Primary Care Partnership
BENDIGO LODDON

STRENGTH TRAINING DEVELOPMENT PLAN

2007 - 2012




Prepared by

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ACKNOWLEDGEMENTS

The Bendigo-Loddon primary Care Partnership acknowledges the contribution made by the following organisations for contributing to the preparation of this document.
Bendigo Community Health Services, Bendigo Health, Bendigo Region Institute of TAFE, Fernwood Women's Health Clubs, Greater Bendigo City Council, Inglewood & District Health Services, Loddon Shire Council, Vision Australia and in particular
Sports Focus
for the day to day management of the project.

Executive Summary

The purpose of the Strength Training Development Plan is to provide a co-ordiated approach to the planning, development, promotion and delivery of Strength Training programs across the Bendigo-Loddon Primary Care Partnership region.

The region is significant covering an area 9,693 sq. kilometres which consists of the Regional City of Bendigo and associated urban and rural areas, and the towns and rural areas of the Shire of Loddon.

This project was auspiced by the Physical Activity Consortium, a working group of the Bendigo-Loddon Primary Care Partnership and was managed by Sports Focus.

For the purpose of the Strength Training Development Plan strength training:

- is defined as an exercise that progressively increases the load placed on a muscle or muscles so that the muscle/s increases in strength.
- can be achieved through applying different types of 'loads' including free weights, fixed weights, bands and body weight.

This project recognises that Strength Training programs and activities have benefits for all ages. The project has however identified the over 55 age group as the primary target market for initiatives identified in the Action Plan. This is to ensure resourcing is targeted at the age groups that have the greatest need, and for whom there are currently limited program opportunities in the region.

There are currently 8 programs operating under a 'strength training' banner across the region with 5 of these being in small or remote communities. Programs that are at capacity or have waiting lists are those operating in and around Bendigo. The priorities for programs operating in more remote communities relate to access to suitable indoor spaces.

The project identifies 7 provision models that respond to the needs of the different communities in the project region. These models relate to different community settings as follows:

- Hospital/Health Care Centres
- Gymnasium / Recreation Centres
- Community Gymnasiums
- Community Facilities
- Outdoor Settings
- Personal Trainers
- Self-managed Programs
- HACC Centre-based Services

Actions have been developed in response to opportunities and issues identified in the Plan. It is proposed that short term actions will be addressed in years 1 and 2 of the plan, medium term actions in years 3 to 5 and longer term actions after year 5.

This timeline will be dependent on the level of resourcing available from the lead and support agencies and external funding that may be available to assist with the implementation of the plan.

Twenty actions have been identified in the Action Plan. These are summarised as follows:

Short-term Actions – for implementation in years 1-2

3. Review waiting lists. (Hospital/Health Care Centres)
4. Establish a working party with relevant sector providers to increase participation in strength training programs in private and community gymnasiums.
5. Develop 'transition pathways' and strategies for formalising and strengthening these pathways for participants who would be appropriate to transfer into 'mainstream' gym setting.

6. Research and document 'best practise' guidelines for community-based gyms.
7. Document a 'step-by-step' guide to assist communities understand and address process and provision considerations for establishing community based gyms.
9. Develop guidelines for community facilities that are selected to host Strength Training programs.
14. Carry out a preliminary investigation as to the opportunities, requirements and barriers associated with providing programs through existing HACC services.
15. Establish a working group to consider 'best practise' guidelines. (HACC Centre-based Services)
17. Establish a Strength Training Network Group to assist with the implementation of the Strength Training Development Plan.
18. Assist organisations making application/approach to State/ Federal Government. (S-L)
19. Monitor and review the Action Plan on a quarterly basis. (S-L)

Medium-term Actions - for implementation in years 3-5

8. Establish program models and support information for relevant target groups to encourage participation. (Community Gymnasiums)
10. Develop guidelines for community facilities that are selected to host Strength Training programs. (M-L)
11. Establish a network of personal trainers/ instructors and training organisations to identify opportunities, innovations, business sustainability issues and opportunities to provide Strength Training through personal trainers.
16. Establish a trial program in the Loddon and Bendigo LGAs implementing the best practice guidelines. (HACC Centre-based Services)
20. Develop information and resources to promote and market Strength Training opportunities in Bendigo and Loddon LGAs. (M-L)

Longer-term Actions - for implementing in 5 years plus

1. Review opportunities, protocols and requirements to enable the referral of relevant clients (hospital/health care centre programs) to alternative services and programs.
2. Consider establishing a 'fee paying' service for clients with the ability to pay / with private healthcare insurance to subsidise subsidised services. (Hospital/Health Care Centres)
12. Develop a framework for 'self-managed' Strength Training models
13. Develop information for participants ('Self-managed' Programs).

A *Strength Training Development Plan Co-ordination Group* with representatives from organisations that have a key role in the implementation of the Action Plan will be established to monitor the Action Pan in accordance with key measures.

1.0 Project Background

1.1 The Purpose of the Project

The purpose of this project is to provide a plan for a co-ordiated approach to the planning, development, promotion and delivery of Strength Training programs across the Bendigo-Loddon region.

In doing this the project was required to:

- Be realistic and achievable and have a focus on sustainability.
- Articulate an agreed and consistent message about Strength Training
- Propose agency collaborations and partnership for the implementation of the plan.
- Propose a range of delivery options including new models of provision.
- Provide a foundation to assist establish the Bendigo-Loddon region as a leader in the provision of Strength Training opportunities.

1.2 Defining Strength Training

For the purpose of this paper Strength Training:

- is defined as an exercise that progressively increases the load placed on a muscle or muscles so that the muscle/s increases in strength.
- can be achieved through applying different types of 'loads' including free weights, fixed weights, bands and body weight.

