries

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2008
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INTRODUCTION

This volume complements the report Community programs to improve cardiovascular health and cancer prevention – a preliminary review of programs in rural Australia, the purpose of which was to identify and describe currently available Australian programs aimed at engaging communities in programs that aim to improve cardiovascular health and fitness (including Type 2 Diabetes), and to examine their evidence base, effectiveness, suitability and accessibility for Australian farmers and farm families.

The contents of this volume are tables with brief descriptions of each of the community-based programs and the general practitioner-based promotion and cardiovascular disease prevention programs.

The information contained herein is necessarily incomplete - the summaries are based on the references and information available to the authors available at the time of preparation of this report (June 2008). The authors request and encourage feedback and further information relating to the programs that have been described, as well as to other similar programs that have not been identified or included. In this way a further edition of the report can be produced that will be more complete.

Acknowledgements

Thank you to all the people contacted for so generously providing information for this report. We hope to continue the dialogue in the interests of development and implementation relevant and effective programs for the farming people of Australia.
SECTION 1: COMMUNITY-BASED PROGRAMS

Program 1: 10 000 Steps Rockhampton

<table>
<thead>
<tr>
<th>Program: 10 000 Steps Rockhampton</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership</strong></td>
</tr>
<tr>
<td>The project was funded by Queensland Health and implemented. The program was run by a team of researchers from Central Queensland University, The University of Queensland and the Queensland University of Technology in collaboration with members of the Rockhampton community. The program was implemented by a Local Physical Activity Task Force (LAPTF) who worked with the community to develop and implement strategies.</td>
</tr>
<tr>
<td><strong>Contact Address</strong></td>
</tr>
<tr>
<td>Building 18</td>
</tr>
<tr>
<td>Central Queensland University</td>
</tr>
<tr>
<td>Rockhampton, QLD, 4702</td>
</tr>
<tr>
<td>Phone: (07) 4930 6751</td>
</tr>
<tr>
<td>Fax: (07) 4930 9820</td>
</tr>
<tr>
<td><strong>Website</strong></td>
</tr>
<tr>
<td><a href="http://10000steps.org.au/">http://10000steps.org.au/</a></td>
</tr>
<tr>
<td><strong>General overview of program</strong></td>
</tr>
<tr>
<td>10 000 Steps Rockhampton was a whole community health promotion project aimed at increasing physical activity levels. The program ran from 2001 to 2003. The health benefits of physical activity are well established and including reduced risk of diabetes and cardiovascular disease. The program used pedometers as a motivational tool to assist individuals to increase their daily physical activity levels and encouraged accumulation of physical activity across the entire day. The project used media campaigns, GP’s and local health professionals, developing infrastructure and a micro-grant scheme to facilitate community awareness of the program (1-3). The program continues via an interactive website. As of 5/6/08 the website indicated that it had 60 642 members in total and they have logged 38 811 117 184 steps.</td>
</tr>
<tr>
<td><strong>Target population</strong></td>
</tr>
<tr>
<td>All members of the Rockhampton community</td>
</tr>
<tr>
<td><strong>Inclusivity</strong></td>
</tr>
<tr>
<td>Yes.</td>
</tr>
<tr>
<td><strong>Specific Objectives</strong></td>
</tr>
<tr>
<td>Objective 1</td>
</tr>
<tr>
<td>To design and implement a sustainable whole community intervention to increase physical activity levels.</td>
</tr>
</tbody>
</table>

**Interventions being promoted to achieve objective**

<table>
<thead>
<tr>
<th>Local media campaigns: To raise awareness of the low levels of physical activity in the community (using pedometers), profile the program theme (10 000 steps per day), profile community role models and promote associated activities (1-3).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion of physical activity through general practice and other health services: This strategy is guided by the Active Practice protocol. To give general practitioners and other health care professionals the opportunities for training to increase their skills in brief PA counseling, to be provided with evidence-based</td>
</tr>
<tr>
<td>Improving social support among disadvantaged groups: To work with community partners in the health, sport, recreation and fitness sectors to provide leadership for activity programs targeting the needs of disadvantaged and special needs groups (1-3).</td>
</tr>
<tr>
<td>Influencing local policy and environmental change: Developing infrastructure to promote active living within the community (1-3).</td>
</tr>
<tr>
<td>Instituting a community micro grant scheme: Guidelines were established on how to implement a community fund to support community based initiatives and competitions to increase physical activity in local neighborhoods, small workplaces and non-government organizations (1-3).</td>
</tr>
<tr>
<td>Evidence for effectiveness of intervention being promoted</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>• Despite a high level of recall (approximately 70%), mass media campaigns <strong>did not</strong> impact significantly on physical activity behavior (4).</td>
</tr>
<tr>
<td>Level of evidence = III (cohort study)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*Written exercise prescriptions might further enhance the effectiveness of brief interventions by General Practitioners to increase physical activity levels amongst patients.*
The primary outcome evaluation was a pre and post intervention computer assisted telephone interview (CATI) surveys of both Rockhampton and its comparison community Mackay QLD. The results are as follows (10).

1. 1% increase in the proportion of Rockhampton residents who were sufficiently active for health benefit between 2001 and 2003.
2. 7% decline in the proportion of Mackay residents who were sufficiently active for health benefit between 2001 and 2003.
3. 4% decline in the proportion of men in the Rockhampton who were sufficiently active for health benefit between 2001 and 2003.
4. 5% increase in the proportion of Rockhampton women who were sufficiently active for health benefit between 2001 and 2003.
5. 9% decline in the proportion of Mackay men who were sufficiently active for health benefit between 2001 and 2003.
6. 4% decline in the proportion of Mackay women who were sufficiently active for health benefit between 2001 and 2003.
7. 3% increase in the proportion of Rockhampton residents who were sufficiently active with any vigorous activity benefit between 2001 and 2003.
8. 3% decrease in the proportion of Mackay residents who were sufficiently active with any vigorous activity benefit between 2001 and 2003.
9. 1% increase in the proportion of Rockhampton men who were sufficiently active with any vigorous activity benefit between 2001 and 2003.
10. 6% increase in the proportion of Rockhampton women who were sufficiently active with any vigorous activity benefit between 2001 and 2003.
11. 4% decrease in the of Mackay men who were sufficiently active with any vigorous activity benefit between 2001 and 2003.
12. 2% decrease in the proportion of Mackay women who were sufficiently active with any vigorous activity benefit between 2001 and 2003.

Due to the success of 10 000 Steps Rockhampton the program has been disseminated nation wide via a website. In a two year period from May 2004 to March 2006 more than 18 000 people registered online (logging more than 8.5 billion steps) and almost 100 workplaces and 13 communities have implemented components of the program. In 2007 56.6% of Queenslanders were aware of the 10 000 steps program, up from 42.5% in 2006 (11).

References


### Program 2: Dorrigo Active Community Project 2003

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Mid North Coast Area Health Service. Initial funding was provided by The Rural Chronic Disease Initiative (RCDI) funded by Commonwealth Department of Health and Aging.</th>
</tr>
</thead>
</table>
| Contact Address | Jenny Preece  
Mid North Coast Area Health Service  
Morton Street  
Port Macquarie NSW 2444  
Ph: (02) 6588 2949 |
| Website | No website |
| General overview of program | The Dorrigo Active program was a whole population approach to health promotion. After community consultation (survey + 35 focus groups across all age groups) and it was decided that cardiovascular disease and hypertension was the major perceived chronic health issue and that a lack of physical activity was the major contributing risk factor. Interventions implemented include:  
- 12 regular physical activity groups  
- Supermarket nutrition tours.  
- Revision of the Dorrigo High school sport selection.  
- Implementation of a weight watchers program  
- Pedometer bulk order to implement the 10 000 steps program.  
- Twenty exercise kits available on loan from the library.  
- Two give me strength workshops – osteoporosis prevention.  
- Weekly winter aqua fitness.  
- Men’s Health Expo  
- Fitness leader training for seven local community members.  
On completion of the program the majority of the activities were running independently (1-2). |
| Target population | Members of the Dorrigo community |
| Inclusivity | Yes. Program is open to all members of the community. |
| Specific Objectives | Objective 1  
To lessen the incidence and consequence of hypertension and cardiovascular disease in the Dorrigo community. |
| Interventions being promoted to achieve objective | Increase the uptake of physical activity in the Dorrigo community.  
Support skill development at the local level.  
Improve overall health behaviors |
| Evidence for effectiveness of intervention being promoted | Level of evidence = I (systematic review of randomised controlled trials.)  
- Physical activity is associated with improved clinical indicators / cardiovascular risk factors such as serum lipids, blood pressure and fasting glucose (3).  
No evidence identified  
Level of evidence = I (systematic review of randomised controlled trials.)  
- Dietary advice brings about modest beneficial changes in clinical indicators such as cholesterol and blood pressure over approximately 10 months but longer term effects are not known (4). |
### Evidence of effectiveness of program in achieving object

An evaluation report was completed by Dr Kim Webber, however a copy of this report was unable to be obtained.