Other terms that can be used interchangeably to describe Strength Training are as follows:

- Resistance Training
- Progressive Resistance Training and
- Weight Training

This project recognises the confusion that can arise because of the interchanging of terminology that is used across the different health industry sectors to define programs that can deliver strength training outcomes.

This project recommends consideration be given to an umbrella 'branding' of programs that deliver strength training outcomes so that there is greater clarity for the community.

1.3 Project Region

The project is based in the Bendigo-Loddon Primary Care Partnership Region which takes in the City of Greater Bendigo and the Shire of Loddon.

The City of Greater Bendigo has a population of 99,636 and is forecast to increase to 118,792 people by the year 2021. Consistent with other regional cities the City has experienced significant growth with an average annual growth rate of approximately 1.5% % over the last 5 years. It is estimated that the municipality will experience an average annual growth of approximately 3.6% from 2008 to 2021.

The City of Greater Bendigo is 2,999 sq km.

By 2021 the population in the Shire of Loddon is estimated at 8,018 representing a population decline of 5% over the period 2006 to 2021. The number of people in the in the over 50 age groups is estimated to increase by 655 people or 17% in the same period to represent 54.2% of the population by 2021.

The Shire of Loddon is made up of a large number of small towns dispersed over some 6,694 sq km.

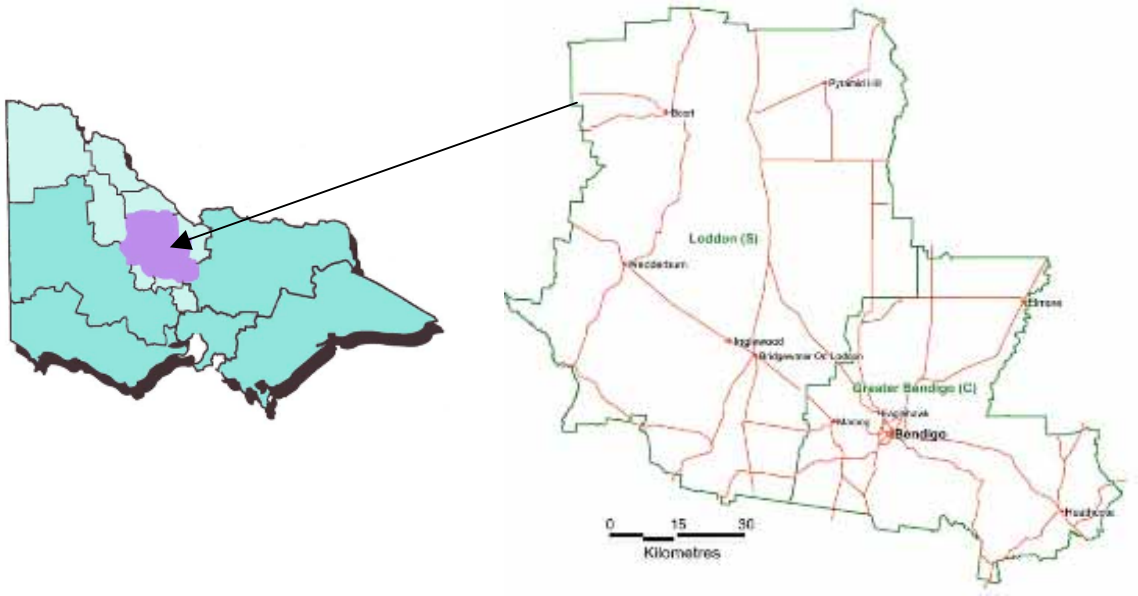


Figure 1 – The Bendigo-Loddon Primary Care Partnership Region

1.3 Target Age Group

This project recognises that Strength Training programs and activities have benefits for all ages. The project has however identified the over 55 age group as the primary target market for initiatives identified in the Action Plan.

This is to ensure resourcing is targeted at the age groups that have the greatest need and for whom there are currently limited program opportunities.

The project also recognises that current participation in strength training programs is by people in the older age groups and by women. The number of women participating in programs significantly exceeds the number of men. Again the project recognises the need to encourage male participation in programs.

1.4 Existing Programs in the Bendigo – Loddon Region

There are currently 8 programs operating under a 'strength training' title/banner. These programs are run by district health services including the Inglewood and District Health Service, the Bendigo Community Health Service and Bendigo Health.

Three of these programs are either at capacity, have waiting lists or are operating in over-crowded venues. These issues relate to the programs operating in the more urban areas of the region around Bendigo.

Three of the programs identify the need for storage space and/or venues that have the space so that equipment does not have to be put away after each session.

This is normally an issue for the programs conducted in small towns where venues are used for a range of functions. This requires equipment to be set up and dismantled after each session. This is particularly difficult given the limited capacity (age, ability, health) of participants to assist.

Strategies will need to address provision of additional programs in the

Bendigo and surrounding areas, the provision of more suitable venues in small towns (as part of a multi-purpose facility provision strategy) and encouragement of participation at venues that have additional capacity (rural programs).

1.5 The Primary Care Partnership and the Physical Activity Working Group

This project is auspiced by the Physical Activity Consortium, a working group of the Bendigo-Loddon Primary Care Partnership.

Sports Focus is the organisation responsible for managing this project on behalf of the Primary Care Partnership and the Physical Activity Consortium

The goal of the PAC is to facilitate increased participation in physical activity within the City of Greater Bendigo and the Shire of Loddon. One of the key focus areas of the PAC has been Strength Training and as a result a specific Strength Training sub group of the PAC was formed in 2005.

The following provides an overview of the relationship between the various organisations that are part of the Primary Care Partnership.

MEMBERSHIP OF THE PRIMARY CARE PARTNERSHIP (1)		
▪ Annie North Inc.	▪ City of Greater Bendigo	▪ Richmond Fellowship
▪ Bendigo & District Aboriginal Coop.	▪ Dingee Bush Nursing Centre	▪ Salvation Army
▪ Bendigo & District Division of GPs	▪ Future Connections Youth Service	▪ Sports Focus
▪ Bendigo Community Health Services	▪ Golden City Support Services	▪ St. Lukes Anglicare
▪ Bendigo Health	▪ Inglewood & District Health Service	▪ OTIS Foundation
▪ Bendigo Regional Breastscreen Centre	▪ Interchange	▪ Vision Australia
▪ Bendigo Regional Ethnic Communities Council	▪ Rochester & Elmore District Health Service	▪ Monash University School of Rural Health
▪ Bendigo Uniting Care Outreach	▪ Lifeline	▪ Loddon Shire Council
▪ Boort District Hospital	▪ Loddon Mallee Housing Service	▪ McIvor Health & Community Services
▪ Country Awareness Network	▪ Loddon Mallee Women's Health	▪ YMCA
▪ Centre Against Sexual Assault	▪ Northern District Community Health Service	▪ LaTrobe University
▪ Centacare		▪ Murray Plains Division of GPs

PCP WORKING GROUP (PAC)

PHYSICAL ACTIVITY CONSORTIUM (PAC) The PAC is one of a number of working groups established by the Primary Care Partnership		
▪ Bendigo-Loddon PCP	▪ Sports Focus	▪ Bendigo Health
▪ Department of Planning & Community Development	▪ City of Greater Bendigo	▪ Inglewood & District Health Services
▪ Bendigo Community Health Service	▪ Vision Australia	▪ Bendigo Institute of TAFE

PAC SUB-GROUP PROJECT

BENDIGO & LODDON STRENGTH TRAINING DEVELOPMENT PLAN 2007- 2012

(1) Bendigo-Loddon Primary Care Partnership Community Health Plan 2006-2009

2.0 Project Considerations and Understandings

This section provides a very brief overview of the key issues that the project has considered. These issues have been drawn from a number of research and project documents and from information provided by key stakeholders during the project.

Analysis of the key issues identifies the need:

- For increasing access to Strength Training programs, facilities and information particularly given the ageing of the population.

- For more effective integration between industry sectors in relation to:
  - The terminology used to define Strength Training i.e. clarifying, simplifying terminology
  - The delivery of programs and opportunities
  - Discussion about service delivery options and benefits that can be derived
  - Enhanced access to opportunities e.g. physical / geographic access, information and
  - Strategies to address the over demand/under supply situation that currently exists.

- For examples of the type and range of programs and/or activities that can result in Strength Training outcomes, particularly those that are not described using the term 'Strength Training'.

- To breakdown incorrect perceptions about Strength Training held by different groups in the community. Examples of these perceptions are:
  - Strength Training is only for young people and body builders
  - Strength Training is only for people who are sick, injured or who have a disability
  - Strength Training is only for women (and not men) because they are prone to osteoporosis
  - Strength Training is only for old people who cannot exercise vigorously

- To identify, provide and effectively promote different Strength Training opportunities that target different age groups, abilities and needs.

- For Strength Training environments that respond to the needs of 'target groups' and that provide choice and variety e.g. gymnasiums that recognises the needs of older people relating to social environments, outdoor gyms.

- To expand the manner by which programs are delivered e.g. fully supervised (high dependency) through to self-managed programs (low dependency).

- To establish protocols and guidelines so there is a clear understanding, agreement and confidence between providers from different sectors in relation to:
  - The level of training and experience required by program leaders, assistants, volunteers etc.
  - The type and level of supervision required for the different target/participant groups
  - Facility provision and equipment
  - Information provided to participants / potential participants.

- For an inter sector forum / working group through which liaison and discussion takes place; issues are addressed; and innovations and initiatives explored and monitored.

- For an integrated marketing and information framework and campaign that includes:
  - common / integrated branding
  - website
  - information and marketing aides and materials.

- For resourcing strategies that recognise:
  - the needs and capacity (e.g. financial, mobility) of people in rural / remote communities, on limited income, with no or limited transport and with varying degrees of confidence
  - there are people who can pay for the services and programs

3.0 Guiding Principles

The following principles were developed to guide project discussions and the scope of the recommendations contained in section 6 of this document.

Guiding Principle 1 - Strength Training has significant benefits for all age groups but is particularly beneficial for mid to older age groups because of benefits relating to age related disease and disability.

Guiding Principle 2 - There are a range of options through which participants can access strength training programs and opportunities.

Guiding Principle 3 - A range of participation options are required given:
- the vast area of the region and the different and diverse communities across the region,
- the capacity of these communities to support some types of programs e.g. on a fee for service basis)
- the capacity of agencies to sustain some types of programs in remote areas.

Guiding Principle 4 - There are some participants that will require specialist supervision because of disability.

Guiding Principle 5 - Strength training programs can be:
- delivered by a range of providers e.g. fitness/personal trainers, physiotherapists, certified personnel
- delivered by a range of provider organisations e.g. fitness centres, health centres, recreation centres and
- undertaken in a range of settings e.g. indoors, parkland/outdoor gyms.

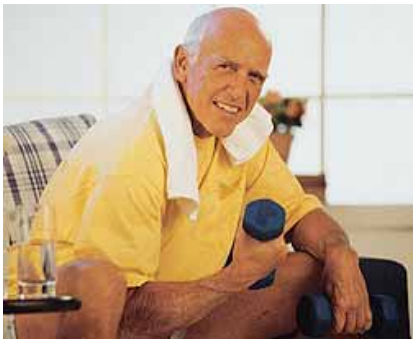
4.0 Strength Training Provision Options for Bendigo – Loddon Region

This project considered a number of options to improve access to Strength Training opportunities for people in the Bendigo-Loddon region. These options are summarised in the following table.

Appendix 1 contains a detailed analysis of these options and examines the benefits, disadvantages and strategies for overcoming issues associated with the provision model.