### Linkage to Primary Health services

The program was run by the Mid North Coast Area Health Service.

### Follow-up of people identified as at-risk

N/A

### Where are medical records held

N/A

### Problems identified in program

As the evaluation report was not available it has not been indicated whether the program was successful in reducing the incidence of cardiovascular disease and hypertension.

### Other comments

Discussion with Jenny Preece (Rural Rehabilitation Clinician Network Project Officer)

- The majority of the programs established during the project are ongoing and continue to attract community participation, these include Tai Chi, yoga (including a class specifically for men) pilates, aqua aerobics and walking groups.
- Up to 30 community members attend classes, the majority are in the over 50 age group.
- Of the 7 community members who completed their fitness training, 4 continue to provide health and fitness services to the community. The three individuals who relocated are working in the health and fitness industry in their new home.
- The library fitness kits continue to be popular, particularly in the winter months. Kits include hand weights, a fitness video, a fit-ball and instructional information.
- Ms Preece reported that sustainability was a key issue for consideration during the program.

### References


# Program 3: Foundation 49 – Decades of life health assessment program

<table>
<thead>
<tr>
<th>Program: Foundation 49 – Decades of life health assessment program.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership</strong></td>
</tr>
<tr>
<td>Foundation 49 is funded through Cabrini Health.</td>
</tr>
<tr>
<td><strong>Contact Address</strong></td>
</tr>
</tbody>
</table>
| Cabrini Institute  
183 Wattletree Road  
Malvern Vic 3144  
Ph: 03 9508 1567  
Email: admin@49.com.au |
| **Website** |
| www.49.com.au |
| **General overview of program** |
| A workplace based health screening program for men tailored to specific age groups. The screening process involves both an online health assessment and a physical examination (1). Two levels of program for workplaces:  
1. In-house. Training company nurse or health professional to use *Decades of Life Program* and offering ideas on ways to promote the health assessment, including distribution of our information kit.  
2. Full Program. This includes access to the online *Decades of Life Program* with a Foundation 49 nurse who conducts individual appointments and provides unique reports – for the staff member and their GP.  
Also offer staff access to ongoing health information through the website, our newsletter and support from the Foundation 49 team. |
| **Target population** |
| Employers of males |
| **Inclusivity** |
| Men only |
| **Specific Objectives** |
| Object 1:  
To reduce the number of men dying from preventable conditions through raising awareness and encouraging regular check-ups. |
| **Interventions being promoted to achieve objective** |
| Workplace health checks / screening for men.  
Using *Decades of Life* approach, age-specific screens include:  
- Blood pressure  
- Height and weight (Body Mass Index)  
- Finger prick - blood sugar level, total cholesterol  
- Screening questions for a number of different conditions, depending on age and personal history  
General and tailored prevention information provided, and referral to GPs |
| **Evidence for effectiveness of intervention being promoted** |
| Screening of Blood pressure, Cholesterol  
Level of Evidence = I (Randomised Controlled Trials)  
See Red Book (2)  
- Workplace intervention involving supervised aerobic activity and weight training and health education seminars found a significant improvement in waist circumference and aerobic fitness (a substantial proportion of these effects were concentrated in one subject). However this study has multiple limitations and encountered substantial barriers to adoption and adherence (3).  
- Paper concluded “guarded, cautious, optimism about the clinical and/or cost effectiveness of worksite programs” focusing on health promotion and disease management. It should be noted that this study indicated that both the quality and quantity of studies into worksite health promotion has declined. It was hypothesized that this may be due to a reporting bias where by studies that do not demonstrate statistically significant results tend not to be published (4). |
A workplace based project involving community organizations and GPs in Bunbury, WA, concluded that it was successful in engaging men in the concept of preventative health care and getting them to attend their GP. However, following their appointment, most men indicated they were instructed to lose weight and increase physical activity but were unsure how to go about making lifestyle changes to decrease their health risk (5).

<table>
<thead>
<tr>
<th>Evidence of effectiveness of program in achieving object</th>
<th>No evaluation available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linkage to Primary Health services</td>
<td>Participants are strongly encouraged to have GP and referral letters and results for GPs are provided.</td>
</tr>
<tr>
<td>Follow-up of people identified as at-risk</td>
<td>Not stated</td>
</tr>
<tr>
<td>Where are medical records held</td>
<td>Records are held by Foundation 49. Confidentiality is ensured as information does not contain any reference to individual people as names are not used.</td>
</tr>
<tr>
<td>Problems identified in program</td>
<td>This program may not be suitable for use across a farming community as it would be difficult to screen large numbers of men in one location except on larger corporate enterprises.</td>
</tr>
<tr>
<td>Other comments</td>
<td>The concept of age specific health screening may be beneficial, however evidence to support this intervention was not identified.</td>
</tr>
</tbody>
</table>

References


Program 4: Greater Green Triangle Diabetes Prevention Project

**Program: Greater Green Triangle Diabetes Prevention Project.**

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Funded by the Department of Health and Ageing through the National Diabetes Prevention Initiative. Study was conducted by The University Department of Rural Health (partnership between Flinders and Deakin University)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Address</td>
<td>GGT University Department of Rural Health PO Box 423 Warrambool VIC 3280 Ph: +613 5563 3315</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.greaterhealth.org/">www.greaterhealth.org/</a></td>
</tr>
<tr>
<td>General overview of program</td>
<td>The Greater Green Triangle Diabetes Prevention Project is an intervention study to evaluate the effectiveness of a lifestyle modification program in an Australian Primary Care setting to prevent Type II diabetes. The program was implemented in the Greater Green Triangle (Hamilton, Horsham and Mount Gambier), Victoria. The Program is designed for people at risk of developing Type II diabetes. The program involves completion of 6 x 90 minute small group sessions focusing on diet and physical activity. Implementation of the program cost $195 610 GST inclusive, an additional $160 000 was used to complete the necessary research and evaluation of the program.</td>
</tr>
<tr>
<td>Target population</td>
<td>Individuals at risk of developing Type II diabetes.</td>
</tr>
</tbody>
</table>
| Inclusivity | Study is open to males and females of all ages and ethnicity. The following exclusion criteria applied.  
1. Pregnant.  
2. Diagnosed with diabetes.  
3. Myocardial Infarction in the last three months.  
4. Diagnosed mental disorder.  
5. AUDIT score >15 (alcohol addiction) |
| Specific Objectives | Objective 1  
To evaluate the feasibility of the structured group program for lifestyle modification in Australian Primary Care settings.  

Objective 2  
To prevent the onset of Type II diabetes in high risk individuals. |
| Interventions being promoted to achieve objective | An intervention study involving 237 individuals at moderate to high risk of developing diabetes. Clinical measures were taken at baseline, 3 months and 12 months. Psychological measure where taken at baseline and 12 months. No control group was used (1,2).  
A lifestyle modification program involving 6 90 minute sessions (1,2).  
1. No more then 30% energy from fat.  
2. No more then 10% energy from saturated fat.  
3. At least 15g/1000 kcal fibre.  
4. 30min/day moderate intensity physical activity.  
5. 5% reduction in body weight. |
| Evidence for effectiveness of intervention being promoted | Level of evidence = II randomized controlled trial.  
Two randomized controlled trials demonstrated a 58% decrease in the risk of type 2 diabetes with lifestyle interventions compared to the control / placebo group (3,4).  