OPTIONS	OPPORTUNITIES IDENTIFIED FOR EACH SETTING	TARGET GROUPS
Model 1 Hospital/Health Care Centres	▪ Facilities have access to a range of medical support services, qualified staff and equipment. ▪ There are systemic referral pathways already in place and opportunities to engage with private providers in relation to some clients. ▪ Opportunities for better information about alternative options. ▪ Opportunities to provide assistance to potential partnership organisations and other providers. ▪ Opportunity for 'full fee paying client service' to subsidise other services.	▪ People who have referred by medical practitioners. ▪ People with age-related disability. ▪ People who are 'high risk' and may need medical backup.
Generally applicable for:	Large Towns √√√ Med/Small Towns X	District/Remote Area X
Model 2 Gym / Recreation Centres	▪ To improve attraction for older people e.g. promotional 'messages' that embrace older people, social / café areas, employment of older staff/ training of staff to more effectively deal with needs of older people. ▪ To 'transition' clients to this setting from more dependent settings e.g. physiotherapy supervised programs. ▪ To reduce the pressure 'supervised programs' and to retain participation in Strength Training activities. ▪ Program sessions that offer higher level of supervision. ▪ Advocacy for Government concession subsidies (e.g. HACC) to apply to 'recognised' programs if participant is eligible. ▪ Can offer alternative to the health centre/hospital based Strength Training programs. ▪ To provide gyms/ recreation centres with support services for relevant clients. ▪ To establish protocols between a referring agency and the facility/centre for feedback and assessment purposes.	▪ Clients that no longer need the level of support/supervision of a physiotherapist etc. ▪ The independent participant. ▪ Under 60 year olds. ▪ People comfortable with the recreation centre setting. ▪ Note that there will potentially be an increasing number of older people that are familiar and comfortable with this setting as the population ages.
Generally applicable for:	Large Towns √√√ Med/Small Towns X	District/Remote Area X
Model 3 Community Gymnasiums	▪ Makes opportunities (for individuals and group programs) accessible to residents in remote and small communities. ▪ Provides opportunity in areas that would not otherwise have access to any type of gym facility or equipment. ▪ Can be accessed when convenient to the user. ▪ Opportunity to develop industry standards and models for provision that can be easily replicated.	▪ People who cannot access a facility at regular times e.g. people who work outside the area, people working on the land, shift workers. ▪ Individuals, community groups, private/public health workers looking to run programs. ▪ People comfortable with the recreation centre setting. ▪ The independent participant.
Generally applicable for:	Large Towns X Med/Small Towns √√	District/Remote Area X
Model 4 Community Facilities	▪ Makes opportunities accessible to remote/small communities. ▪ Programs can share space with other community activities and make facilities more 'viable' e.g. sporting club, senior citizens centre. ▪ Costs can be shared between a number of facility users or programs.	▪ People in remote communities that have no alternative access. ▪ People who cannot access a facility at regular times e.g. people who work outside the area, people working on the land, shift workers.
Generally applicable for:	Large Towns √ Med/Small Towns √√	District/Remote Area X
Model 5 Outdoor Settings	▪ Opportunities in these settings are easily accessible and can be combined with other outdoor activities. ▪ Activities can be done in the participants own time and there is opportunity to meet people.	▪ People who have a reasonable level of mobility. ▪ People who have an understanding of technique etc.

OPTIONS	OPPORTUNITIES IDENTIFIED FOR EACH SETTING	TARGET GROUPS
	▪ Opportunities for 'Instruction days' or weekly programmed sessions by trained instructor. ▪ Private sector can be involved. ▪ Opportunity to develop industry standards and models for provision that can be easily replicated.	▪ Tourists/travellers. ▪ People who cannot access a facility at regular times e.g. people who work outside the area, people working on the land, shift workers.
Generally applicable for:	Large Towns √√ √	Med/Small Towns √√	District/Remote Area X
Model 6 Personal Trainers	▪ Increases accessibility to opportunities in remote/small communities. ▪ Offers a more personalised service. ▪ Provides small business opportunity in a small community. ▪ Potential to obtain/negotiate funding for the service.	▪ Participants looking for private, small group, personal instruction in a variety of setting options. ▪ Clients who are confident to 'self-refer.
Generally applicable for:	Large Towns √	Med/Small Towns √√	District/Remote Area X
Model 7 Self-managed Programs	▪ Easily accessible. ▪ Can be done in the participant's own time. ▪ Opportunity to develop accessible and age-relevant information. ▪ Opportunity to integrate programs with allied programs e.g. 1 centre based program every 2 weeks, self-managed programs in between. ▪ Material/information can be developed to support participants e.g. DVD, online support/information, telelink. phone coaching, library of equipment.	▪ People who live in remote communities. ▪ People who do not have access to transport or who have access to irregular transport only. ▪ People who cannot access a facility at regular times e.g. people who work outside the area, people working on the land, shift workers. ▪ People who are less physically mobile.
Generally applicable for:	Large Towns √√	Med/Small Towns √√	District/Remote Area √√√
Model 8 HACC Centre-based Services	▪ Increases accessibility to opportunities in remote/small communities. ▪ Does not require participant to travel from home. ▪ Can be linked with existing HACC service provision and so does not require another management structure. ▪ Can be tailored to those less able. ▪ Opportunity for 'full fee paying client service' to subsidise other services.	▪ People with limited mobility. People lacking confidence.
Generally applicable for:	Large Towns √√	Med/Small Towns √√	District/Remote Area √√√



5.0 Implementation and Review of the Action Plan

A *Strength Training Development Plan Co-ordination Group* with representatives from organisations that have a key role in the implementation of the Action Plan will be established to monitor the Action Pan in accordance with key measures.

It is unlikely that there will be significant change to the key direction proposed in the plan. A review process is however important, to ensure that the Action Plan continues to respond to current issues, opportunities and any changing priorities.

The following review process is proposed

Quarterly Monitoring	Agencies/organisations responsible for implementing Actions will report to the Bendigo-Loddon Primary Care Partnership on a quarterly basis against key performance indicators identified in the Plan and others as may be established.
Annual monitoring	On an annual basis the Action Plan and priorities will be reviewed to identify changing needs and issues, and to ensure the Strategy is being implemented in accordance with key measures.
Every 3 years	Review of timelines, key directions and priorities.
Year 9	Commencement of the full review of the Strength Training Development Plan

6.0 Action Plan

The Action Plan has been developed in two sections. Part A includes the actions required to put in place each of the provision models identified in the project. Part B includes actions that apply to all of the models e.g. marketing, branding, information.

Actions will be addressed in the short, medium or longer term. It is proposed that short term actions will be addressed in years 1 and 2 of the plan, medium term actions in years 3 to 5 and longer term actions after year 5. This timeline will be dependent on the level of resourcing available from the lead and support agencies and external funding that may be available to assist with the implementation of the plan.

Key Performance Indicators have also been identified. These may be amended as actions are implemented and refined.



6.1 Action Plan – Part A

This part of the Action Plan includes the actions required to achieve the aim/s for each of the provision models identified in the project. It also provides the name of the agency/ies that are deemed the most appropriate to facilitate the implementation of the required actions.

MODEL 1 – HOSPITAL / HEALTH CARE CENTRES

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM To address the over demand / under supply of Strength Training programs provided by health care professionals through hospitals, health care services etc.			
ACTIONS			
1. Review opportunities, protocols and requirements to enable the referral of relevant clients to alternative services and programs (determined according to ability).	▪ Identify eligibility criteria for each public strength training group. ▪ Reach agreement to utilise the SCTT to provide referrals to strength training agencies. ▪ Alternative programs/ models established. ▪ Protocols reviewed. ▪ Effectiveness of partnerships in achieving identified outcomes (e.g. impact on waiting lists).	$7,000	**L**
2. Consider establishing a 'fee paying' service for clients with the ability to pay / with private healthcare insurance to subsidise subsidised services.	▪ Opportunities investigated (feasibility, sustainability). ▪ Service established (depending on feasibility)	$5,000	**L**
3. Review waiting lists.	▪ Obtain client consent to develop and maintain a common waiting list for clients who are eligible for more than one group. ▪ Review existing clients to identify if any are receiving strength training form more than one agency/group.	$5,000	**S**
LEAD AGENCY/IES	Bendigo-Loddon Primary Care Partnership		
SUPPORT AGENCY/IES	Bendigo Health; Bendigo Community Health Services, McIvor Health and Community Services; Inglewood and District Health Service.		

MODEL 2 – GYM / RECREATION CENTRE SETTING (Private and Public)

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM To increase awareness of and access to Strength Training programs in public and private gymnasiums.			
ACTIONS			
4. Establish a working party with relevant sector providers (including gym operators and health providers) to increase participation in strength training programs in private and community gymnasiums.	▪ Working party and objectives established. ▪ Trial program established. ▪ Referral and feedback 'pathways' established. ▪ Evaluation and reporting trial program.	$5,000 pa	**S**
5. Develop 'transition pathways' and strategies for formalising and strengthening these pathways for participants who would be appropriate to transfer into 'mainstream' gym setting.	▪ Transition pathways identified and trialed. ▪ Transition pathways formalised between partner agencies/ organisations e.g. protocols established. ▪ Evaluation plan designed and implemented.	$3,000	**S**
LEAD AGENCY/IES	Bendigo Health Service, Bendigo Community Health Services		
SUPPORT AGENCY/IES	Bendigo Community Health Service; Private and community gymnasiums including Fernwood, YMCA, Lifestyle		

MODEL 3 – COMMUNITY GYMNASIUMS

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM To increase opportunities for people in small/remote communities to access gym facilities (including spaces that are dedicated to gymnasium equipment) that offer Strength Training opportunities.			
ACTIONS			
6. Research and document 'best practise' guidelines for the provision of community-based gyms.	▪ Best practise guidelines developed.	$7,500	**S**
7. Document a 'step-by-step' guide to assist communities understand and address process and provision considerations for establishing community based gyms.	▪ Community guide for establishing community-based gyms developed. ▪ Review/s undertaken to identify additional opportunities, operational improvements etc.	$7,500	**S**
8. Establish program models and support information for relevant target groups to encourage participation.	▪ Participant information developed and produced. ▪ Increased participation by target groups	$12,000	**M**
LEAD AGENCY/IES	Loddon Shire Council; Department of Planning and Community Development		
SUPPORT AGENCY/IES	Bendigo Community Health Centre; McIvor Health and Community Services; Elmore Primary Health Service; City of Greater Bendigo; YMCA; Sports Focus, Boort Resource and Information Centre, Loddon Neighbourhood House		

MODEL 4 – COMMUNITY FACILITY

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM To increase opportunities through existing community facilities (e.g. senior citizens centres, residential care facilities, community halls) to provide opportunities for Strength Training programs. * Note; It is anticipated that all/most spaces in these types of facilities are shared and that are generally no dedicated spaces for programs. If a dedicated space is to be considered then refer to Model 2.			
ACTIONS			
9. Develop guidelines for community facilities that are selected to host Strength Training programs. Guidelines should consider criteria relating to: - space - type of equipment (equipment will need to be portable) - storage space required - amenities e.g. access to kitchen / kitchenette, disability toilets, social / sitting space - access requirements e.g. ramps, carparks, emergency access	▪ Funding sought to assist with project. ▪ Guidelines and checklist established and supported as a model by relevant agencies e.g. Department of Planning and Community Development	$7,500	**S**

LEAD AGENCY/IES	Bendigo Community Health Service
SUPPORT AGENCY/IES	Inglewood District Health Service; Loddon Shire Council; McIvor Health and Community Services; Neighbourhood Houses; Existing gym providers (outreach programs); Bendigo Regional Institute of TAFE