Evidence of effectiveness of program in achieving object | Level of evidence = IV  
The results of this study demonstrate that following completion of the diabetes prevention program the risk of developing diabetes was decreased by 23 to 40%. Additionally, results demonstrated risk factors for cardiovascular disease were improved. Also the results indicate that lifestyle modification interventions carried in an Australian primary care setting are both successful in reducing the risk of type 2 diabetes and cost effective (1,2). |
<table>
<thead>
<tr>
<th>Linkage to Primary Health services</th>
<th>Participants are recruited through their local medical practice and the intervention is run by nurses and allied health professionals within the local area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up of people identified as at-risk</td>
<td>Individuals identified as at risk are referred to their GP and if eligible recruited into the program.</td>
</tr>
<tr>
<td>Where are medical records held</td>
<td>Not stated.</td>
</tr>
<tr>
<td>Problems identified in program</td>
<td></td>
</tr>
<tr>
<td>Other comments</td>
<td>The information / experience gained from the Go For Your Life Diabetes Prevention Program and the Greater Green Triangle Diabetes Prevention Program was utilized in the development and implementation of the “Life” Program. The Life Program will be rolled out to over 25 000 Victorians over 50 years of age. The Life program has a specific accreditation process in order to become a certified provider / facilitator. All materials are provided by the program.</td>
</tr>
</tbody>
</table>

References.

1. Greater Green Triangle University Department of Rural Health A Flinders and Deakin University Partnership. Final Project Report Greater Green Triangle Diabetes Prevention Project. [www.greaterhealth.org/resources/37](http://www.greaterhealth.org/resources/37)


### Program 5: Go For Your Life Diabetes Prevention Program

<table>
<thead>
<tr>
<th><strong>Ownership</strong></th>
<th>Victorian Department of Human Services</th>
</tr>
</thead>
</table>
| **Contact Address** | Liza Culleney = (03) 90965117  
Victorian Government Department of Human Services  
Public Health Division |

#### General overview of program

The diabetes prevention program is a randomised controlled trial which aims to identify individuals with pre-diabetes and provide an intervention in the form of a lifestyle behavior change intervention (Healthy Living Course) to support lifestyle changes and reduce the risk of progression to Type 2 diabetes. The Healthy Living Course involves one individual and 6 group sessions over 6 months addressing weight management, physical activity, healthy eating, motivation and goal setting. Participants are followed up at 9 and 12 months. Aboriginal populations were a target group for this pilot (1).

#### Target population

Males and females suffering from pre-diabetes (impaired glucose tolerance).

#### Inclusivity

Yes. The program targets over 50 year olds and is also tailored to the needs of an indigenous population.

#### Specific Objectives

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>Objective 2</th>
<th>Objective 3</th>
<th>Objective 4</th>
<th>Objective 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve detection of pre-diabetes in high risk individuals in three pilot sites, with a catchment of approximately 100 000 people per site.</td>
<td>To provide evidence based intervention (healthy living course) for people identified with pre-diabetes in the pilot catchments.</td>
<td>To improve service coordination for people identified with pre-diabetes in the pilot catchments.</td>
<td>To develop and implement a set of resources (inclusive of the broad range of people within pilot site communities) to facilitate desired changes for people with pre-diabetes.</td>
<td>To evaluate the implementation and health outcomes of an evidence-based intervention for people with pre-diabetes in a community-based setting.</td>
</tr>
</tbody>
</table>

#### Interventions being promoted to achieve objective

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>Objective 2</th>
<th>Objective 3</th>
<th>Objective 4</th>
<th>Objective 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunistic risk factor assessments (resource not available). Individuals identified as high risk using NHMRC criteria referred to GP for pathology screening.</td>
<td>Lifestyle behavior change intervention (Healthy Living Course) in a community based setting.</td>
<td>The pilot site communities included Chinese, Anglo-Australian and Aboriginal and Torres Strait Islander populations as well as both rural and metropolitan communities.</td>
<td>Evaluation not available.</td>
<td></td>
</tr>
</tbody>
</table>

#### Evidence for effectiveness of intervention being promoted

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>Objective 2</th>
<th>Objective 3</th>
<th>Objective 4</th>
<th>Objective 5</th>
</tr>
</thead>
</table>
| Level of evidence = II (Randomized controlled trial)  
- Two randomized controlled trials demonstrated a 58% decrease in the risk of type 2 diabetes with lifestyle interventions compared to the control / placebo group (2-3). | Level of evidence = III (Cohort study)  
This study highlighted the group and gender differences in the manifestation of pre-diabetes in a Chinese and Anglo-Australian sample.  
This highlights the need for specific approach to | | | |
<table>
<thead>
<tr>
<th>Evidence of effectiveness of program in achieving object</th>
<th>Evaluation to be completed by December 2008. Qualitative feedback has been positive.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linkage to Primary Health services</td>
<td>Participants are recruited through their General Practitioner. GPs perform pathology test to identify the presence of impaired glucose tolerance (pre-diabetes) and then refer for participation in the program.</td>
</tr>
<tr>
<td>Follow-up of people identified as at-risk</td>
<td>Individuals identified as high risk through screening are referred to GP for pathology to identify those suffering from impaired glucose tolerance (pre-diabetes).</td>
</tr>
<tr>
<td>Where are medical records held</td>
<td>Not stated.</td>
</tr>
<tr>
<td>Problems identified in program</td>
<td></td>
</tr>
<tr>
<td>Other comments</td>
<td>The program is also tailored to meet the needs of an indigenous population. The information / experience gained from the Go For Your Life Diabetes Prevention Program and the Greater Green Triangle Diabetes Prevention Program was utilized in the development and implementation of the “Life” program. The Life program will be rolled out to over 25 000 Victorians over 50 years of age. The Life program has a specific accreditation process in order to become a certified provider / facilitator. All materials are provided by the program.</td>
</tr>
</tbody>
</table>

**References**


### Program 6: Healthy Men Ballarat

<table>
<thead>
<tr>
<th><strong>Program:</strong> “Healthy Men” Ballarat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership:</strong> Ballarat and District Division of General Practice.</td>
</tr>
</tbody>
</table>

| **Contact Address:**  
105 Webster St  
Lake Wendouree, VIC 3350  
(03) 5331 6303  
http://www.bddgp.org.au |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Website:</strong> Not available</td>
</tr>
</tbody>
</table>

#### General overview of program
A workplace based health and well-being screening program for men. This program targets male blue collar workers. The program involves a questionnaire relating to general health and well-being, a basic health check including blood pressure and cholesterol, a referral to an appropriate health professional if required and additional health information. Participants were offered free immunization. A second assessment was conducted three months later. The program involved a multi-disciplinary team including Registered Nurses, a General Practitioners and Men and Family Relationships workers (1,2).

<table>
<thead>
<tr>
<th><strong>Target population:</strong> Male blue collar workers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inclusivity:</strong> No, males working in blue collar industries. Exclusive on the basis of gender and occupation.</td>
</tr>
</tbody>
</table>

#### Aim / Goal of program
To develop a workplace based model for encouraging increased participation of men in matters of health and well-being.

<table>
<thead>
<tr>
<th><strong>Specific Objectives</strong></th>
</tr>
</thead>
</table>
| Objective 1  
To provide opportunities for men to access health information and health assessments in their workplace. |
| Objective 2  
To raise awareness and inform men about health and wellbeing issues. |
| Objective 3  
To increase levels of interaction for men with health and social services. |
| Objective 4  
To identify strategies and processes to engage men and workplaces. |

#### Interventions being promoted to achieve objective
Taking a health and well-being screening programs to at risk men (blue collar workers) at their workplaces. This screening involves Registered Nurses, a General Practitioners and Men and family relationships workers. Men are referred to other health workers such as physiotherapists, GP’s and dieticians as necessary.