MODEL 5 – OUTDOOR GYMNASIUMS

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM To increase opportunities for people to access Strength Training opportunities through outdoor gyms that do not rely on presenters/trainers and access to indoor facilities.			
ACTIONS			
10. Research and document' best practise' provision guidelines that maximise access to opportunities for a range of mobility, age and ability levels.	▪ Best practise provision guidelines researched and developed.	$7,500	**M-L**

LEAD AGENCY/IES	City of Greater Bendigo
SUPPORT AGENCY/IES	Loddon Shire Council; Sports Focus; Bendigo Loddon Physical Activity Consortium; Bendigo Regional YMCA; Township Committees; Department of Planning and Community Development

MODEL 6 – PERSONAL TRAINERS

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM To increase awareness and access to Strength Training opportunities provided by personal trainers			
ACTIONS			
11. Establish a network of personal trainers/ instructors and training organisations to identify opportunities, innovations, business sustainability issues and opportunities to provide Strength Training through personal trainers.	▪ Working Group established and Action Plan prepared.	$3,000 pa	**M**
LEAD AGENCY/IES	Bendigo Regional Institute of TAFE		
SUPPORT AGENCY/IES	Bendigo Loddon Physical Activity Consortium; Private providers		

MODEL 7 – SELF-MANAGED PROGRAMS

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM To increase options and information available to people that want to undertake Strength Training exercises as part of their regular (but independent) exercise program.			
ACTIONS			
12. Develop a framework for 'self-managed' Strength Training models that considers inclusion of: - introductory sessions / monitoring / assessment / 'refresher' sessions - support / sessions provided through fitness centres, private providers - information in hard copy, electronic form, on CD, online kits and/or information - partnerships with local TV.	▪ Framework developed.	$10,000	**L**
13. Develop information for participants relating to: - Strength training exercises that can be undertaken in a variety of settings - use of / type of 'equipment' (including improvised equipment in the home and fixtures in the public environment) - safety considerations - support and advice.	▪ Information developed.	$10,000	**L**
LEAD AGENCY/IES	Bendigo-Loddon Primary Care Partnership		
SUPPORT AGENCY/IES	Bendigo Health; Bendigo Community Health Services, McIvor Health and Community Services; Inglewood and District Health Service; Private providers; Bendigo Regional Institute of TAFE.		

MODEL 8 – HACC CENTRE-BASED SERVICES

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM To increase access to Strength Training programs through existing centre-based HACC services/service providers.			
ACTIONS			
14. Carry out a preliminary investigation as to the opportunities, requirements and barriers associated with providing programs through existing HACC services.	▪ Investigation completed.	$7,500	**S**
15. Establish a working group to consider 'best practise' guidelines relating to: - the incorporation of Strength Training activities into existing Centre-based HACC programs - risk management protocols - support protocols for providers - referral, assessment and monitoring protocols.	▪ Working Group established. ▪ Best practise guidelines for physical activity within the HACC target group developed.	$10,000	**S**
16. Establish a trial program in the Loddon and Bendigo LGAs implementing the best practice guidelines.	▪ Program developed, implemented and evaluated.	$10,000	**M**
LEAD AGENCY/IES	Bendigo Health /Bendigo Community Health Services		
SUPPORT AGENCY/IES	City of Greater Bendigo; Shire of Loddon; McIvor Health and Community Services; Inglewood and District Health Service; Department of Human Services.		

6.2 Action Plan – Part B

This part of the Action Plan includes actions that are applicable to all the models outlined in section 6.1.

CO-ORDINATION / MANAGEMENT /ADVOCACY

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM An integrated Strength Training management model for the Bendigo-Loddon region that is sustainable into the future.			
ACTIONS			
17. Establish a Strength Training Network Group to assist with the implementation of the Strength Training Development Plan.	▪ Engaging of all identified partners to achieve outcomes according to determined timelines	$3,000 pa for 5 years	**S**
18. Assist organisations making application/approach to State/ Federal Government in relation to: - Review of the type and range of programs to which 'concessions' and subsidies can apply. - Funding of community based gyms (Model 3) and outdoor gym equipment (Model 5). - Funding of minor modifications to existing community facilities that are needed to accommodate Strength Training programs. (Model 4) - Development of program information materials.	▪ Advocacy strategy developed and implemented. ▪ Support provided to organisations making funding applications for programs, program equipment and/or infrastructure provision. ▪ Discussions with State/ Federal Government regarding review of concessions/subsidies. ▪ Greater flexibility of concessions/ subsidy application.	$3,000 pa for 5 years	**S-L**
19. Monitor and review the Action Plan on a quarterly basis.	▪ Timeline developed and adhered to.	Within operational budget	**S-L**

LEAD AGENCY/IES	Bendigo-Loddon Primary Care Partnership
SUPPORT AGENCY/IES	Bendigo Community Health Services; Bendigo Health; McIvor Health and Community Services; Inglewood and District Health Service; Greater City of Bendigo; Shire of Loddon; Private providers.

INFORMATION

AIM AND ACTIONS	KPIs	RESOURCING	PRIORITY
AIM An integrated information and awareness framework			
ACTIONS			
20. Develop information and resources to promote and market Strength Training opportunities in Bendigo and Loddon LGAs.	▪ A brochure/booklet that promotes strength training benefits and identifies local opportunities. ▪ Promotion of opportunities on relevant websites.	$12,000 Funding to be sought for preparation of material.	**M-L**

LEAD AGENCY/IES	Bendigo-Loddon Primary Care Partnership
SUPPORT AGENCY/IES	Bendigo Community Health; Bendigo Health Services; McIvor Health and Community Services; Inglewood and District Community Health Service; Greater City of Bendigo; Shire of Loddon; Private providers.

Notes to Accompany Action Plan

The following are supplementary notes for a number of actions as indicated below.

Action	Notes
1	▪ The review should consider: - restructure of programs - partnerships with other providers (centre-based, personal trainers etc.) and self-managed programs (semi-supported / unsupported) - opportunities for existing service providers to provide an additional level of service e.g. increased monitoring / supervision - transferable subsidies
4	▪ Process should identify opportunities, innovations and constraints and strategies for addressing these constraints. ▪ Opportunities should consider initiatives relating to 'Buddy Programs' (2 for 1); fee schedules relating to off-peak times; 'off-peak' access; a trial program; strategies for attracting both males and females; 'industry branding' for partner gyms; design of strength training programs, opportunities for physiotherapist based programs to be conducted in gyms on an occasional basis.
6	▪ Guidelines should include reference to size, type of equipment, number of pieces of equipment, supervision, access requirements, operational partnerships, co-location with other facilities, insurance, use by commercial/private trainers/providers, pricing framework etc.
10	▪ Guidelines should consider physical access, opportunities for group involvement, the 'Safe Environments For Physical Activity Guidelines', user information requirements (on site and printed material), type and extent of equipment, co-location with other facilities e.g. trails, toilets.
17	▪ The review should consider: - restructure of programs - partnerships with other providers (centre-based, personal trainers etc.) and self-managed programs (semi-supported / unsupported) - opportunities for existing service providers to provide an additional level of service e.g. increased monitoring / supervision - transferable subsidies
20	▪ Information and resource material may relate to: - Examples of programs that achieve Strength Training outcomes (but that are not necessarily defined using the term Strength Training). - An 'opportunities matrix' so that prospective clients/participants can 'self-select' their method of engagement. - Providers of Strength Training programs (including those not defined using the term 'strength training'). - Frequently asked questions. - Material/information (e.g. 'how to'/'where to') for people wanting to engage through various models. - People/organisations wanting to become affiliate providers, enrol in training programs. - A website or integration of information between already existing websites (e.g. providers).

7.0 Appendices

Appendix 1 - Analysis of Provision Opportunities (Models) and Requirements

The following provides a summary of the Strength Training provision models identified through the project. For each model a consideration of the following is included:

- an overview of the possible Benefits/Advantages/Opportunities
- an overview of the possible Disadvantages/Barriers/Issues
- an overview of the anticipated target groups and
- an overview of possible strategies for addressing the barriers/issues

Model 1 - Formal Gym / Recreation Centre (Private and Public) Description: Programs that are run in a community or private gymnasium facility that is generally co-located with other active sporting/recreation activities. May include recreation centres, private gyms	
Benefits/Advantages/ Opportunities	▪ Equipment, staff and program spaces readily available. ▪ Social opportunities. ▪ Opportunities for integration into mainstream activities/opportunities e.g. pilates. ▪ Staff with generalist expertise available on site.
Disadvantages/Barriers/Issues	▪ The gym/recreation environment does not appeal to a large number of older people. Note however that some participants do enjoy this environment and that future generations of 'older people' will possible feel more comfortable in these environments. ▪ Sustainability of programs. ▪ Staff not attuned to the communication needs of older adults e.g. patience, pace of spoken word and levels and not perceptive to levels of comfort etc. ▪ Cost/membership structures e.g. set contract period. ▪ Cost. ▪ Knowing at what point it is appropriate to refer to the gym. ▪ Professional sector barriers.
Primary Target Groups	▪ People who have a history of involvement with recreation centres/gymnasiums and feel comfortable in these environments. ▪ Clients that no longer need the level of support/supervision e.g. physiotherapist, initially required and can safely monitor their own progress.
Strategies for overcoming barriers/issues	▪ Effective promotion. ▪ The facility - Positive environments for older people e.g. social / café areas. - Promotional 'messages' that embrace older people. - Employment of 'older staff'. - Training of staff to more effectively deal with needs of older people. - Appropriate supervision ratios. ▪ Should look at opportunities for subsidy if participant is HACC eligible. Are there any other subsidy opportunities? ▪ Provision of ST programs in facilities other than healthcare facilities. ▪ Transition process / model for moving clients over to a more independent structure e.g. programs conducted in a gym

	environment. ▪ Look at opportunities to provide gyms with support services. ▪ Establishing protocols between a referring agency/org and the gym in terms of feedback, assessment of participant and assessing the suitability of program. ▪ Understand what did not work effectively in relation to the referral/engagement process for Active Script ▪ Actively engaging private health providers in identifying opportunities and resolving areas of concern. This will improve confidence in the referral. ▪ Opportunities to structure participation e.g. sessions that are structure for older participation.
Model 2 - Community gym/facility (permanent and dedicated space) Description: A small facility or room that is part of a larger community facility, which accommodates a range of general community services.	
Benefits/Advantages /Opportunities	▪ Makes opportunities (for individuals and group programs) accessible to remote/small communities. ▪ Provides opportunity in areas that would not otherwise have access to any type of equipment. ▪ Regardless of there being a ST program or not the facility is a valuable asset to the broader community. ▪ Can be accessed when convenient to the user.
Disadvantages/Barriers/ Issues	▪ Only small range of equipment likely to be available – lack of variety. ▪ Initial set-up costs. ▪ Supervision. ▪ Motivation. ▪ Insurance may make prohibitive in some areas. ▪ Recruitment and retention of qualified staff. ▪ If agency providing the program departs how to keep program happening? ▪ Generally a lack of storage space. ▪ May not address social needs of the client group i.e. if at a sports clubrooms, Rural Transaction Centre. ▪ Opening hours may not suit users. ▪ Maintenance and replacement costs associated with buildings and equipment.
Primary Target Groups	▪ People who cannot access a facility at regular times e.g. people who work outside the area, people working on the land, shift workers. ▪ Individuals, community groups, private/public health workers looking to run programs. ▪ People who have a history of involvement with recreation centres/gymnasiums and feel comfortable in these environments.
Strategies for overcoming barriers/issues	▪ Development of industry standards and models for provision. ▪ Industry approach to insurance considerations. ▪ Group activities to maintain motivation. ▪ Training of presenters/staff.
Model 3 – At a community facility e.g. sporting clubroom, community hall (not a dedicated space) Description: A facility that is largely for another purpose but which has made provision for other community based programs. * Note that this model may have synergies with Model B above in that a community gym may be co-located with one of these facilities.	
Benefits/Advantages /Opportunities	▪ Makes opportunities accessible to remote/small communities. ▪ Equipment / space can benefit a number of users (sporting club). ▪ Costs can be shared.