<table>
<thead>
<tr>
<th><strong>Evidence for effectiveness of intervention being promoted</strong></th>
</tr>
</thead>
</table>
| Level of evidence = III  
Project aims to promote men’s health through diabetes education and screening. 525 men from different industries were screened, 64% were identified as high risk of developing diabetes and where referred to their GP. 76% of men identified as at risk visited their GP. The project concluded that it was successful in engaging men in the concept of preventative health care and getting them to attend their GP. However following their appointment most men indicated they were instructed to lose weight and increase physical activity but were unsure how to go about making lifestyle changes to decrease their health risk (4). |
| Level of evidence = II (Randomized controlled trial)  
Workplace intervention involving supervised aerobic activity and weight training and health education seminars found a significant improvement in waist circumference and aerobic fitness. However this study has multiple limitations and encountered substantial barriers to adoption and adherence. Additionally, only 73 (6.4%) employees agreed to participate and only 44 completed the intervention (3). |
| Level of evidence = I (critical review)  
Critical review of experimental and quasi-experimental research trials published between 2000 and 2004. Paper concluded “guarded, cautious, optimism about the clinical and/or cost effectiveness of worksite programs” focusing on health promotion and disease management. It should be noted that this study indicated that both the quality and quantity of studies into worksite health promotion has declined. It was hypothesized that this... |
may be due to a reporting bias where by studies that do not demonstrate statistically significant results tend not to be published (5).

| Evidence of effectiveness of program in achieving object | Level of evidence = IV  
Three workplaces participated in the program and a total of 68 men between the ages of 20 and 64 where screened. A total of 32 men (47%) required a referral to a health professional for further testing. 52 men returned for their follow up visit. A small improvement in health statistics where observed at the 3 month follow up. There were marked improvements in levels of physical activity and smoking behaviors. Qualitative feedback from both participants and employers was overwhelmingly positive with 88% of participants reporting that the program had made them more aware of their health and well-being. |
| Linkage to Primary Health services | Men identified as being at risk are referred to appropriate health professionals in the area for further treatment. Collaboration with Ballarat Community Health, Ballarat University and Ballarat and district division of general practice. |
| Follow-up of people identified as at-risk | Yes.  Individuals identified as at risk are referred to the appropriate health professional and then followed up at the 3 month health screening. |
| Where are medical records held | Not stated. |
| Problems identified in program | It may be difficult to implement this program in a rural / farming community due to geographical isolation of workers. |
| Other comments | There appears to be a lack of high quality studies investigating the effectiveness of work based health screening. |

References


### Program 7: Heart Foundation Walking

**Program: Heart Foundation Walking previously Just Walk It (as of 7/12/07 changed to Heart Foundation Walking)**

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Developed by the Australian Heart Foundation and the School of Human Movement Studies at the University of QLD. Individual programs are owned and implemented by local community members / groups.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Address</td>
<td>State specific contact details are available from the below mentioned website. Ph: 1300 36 2787</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.heartfoundation.org.au/Healthy_Living/Physical_Activity/Walking.htm">http://www.heartfoundation.org.au/Healthy_Living/Physical_Activity/Walking.htm</a></td>
</tr>
<tr>
<td>General overview of program</td>
<td>Heart Foundation Walking is a free community based group walking activity. The program is designed to overcome common barriers to physical activity such as cost, safety, proximity and no one to be active with. The Heart Foundation in partnership with local communities is setting up walking groups across Australia. These groups are run by area coordinators and volunteer Walk organizers who work together to recruit walkers and establish groups in their local area. Walk organizers are provided with training and resources from the Heart Foundation. Population specific walking groups such as mothers groups, groups for people with heart conditions etc. are available in some areas. Participants are required to register and incentives to continue to attend regularly are provided and include discounts on merchandise etc (1).</td>
</tr>
<tr>
<td>Target population</td>
<td>All, in a town, community setting</td>
</tr>
<tr>
<td>Inclusivity</td>
<td>Only excluded by distance</td>
</tr>
<tr>
<td>Specific Objectives</td>
<td>Goal 1</td>
</tr>
<tr>
<td></td>
<td>To increase participation in regular physical activity.</td>
</tr>
<tr>
<td>Interventions being promoted to achieve objective</td>
<td>Implementation of a free community based walking program which offer incentives for continued participation.</td>
</tr>
<tr>
<td>Evidence for effectiveness of intervention being promoted</td>
<td>Level of evidence = II (Two randomized controlled trials)</td>
</tr>
<tr>
<td></td>
<td>- Walking decreases coronary risk factors and improves functional capacity in middle aged to older adults (2-3).</td>
</tr>
<tr>
<td></td>
<td>Level of evidence = I (Systematic review of both randomised controlled trials and non-randomised controlled trials)</td>
</tr>
<tr>
<td></td>
<td>- This review indicates that interventions promoting walking have the capacity to increasing walking among participants by 30-60 mins per week on average in the short term. However the review highlighted the fact that different people respond to different intervention methods (for example group based, community based, internet) depending on their circumstances. Additionally, few studies in this review found unequivocal improvements in health and disease risk factors (4).</td>
</tr>
<tr>
<td>Evidence of effectiveness of program in achieving object</td>
<td>Level of evidence = III (Preliminary results from a Longitudinal impact evaluation)</td>
</tr>
<tr>
<td></td>
<td>- Just Walk It demonstrated a 6 month retention rate of 80%.</td>
</tr>
<tr>
<td></td>
<td>- Just Walk It attracts and retains population groups that have been identified as least likely to participate in sufficient physical activity. These include</td>
</tr>
<tr>
<td></td>
<td>- Women (80%)</td>
</tr>
<tr>
<td></td>
<td>- Older people (61% over 45 and 25% over 65)</td>
</tr>
<tr>
<td></td>
<td>- People who are overweight (36%)</td>
</tr>
<tr>
<td></td>
<td>- People who are obese (25%)</td>
</tr>
<tr>
<td></td>
<td>- People of lower socioeconomic status (38%)</td>
</tr>
<tr>
<td></td>
<td>- At baseline 50% of participants were sufficiently active, this increased to 63% at 6 months.</td>
</tr>
</tbody>
</table>
| | - Overall conclusions from the preliminary results are; Just walk it has been successful at:
1. Reaching populations who are least likely to participate in physical activity.
2. Increasing physical activity levels among these populations.
3. Sustaining their participation in a physical activity program (5)

**Linkage to Primary Health services**

There is no formal linkage to Primary Health Services. During registration, it is recommended participants consult their doctor prior to becoming more physically active, however this is not a requirement of registration.

**Follow-up of people identified as at-risk**

N/A

**Where are medical records held**

N/A

**Problems identified in program**

N/A

**Other comments**

Despite telephone calls to the Heart Foundation and the researchers a copy of the complete evaluation report was not received.

**References**


Program 8: Heartmoves

<table>
<thead>
<tr>
<th>Ownership</th>
<th>The Heart Foundation. This program is implemented by accredited health and fitness professional in the local area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Address</td>
<td>State and area specific contact addresses can be found at URL: <a href="http://www.heartfoundation.org.au/Contact_Us.htm">http://www.heartfoundation.org.au/Contact_Us.htm</a></td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.heartfoundation.org.au/heartmoves">http://www.heartfoundation.org.au/heartmoves</a></td>
</tr>
</tbody>
</table>

**General overview of program**

The aim of the *Heartmoves* project was to develop and implement an innovative and sustainable exercise program that met the needs of older clients, particularly those with, or at risk of cardiovascular disease, which was acceptable to both the fitness industry and referring health professionals. *Heartmoves* is designed to provide low to moderate intensity exercise programs suitable for both the general population and individuals who suffer from heart conditions, diabetes, arthritis, lung conditions, chest conditions, high blood pressure, high cholesterol, obesity, depression etc. The *Heartmoves* program comes in various forms which can include aqua aerobics, aerobics, resistance training, stretching and balance class’s yoga etc. All programs are delivered by specially trained and accredited health and fitness professionals. Programs are available nationally through health and fitness centers and community venues such as registered clubs, YMCA, PCYC and community halls (1-3).

**Target population**

Older adults.

**Inclusivity**

Inclusive

**Specific Objectives**

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>Objective 2</th>
<th>Objective 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide a physical activity program suitable for both the general population and special populations, such as individuals with cardiovascular disease or diabetes, that is safe, sustainable and effective in reducing risk factors for chronic illness.</td>
<td>To provide a physical activity program that is easily implemented by local health and fitness centers and community organizations there-by increasing the proportion of low to moderate intensity exercise classes offered.</td>
<td>To provide GP’s and health professionals with a safe, appropriate referral option for clients who would benefit from increasing their physical activity levels.</td>
</tr>
</tbody>
</table>

**Interventions being promoted to achieve objective**

1. Low to moderate intensity physical activity classes supervised by accredited health and fitness professionals.
2. *Heartmoves* training workshops which include provision of a training manual, safety guidelines and pre-exercise assessment form.
3. Workshops for GP’s, allied health professionals and fitness centre managers.
4. Marketing, including demonstrations and presentations, direct promotion to general practitioners, newspaper articles, posters, pamphlets, t-shirts etc.

**Evidence for effectiveness of intervention being promoted**

- Level of evidence = II (two randomised controlled trials)
  - Exercise based cardiac rehabilitation is effective in reducing cardiac deaths and all cause mortality and improves a number of primary risk factors (4, 5).

- Level of evidence = II (two randomized controlled trials)
  - Moderate intensity physical activity is sufficient to increase aerobic fitness and reduce risk factors for metabolic syndrome. There is conflicting evidence as to whether vigorous or moderate intensity exercise is more effective in reducing the risk of cardiovascular disease (6,7)

- Level of evidence = II (randomized controlled trial)
  - A 20 week low intensity community based exercise program significantly improved dynamic balance, lower body strength and blood pressure in older adults. The program did not impact on upper body strength, body composition and fat distribution, 20m walk and cardiovascular endurance (8).

**Evidence of effectiveness of program in**

An evaluation of the *Heartmoves program* was conducted in NSW from. The results are as follows.
1. 400 individuals enrolled in the *Heartmoves* program in the 9 months following the public launch with 80% retention at 6 months. 24% of these clients reported an existing recent cardiovascular disease or diabetes.
| achieving object | 2. 63% of fitness leaders who participated in the training programs subsequently provided a *Heartmoves* class.  
3. 137 local health professionals attended the *Heartmoves* workshops.  
4. 78% of fitness centres in the Hunter offered *Heartmoves* nine months after the launch.  
5. Significantly higher proportion of fitness centres offering low to moderate intensity classes. |

| Linkage to Primary Health services | A workshop for Health care workers was provided. Participants considered high risk are required to obtain medical clearance prior to participation. Health professionals are able to refer patients to the *Heartmoves* program. The *Heartmoves* program provides a health professional fax-back form to allow *Heartmoves* leaders to send information back to GP’s and Allied Health professionals. |

| Follow-up of people identified as at-risk | A pre-exercise assessment form is completed by participants to identify individuals at increased risk and there fore in need of medical clearance prior to participation. |

| Where are medical records held | N/A |

| Problems identified in program | |

| Other comments | |

**References**


## Program 9: Men’s Shed

### Program: Men’s Shed

#### Ownership
Each individual Men’s Shed is owned by the community that founded it. Menshed Australia Ltd. is a not-for-profit Australian public company and registered health promotion charity that assists in the development and running of Men’s Shed’s in Australia.

#### Contact Address
PO Box 6599 Paramatta, NSW Australia 2150  
Phone: 02 8213 8699

#### Website

#### General overview of program
Men’s Shed aim to address issues of men’s health, physical, emotional and social within a community. A community Men’s Shed provides place for men to participate in a range of activities such as woodworking and mentoring programs. The principles of a Men’s Shed are
1. Health and well being of men.  
2. Men’s activities.  
3. Sustainability.  
Men’s Sheds address growing men’s health issues such as loneliness, isolation and depression (1).

#### Target population
Men of all ages.

#### Inclusivity
Predominately men, but there are a small number of female members.

#### Specific Objectives

<table>
<thead>
<tr>
<th>Object</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object 1</td>
<td>To address the issues of men’s health (physical, emotional and social well-being) in the community.</td>
</tr>
<tr>
<td>Object 2</td>
<td>To engage the elderly, differently-abled, youth, veterans and other groups of men of the communities in both rural Australia and urban Australia, and to specifically address any issues of isolation, loneliness and depression;</td>
</tr>
<tr>
<td>Object 3</td>
<td>To support the social interaction of men in transitional periods (e.g. Redundancy, Bereavement, Retirement, Ill Health, Relocation, Respite Care);</td>
</tr>
<tr>
<td>Object 4</td>
<td>To share, disseminate and preserve the skills, abilities and interests that are relevant to the community.</td>
</tr>
</tbody>
</table>

#### Interventions being promoted to achieve objective
Development of an informal meeting place (Shed) within the community for men of all ages to meet and participate in a range of activities such as wood working, car restoration etc.

#### Evidence for effectiveness of intervention being promoted
There is an absence of literature / evidence as to the impact of a Men’s Shed on health outcomes such as cancer and cardiovascular disease. Evaluations completed are focused on learning and skill acquisition. A summary of key points from this evaluation are as follows.

- Men’s Sheds are successful in attracting older men, many of which are facing issues associated with significant change such as ageing, health, retirement and isolation.  
- They provide mate ship and a sense of belonging through positive and therapeutic informal activities. Men’s Shed achieve positive health, happiness and well being outcomes for men who participate.  
- Men’s Shed confirm the preferences of older men for hands on, practical learning styles.  
- Men’s shed have more to do with non-vocational benefits and rarely provide direct vocational pathways to future paid work.  
- Being heavily reliant on volunteers, Men’s Sheds often struggle to cope with initial set up costs and regulations. Despite this, Men’s Sheds continue to grow in number (2).
There is some evidence that men are referred to Men’s shed by health care providers, predominately mental health, however there is no formal process / linkage.

<table>
<thead>
<tr>
<th>Linkage to Primary Health services</th>
<th>There is some evidence that men are referred to Men’s shed by health care providers, predominately mental health, however there is no formal process / linkage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up of people identified as at-risk</td>
<td>N/A</td>
</tr>
<tr>
<td>Where are medical records held</td>
<td>N/A</td>
</tr>
<tr>
<td>Problems identified in program</td>
<td>No formal evaluation of the program was identified.</td>
</tr>
<tr>
<td>Other comments</td>
<td>There is evidence to suggest that the majority of Men’s Shed members reported a recent significant event or difficult time for example a health issue, relationship breakdown or recent retirement. The evidence suggests that Men’s Sheds are used more frequently as a way of addressing psychological issues as opposed to physical health problems.</td>
</tr>
</tbody>
</table>

References


## Program 10: Pit Stop

<table>
<thead>
<tr>
<th>Program: Pit Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
</tr>
</tbody>
</table>
| Contact Address   | MidWest Community Drug Service Team (Gascoyne)  
                    WA Country Health Services  
                    PO Box 733  
                    CARNARVON 6701  
                    08 9941 0494 |
| Website           | [http://www.cucrh.uwa.edu.au/projects/Pit_Stop.html](http://www.cucrh.uwa.edu.au/projects/Pit_Stop.html) or  
| General overview of program | Pit Stop is a men’s health screening program housed within a mechanical metaphor. The screening program includes basic health assessments such as blood pressure and waist to hip ratio to identify possible health risks / concerns and encourage men to take an interest in preventative health. On completion of the screening men are issued with either a registration sticker (pass) or a yellow sticker (fail). The men are provided with a work order form which gives details of their performance in each of the tests and provides basic health advice / recommendations (1-2). |
| Target population | Males. However some areas have implemented modified programs targeting both men and women. |
| Inclusivity       | Gender specific targeting males. |
| Specific Objectives | **Object 1**  
                    To address the disparity in men’s health issues. |
|                   | **Object 2**  
                    To reduce the incidence of preventable illness amongst men |
| Interventions being promoted to achieve objective | 1. Applying a masculine, humorous concept to mobile men’s health screening tests to encourage men to take an interest in preventative health and therefore address the inequality in men’s health.  
                            2. Tests that screen for lifestyle factors that impact on disease risk including:  
                               2.1 Waist to hip ratio (4-8).  
                               2.2 Trunk flexion test (9-12).  
                               2.3 Smoking quiz (13-16).  
                               2.4 Alcohol intake quiz (17-18).  
                               2.5 Blood pressure measurement (19-20).  
                               2.6 Testicular self examination quiz (21).  
                               2.7 Skin self examination (22-25). |
| Evidence for effectiveness of intervention being promoted | Level of evidence = V (Descriptive study)  
                            There is some evidence to suggest applying a masculine component to health programs perpetuates traditional gender roles, marginalizes some groups of men and therefore reinforces negative health behaviors (3). |
| Evidence of effectiveness of program in achieving object | Level of evidence = IV  
                            The evaluation of the Pit Stop Program covered three areas:  
                            1. A review of Pit Stop delivery using semi-structured interviews with coordinators of Pit Stop in three sites.  
                               - The overall response from the coordinators was positive. Coordinators raised some concerns in the areas of;  
                                  - Difficulties with staff recruitment  
                                  - The stations (tests) used and whether they were appropriate.  
                            2. Evidence of effectiveness of program in achieving object.  
                               Please see table below. |
2. A review of Pit Stop “Work Order” forms focusing on the quality of documentation, the age of the men screened and frequency of men achieving the health norm determined by the work order sheet.
   - Some inconsistencies were noted in recording between sites, with smoking, skin cancer and testicles being the most poorly recorded stations.
   - It was noted that when participants results where not recorded they were given a pass.
   - Conversely there was some evidence of participants meeting the norm and yet being given a fail.