Disadvantages/Barriers/ Issues	▪ Only small range of equipment likely to be available – lack of variety. ▪ Equipment often has to be set up and taken down and/or gets stored in the corner of a facility (security). ▪ Supervision. ▪ Sport/change room environment (odour, lack of ventilation, poor amenity) not conducive to use by target groups (sports club). ▪ No social environment available (sports club, RTC). ▪ Insurance may make prohibitive. ▪ Maintenance and replacement costs associated with buildings and equipment.
Primary Target Groups	▪ People in remote communities that have no alternative access. ▪ People who cannot access a facility at regular times e.g. people who work outside the area, people working on the land, shift workers.
Strategies for overcoming barriers/issues	▪ Encouraging Council's to identify and plan for 'community hubs' that include opportunities for community-based gyms and opportunities for social engagement. ▪ Opportunities to collocate with existing community facilities e.g. health centres, community house. ▪ Note that some facilities may be more appropriate venues than others e.g. tennis club vs. a football club. ▪ Development of industry standards and models for provision.
Model 4 - Open Space/ Park settings e.g. outdoor gyms, environmental features. Description: Activities may be formal as is the case of outdoor gyms or based on existing amenities commonly found in the out-of-doors	
Benefits/Advantages /Opportunities	▪ Easily accessible. ▪ In the out-of-doors and can be combined with other outdoor activities ▪ Can be done in own time. ▪ Opportunity to met people or do activity with own friends. ▪ Needs motivation by the individual however motivation can come from group engagement.
Disadvantages/Barriers/ Issues	▪ Requires motivation by the individual. ▪ Weather dependent. ▪ Requires a knowledge of technique to maximise benefits and minimise risk of injury. ▪ Outdoor gym equipment a new concept and not readily available at this time. Note that a number of Council's are 'spreading the equipment out along a trail which will require a high level of mobility – Need to think about making recommendations to Council's re this?? ▪ Maintenance and replacement costs associated with equipment.
Primary Target Groups	▪ People who have a reasonable level of mobility. ▪ People who have an understanding of technique etc. ▪ People who cannot access a facility at regular times e.g. people who work outside the area, people working on the land, shift workers.
Strategies for overcoming barriers/issues	▪ 'Instruction days' at equipment or in the park or weekly programmed sessions by trained instructor (at cost). ▪ Encourage private providers – need to consider Council policy re 'commercial use' vs. recognising health benefits. ▪ Encourage wider provision by Council's – funding?? ▪ Development of industry standards and models for provision.

Model 5 – Personal Trainer Description: A private provider who provides services from a home-based gymnasium and/or conducts programs in client's homes and/or in parks.	
Benefits/Advantages /Opportunities	▪ Increases accessibility to opportunities in remote/small communities. ▪ More intimate environment. ▪ Provides small business opportunity in a small community.
Disadvantages/Barriers/ Issues	▪ Longevity of the gym or program is dependent on the provider staying in the area. ▪ Qualifications/experience of provider. ▪ May not appeal to people who do not feel comfortable in one-on-one/small group environments or visiting a private home. ▪ Monitoring quality of provision and maintaining consistent industry standards. ▪ Cost. ▪ Sustainability of the business.
Primary Target Groups	▪ Participants looking for private, small group, personal instruction/engagement either in their own home or in providers' home-based facility. ▪ Self-referrals.
Strategies for overcoming barriers/issues	▪ Access to appropriate training opportunities for providers. ▪ Guidelines for providers (including standards). ▪ Opportunities to get funding for the service?
Model 6 - Hospital / Health Centres Description: Programs that are aligned to specific services provided by the health care sector**.**	
Benefits/Advantages /Opportunities	▪ At facilities with a range of support services. ▪ Access to qualified staff. ▪ Access to equipment. ▪ Systemic referral pathways currently in place. ▪ Opportunities to engage with private providers in relation to some clients.
Disadvantages/Barriers/ Issues	▪ Waiting lists. ▪ Hospital/health care centre environment may not be attractive to some clients. ▪ Risk of institutionalising 'health care'/good health. ▪ May be seen to have a 'disability/poor health' focus rather than a 'health and wellbeing' (preventative) focus by some.
Primary Target Groups	▪ People who have referred by medical practitioners. ▪ People with age-related disability. ▪ People who are 'high risk' and may need medical backup.
Strategies for overcoming barriers/issues	▪ Better information about alternative opportunities. ▪ Integrated provision model. ▪ Breaking down of perceptions. ▪ Assistance to potential partnership organisations/opportunities.

Model 7 – Self-Managed Program Description: Programs/activities that can be undertaken by the individual in their own time and place of choice.	
Benefits/Advantages /Opportunities	▪ Easily accessible. ▪ Can be done in own time. ▪ Needs motivation by the individual however motivation can come from group engagement.
Disadvantages/Barriers/ Issues	▪ Requires motivation by the individual. ▪ Lack of information may prevent participation. ▪ Requires knowledge of technique to maximise benefits and minimise risk of injury. ▪ Requires information that is relevant to the individual and age group. ▪ Does not have the social benefits associated with other models.
Primary