3. A telephone survey to assess recall and behavior change.
   - Reported changes in behavior as a result of attending Pit Stop ranged from 25% to 50%.
   - Losing weight, improving their diet, reducing / stopping smoking and reducing / stopping drinking were the most common reported behavior change.
   - The number of men who reported visiting a GP or health professional following Pit Stop ranged from 10% to 40%.
   - The qualitative feedback from participants was generally positive with men reporting they would prefer to attend Pit Stop due to the easy going and sociable environment.

As a result of the evaluation of the Pit Stop a number recommendations where made to improve the delivery of the program, the accuracy of the recording and to ensure all tests / indices used are best practice (26).

As a result of this evaluation, Pit Stop has been revised and a 2007 edition is available which included Extractor (colorectal cancer) and shock absorbers (coping skills). The new edition also includes a Apprenticeship training (facilitator training), Fast Track Pit Stop (for those with limited time available and Inside Pit Stop for use in a custodial setting).

<table>
<thead>
<tr>
<th>Linkage to Primary Health services</th>
<th>The program has no formal linkage to primary health care services. However, in most cases the screening program is conducted by local health care workers such as nurses, doctors and allied health professionals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up of people Identified as at-risk</td>
<td>Individuals who fail the</td>
</tr>
<tr>
<td>Where are medical records held</td>
<td></td>
</tr>
<tr>
<td>Problems identified in program</td>
<td></td>
</tr>
<tr>
<td>Other comments</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objective</th>
<th>Evidence</th>
</tr>
</thead>
</table>
| 2.1 Measurement of waist to hip ratio to screen for abdominal obesity and therefore identify individuals at risk of metabolic complications. | Level of evidence = III (Collaborative cohort study)  
- A linear relationship was observed between waist to hip ratio and all cause mortality in both men and women (4).  
Level of evidence = III (Cross sectional survey / stratified cluster sample)  
- Waist to hip ratio is the most useful measure of obesity to use to identify individuals with CVD risk factors (5).  
Level of evidence = III (Cross sectional analysis of a an age sex stratified sample)  
- Obesity assessed by waist to hip ratio is a better predictor of CVD and CHD mortality than waist circumference, which, in turn is a better predictor than BMI (6). |
| A. No high quality studies were identified however, the available evidence suggests that both waist to hip ratio and waist circumference are good predictors of disease risk. |
| 2.2 Trunk flexion test to measure flexibility in the lower back and hamstrings to identify individuals at risk of a lower back or lower limb injury. | Level of evidence = III
- Results from this study indicate that the sit and reach test is not related to lower back pain (9). | Level of evidence = III
- Some sit and reach protocols may be more accurate than others, however overall sit and reach tests are moderately valid measures of hamstring flexibility and poorly related to low back flexibility (10). |
| --- | --- | --- |
| 2.3 Smoking questions/quiz to identify individuals that smoke and discuss the benefits of quitting. | Level of evidence = I (Review cited in US Surgeon General’s Report)
- Smoking harms nearly every organ in the body, causing many diseases and reducing the overall health of smokers. Quitting smoking has immediate and long term health benefits such as reducing their risk of smoking related disease and improving general health (13). | Level of evidence = I (Systematic review of randomized controlled trials)
- There is little evidence that community based interventions reduce smoking among adults (14). |
| 2.4 Completion of “The Drinkcheck Quiz” (based on Audit) to identify individuals level of risk in relation to their current alcohol consumption. | Level of evidence = V
- The Australian guidelines for alcohol consumption recommend that men consume no more the 4 standard drinks per day and have 1-2 alcohol free days per week (17). | Level of evidence = III (Systematic literature review)
- The Alcohol Use Disorder Identification Test (AUDIT) is a reliable, valid and practical method of screening for a broad spectrum alcohol use disorders in various setting and with diverse populations. (18). |
| 2.5 Blood pressure assessment to identify individuals at increased risk of heart attack, stroke, CHF and kidney failure. | Level of evidence = I (systematic review of randomized controlled trials, observational studies and systematic reviews)  
- Hypertension contributes to cardiovascular disease morbidity and mortality. The evidence supports blood pressure screening and appropriate intervention in adult populations (19). |
| --- | --- |
| Normal = <140 or <90  
Borderline = 140 to 160 or 90-95  
High = >160 or >95 | Level of evidence = V (WHO and ISH guidelines for the management of hypertension)  
- Recommend assessment of likelihood of developing a major cardiovascular event within the next 10 years using both blood pressure measurement and the identification of additional risk factors such as age, smoking status, obesity etc. Individuals are then classified as low, medium or high risk (20).  
Grade 1 = SBP 140-159 or DBP 90-99  
Grade 2 = SBP 160-179 or DBP 100-109  
Grade 3 = SBP>180 or >110 |
| 2.6 Discussion and information related to regular testicular self examination to assist in the early detection of testicular cancer. | Level of evidence = V (Position statement of the Australian Cancer Council)  
- The Australian Cancer Council encourages men to become familiar with their testicles and immediately see their doctor if they notice any changes. Men with risk factors for testicular cancer should regularly check their testicles. The Cancer Council does not endorse regular testicular self examination as there is currently no evidence of benefit and doing so may create an unnecessary level of anxiety and fear (21). |
| 2.7 Discussion and information relating to regular skin self examination to assist in the early detection of skin cancer. | Level of evidence = III (Controlled trial)  
- Results of this study suggest that skin self examination (SSE) may reduce mortality from melanoma by 63%. The study concludes that SSE may be a useful and inexpensive method screening method to reduce the incidence of melanoma and reduce the development of advanced disease (22).  
Level of evidence = (Cohort study)  
- After allowance for other variables such as age, sex, anatomical site and education, SSE is an independent predictor of early diagnosis (23)  
Level of evidence = II (Randomized controlled trial)  
- The intervention to increase SSE resulted in an increase in the number of surgery on the skin for 6 months following completion of the intervention compared to controls. This increase in surgery was not associated with an additional diagnosis of malignant skin cancer. The increase in surgeries did not persist beyond 6 months; however the increase in the number of people performing SSE remained higher in the intervention compared to controls (24).  
Level of evidence = V (Opinion of respected authority)  
- The Australian Cancer Council recommends that the general public should be encouraged to check all areas of their skin on a regular basis (25). |
| Program offering multiple risk factor assessment and intervention | Level of evidence = -I (Systematic review of randomised controlled trials)  
The use of multiple risk factor intervention has no effect on mortality due to CHD in the general population ( |
References


2. Alston E, Hall C. Pit Stop: Gentlemen Check your engines! Proceeding of the 6th National Rural Health Conference (serial on CD-ROM); 2001 Mar 4-7; Canberra, Australian Capital Territory.


## Program 11: Sustainable Farm Families

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Designed and implemented by Western District Health Service.</th>
</tr>
</thead>
</table>
| Contact Address | Director of Community Services  
Western District Health Service  
PO Box 283  
Hamilton Vic 3300  
Ph: 03 5551 8460  
Fax: 03 5572 5371 |
| Website | www.sustainablefarmfamilies.org.au |

### General overview of program

The Sustainable Farm Families program was developed in response to the higher rates of death and morbidity and lower average life expectancy of individuals living in rural areas. The Sustainable Farm Families Program is run over a three year period. The program provides participants with information on personal health and well being and opportunities for improving health and farm safety outcomes. Participants attend a two day course in year one and one day course in both years two and three. Topics covered include:

- The state of rural health.
- Cardiovascular disease.
- Cancer, including bowel and skin.
- Farm health and safety
- Stress and stress management.
- Diet and nutrition including a supermarket tour.
- Gender specific topics (prostate cancer, impotence, women’s health and breast cancer)
- Action planning
- Anxiety and depression
- Diabetes
- Health and Farm business.

The underlying message of the program is to increase awareness of the human resource in “triple bottom line” and focus on financial, natural and human resource management. The program motto is “no point in a better bottom line if you’re not there to enjoy it” (1-3).

### Target population

Individuals and families that have farmed or have been involved in a farming business for more than 5 years and are aged between 18 and 75 years.

### Inclusivity

Yes, in selected communities

### Specific Objectives (as stated in SFF literature)

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>Objective 2</th>
<th>Objective 3</th>
<th>Objective 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and track farming family health indicators for inclusion in farm management quality assurance processes (1).</td>
<td>Design and deliver a training program that assists farming families to identify strategies to enhance individual, family health and relevant OH&amp;S practices (1).</td>
<td>Communicate program findings to farming families and the health and agricultural sectors (1).</td>
<td>Provide information on the relationship between family health, health as a social issue in rural communities and farm productivity (1).</td>
</tr>
</tbody>
</table>

### Interventions being

The Sustainable Farm Families program utilizes four theories relating to adult learning and evaluation. These include;
promoted to achieve objective

- Azjen and Fishbein’s (1980) theory of reasoned action and planned behavior.
- Kolb’s (1984) training and delivery model.

These theories were incorporated into the design of the Sustainable Farm Families Program. Interventions utilized in the program include:
1. Annual workshops over a three year period including a two day workshop in year one and one day workshops in year two and three.
2. Regular news letters provided to participants.
3. Annual measurement of clinical indicators.
4. Industry knowledge association.
5. Pre and post test knowledge questionnaires.
6. Provision of a resource manual that included both written and visual material.
7. Comprehensive project evaluation.

Sequence of intended outcomes from the SFF project as a result of the above mentioned interventions (3)

<table>
<thead>
<tr>
<th>1. Behavior changes including:</th>
<th>2. Changes in clinical indicators, including:</th>
<th>3. Changes in morbidity and mortality including:</th>
<th>4. Benefits of these changes including:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eating healthier food.</td>
<td>Obesity-related indicators.</td>
<td>Reduced risk of a cardiovascular event</td>
<td>Increased Quality Adjusted Life Years.</td>
</tr>
<tr>
<td>Increased exercise.</td>
<td>Blood sugar level.</td>
<td>Reduced risk of death due to a cardiovascular event.</td>
<td>Downstream cost savings (4).</td>
</tr>
<tr>
<td>Follow up health checks (4).</td>
<td>Cholesterol level.</td>
<td>Reduction in farming accidents.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pulse rate (4).</td>
<td>Reduction in the incidence of cancer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduction in the incidence of anxiety and depression (4)</td>
<td></td>
</tr>
</tbody>
</table>

Research Question

Do comprehensive health screens, health workshops and provision of health information lead to behavior change?

Does behavior change such as increased physical activity and improved diet impact on clinical indicators?

Do positive changes in clinical indicators result in reduced morbidity and mortality from diabetes and cardiovascular disease?

Does decreased morbidity and mortality from diabetes and CV disease result in economic benefits and increased QUALY?

Evidence for effectiveness of intervention being promoted

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<td>Physical activity interventions which include professional advice and guidance with ongoing support can have a moderate effect on self reported activity levels in the short to mid term (5).</td>
<td>Physical activity is associated with improved clinical indicators such as serum lipids, blood pressure and fasting glucose (8).</td>
<td>The use of multiple risk factor intervention has no effect on mortality due to coronary heart disease in the general population (9).</td>
<td>Health programs aimed at decreasing mortality and morbidity due to cardiovascular disease have the capacity to provide economic benefits due to a reduction in the number of early deaths and reduced health care costs. Cardiovascular risk factors also impact other health conditions such as diabetes (12).</td>
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Level of evidence = II
The most effective intervention for promoting increased physical activity was the most intensive, however increases in physical activity identified at 12 weeks were not maintained at one year follow up (6).

Level of evidence = I (systematic review of randomised controlled trials).

Compared to no advice dietary advice increased fruit and vegetable intake, increased fibre intake, decreased saturated fat intake and reduced overall calorie intake however it is uncertain how long these changes where maintained (7).

Dietary advice brings about modest beneficial changes in clinical indicators such as cholesterol and blood pressure over approximately 10 months but longer term effects are not known (7).

Two randomized controlled trials demonstrated a 58% decrease in the risk of type 2 diabetes with lifestyle interventions (diet, exercise and weight loss) compared to the control / placebo group (10,11).

Level of evidence = II (Randomised controlled trial)

A lifestyle modification program focused on increasing physical activity and improved diet is a highly effective way of delaying or preventing type 2 diabetes (12).

Evidence of effectiveness of program in achieving object

Level of evidence IV

A research project evaluating the economic benefits of the Sustainable Farm Families program utilized evidence from a before and after longitudinal observational study with no control group. The authors use participant’s account of their health related behavior changes, which they attributed to the program, to support a causal relationship.

1. Statistically significant changes over 12 and 24 months for body mass index, systolic blood pressure, total cholesterol, waist circumference and waist to hip ratio.
2. Initial improvements in clinical parameters were maintained over the duration of the project.
3. On average participants that completed the SFF program reduce their risk of having cardiovascular disease event in the following 10 years by 2.12%.
4. It was estimated that over 10 years 2 cardiovascular events will be avoided due to participation in the SFF program.
5. It was estimated that amongst participants with a BMI greater than 25, 8 cases of diabetes where avoided.
6. The total gain in discounted QALYs over 10 years as a result of the project is calculated to be 4.33.
7. Cost savings from the predicted reduced incidence of Type 2 diabetes over 10 years is estimated at $154 929 (total program cost = $141 189).

Linkage to Primary Health services

Participants are referred to local health services as required.

Follow-up of people Identified as at-risk

Individuals identified as at risk are referred on to the appropriate health service.

Where are medical records held

Western Division Health Service in Hamilton.

Problems identified
It should be noted that the majority of the evidence cited above are studies conducted on populations at increased risk of diabetes and cardiovascular disease. Evidence to support the impact of interventions on apparently healthy populations is lacking. Few studies are of sufficient duration to measure the effect of their intervention on the incidence of cardiovascular disease and diabetes, consequently most are predictions only.

References


### Program 12: WellingTONE Challenge

**Program:** WellingTONE Challenge.  
**Ownership**  
Funded by a grant from the Department of Health and Ageing and implemented by a committee established in the local community.

| Contact Address | Wellington Community Health Centre  
|                 | Ph: 02 6845 2033  
|                 | Or for a copy of the toolkit  
|                 | National Mail and Marketing  
|                 | PO Box 7077,  
|                 | Canberra BC, ACT 2610 |

| Website | N/A |

**General overview of program**  
The WellingTONE Challenge (WC) is a community health program which aims to reduce the risk of cardiovascular disease and diabetes. WC is a multifaceted 12 week program designed to assists participants to lose weight and increase healthy behaviors such as regular physical activity and increased fruit and vegetable consumption. The WC had a goal for the community to lose a total of 1000kg in 12 weeks. There is a tool kit available to assist communities to implement a similar program.

**Target population**  
Individuals living in the Wellington area who meet the following criteria.  
1. >18 years.  
2. BMI > 25.  
3. Not pregnant.  
5. Not undertaking any medical weight loss procedures.

**Inclusivity**  
Yes, whole community based

**Specific Objectives**  
To reduce the risk of cardiovascular disease in the Wellington community.  
To reduce the risk of diabetes in the Wellington community.

**Interventions being promoted to achieve objective**  
1. The Wellington community losing an accumulated 1000 kgs in 12 weeks.  
2. Increasing participation in physical activity.  
3. Increasing fruit and vegetable consumption.

**Evidence for effectiveness of intervention being promoted**  
Level of evidence = I (Systematic review of randomised controlled trials.)  
- Exercise is associated with improved cardiovascular risk factors even if no weight is lost (2).  

Level of evidence = I (Systematic review of randomised controlled trials)  
- Dietary advice, including increased fruit and vegetable consumption, bring about modest beneficial changes in cardiovascular risk factors over approximately 10 months but

Level of evidence = I (Systematic review of randomized controlled trials)  
- Behavioral interventions aimed at increasing physical activity and improving dietary habits resulted in weight loss amongst people with pre-diabetes and reduced diabetes incidence (11)  

Level of evidence = III (Systematic review and meta-analysis of cohort studies)  
- This review concluded that the consumption of fruit and vegetables is not associated with a substantial reduction in the
longer term effects are not known. It should be noted that the majority of studies encourage decreased fat intake and increased dietary fibre in addition to increasing fruit and vegetable consumption, consequently and effect of increased fruit and vegetable consumption on alone is not described (3).

Level of evidence = III
- A diet consistently high in fresh seasonal fruit and salad vegetables appear protective against cancer and cardiovascular disease (4).

An evaluation of the WellingTONNE Challenge indicated the following results.
1. A total accumulated weight loss of 687 kg (average of 3.14 kg per person)
2. 21% increase in the number of participants walking four or more times per week.
3. 11% increase in the number of participants who eat 8 or more meals a week with vegetables and 16% increase in the number of participants who eat 2 or more pieces of fruit per day.

However, due to limitations in the evaluation and a low response rate at the 36 week follow up it is unknown if the changes where sustained long term.

Evidence of effectiveness of program in achieving object

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Level of evidence = III (Three cohort studies)
- These studies suggest that increased fruit and vegetable consumption may prevent diabetes however results where not conclusive (6-8).

Level of evidence = II (Randomized controlled trial)
- Two randomized controlled trials demonstrated a 58% decrease in the risk of type 2 diabetes with lifestyle interventions (diet, exercise and weight loss) compared to the control / placebo group (9,10).

Reference


### Program: The Royal Australian College of General Practitioners program

#### Ownership
The Royal Australian College of General Practitioners supported by a grant from the Australian Government Department of Health and Ageing.

#### Contact Address
1 Palmerston Crescent  
South Melbourne  
Victoria 3205  
Ph: 03 8699 0414

#### Website
http://www.racgp.org.au/

#### General overview of program
The Guidelines for preventative activities in general practice (Red Book) are a set of evidence based guidelines for preventative activities tailored to Australian General Practice. The guide endorses preventative care that is:

- Opportunistically provided when patients present with other problems or concerns.
- Anticipates the preventative needs of their patients by providing reminders for preventative care and
- Proactively targets high risk individuals who may be least likely to seek out such care.

The guidelines include screening / preventative information that is age specific and disease / injury specific. For the purpose of this evaluation we have focused on Prevention of chronic disease, prevention of vascular disease and early detection of cancer. The guidelines refer extensively to The smoking, nutrition, alcohol and physical activity (SNAP) risk factors due to their effect on the incidence and complications of chronic disease such as diabetes, CV disease and some cancers.

#### Target population
General community of patients

#### Inclusivity
Yes

#### Specific Objectives

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#### Interventions being promoted to achieve objective
Assessment of the absolute risk that the patient will have a vascular event in the next 5 years based on assessment of SNAP behavioral risk factors and physiological risk factors.

#### Evidence for effectiveness of intervention being promoted

|-----------------------------|------------------------------------|---------------------------------------------|
| 1. Average risk = assess every 12 months (IA)  
2. Increased risk = assess every 6 months (IA – IIIA) | 1. Average risk = assess every 2 years (IA)  
2. Increased risk = assess every 12 months (IIA)  
3. High risk = assess every 6 months (IA) | 1. Average risk = assess opportunistically (IIIB)  
2. Increased risk = assess opportunistically (VB)  
3. High risk = assess every 12 months (IIIC) |
| Overweight (Red Book pg 29-31) | Cholesterol and lipids (Red Book pg 39-41) | Non-melanoma skin cancer (Red Book pg 48-49) |
| 1. Average risk = assess every 2 years (IA)  
2. Increase risk = assess every 12 months (IA-IIIA)  
3. Identified risk = assess every 6 months (IIIB) | 1. Increased risk = assess every 5 years (IA)  
2. High risk = assess every 1-2 years (IA)  
3. Very high risk = assess every 12 months (IA) | 1. Average risk = assess opportunistically (IIIB)  
2. Increases risk = assess opportunistically (IIIB) |
| Type 2 diabetes (Red Book pg 41-43) | | |
Nutrition (Red book pg 31-32)
1. Average risk = assess every 2 years (IB)
2. High risk = assess every 6 month (IB)

Early detection of problem drinking (Red Book pg 33-35)
1. Average risk = assess every 3 years (IIB)
2. Increased risk = assess every 12 months (IA)
3. High risk = assess at first consult and then monthly (IA)

Physical activity (Red book pg 35-36)
1. Average risk = assess every 12 months (IIIB)
2. Increased risk = assess every visit (IV)
3. High risk = assess every 12 months (IIIB)

Stroke (Red Book pg 43-44)
1. Increased risk = assess every 12 months (IIIB)
2. High risk = assess every 12 months (IIIB)
3. People who have had a TIA = assess every 12 months (IA)

Kidney disease (Red Book pg 44-45)
1. Increased risk = assess every 12 months (IIIB)
2. High risk = assess every 12 months (IIIA)
3. Very high risk = assess every 12 months (IIIB)

Cervical cancer (Red Book pg 49-51)
1. Average risk = assess every 2 years (IIA)
2. Increased risk = assess every 2 years (IIIB)
3. Increased risk = assess every 12 months (IIIB)

Breast cancer (Red book pg 51-53)
1. Average risk = assess every 2 years from 50-69 years of age (IA)
2. Increased risk = assess at least every 2 years from 50-69 years of age (IIC)
3. High risk – individualized surveillance program (IIC)

Oral cancer (Red Book pg 53-54)
1. Average risk = assess every 2 years (VB)
2. Increased risk = assess every 12 months (VB)

Colorectal cancer (Red Book pg 54-55)
1. Average risk = FOBT every 2 years from 50 years of age (IA)
2. Increased risk = colonoscopy every 5 years from 50 years of age or at an age 10 years younger then the age of first diagnosis of CRC in family (IIC-IA)
3. High risk = FAP every 12 months from 10-15 years of age to 30-35 years of age and every 3 years after 35 years of age (IIC)

Testicular cancer (Red Book pg 56-57)
1. High risk = assess opportunistically (VC)

Evidence of effectiveness of program in achieving object
(I) Brief simple advice about quitting smoking from a General Practitioner results in a small increase smoking cessation rates.

(I) Brief interventions by General Practitioners can increase physical activity levels amongst patients.

“Success of counselling appears to be associated with patients’ readiness to change and with providing training for physicians in counselling techniques. Written exercise prescriptions might further improve outcomes.”

GP programs are being evaluated in a range of PHCREED research projects.
Linkage to Primary Health services

The Red Book is available for General Practitioners. All health screening / assessment is completed by a General Practitioner.

Follow-up of people identified as at-risk

The guidelines make recommendations for treatment and referral of individuals identified as at risk.

Where are medical records held

Medical records are kept by the patient’s General Practitioner.

Problems identified in program

Other comments

References


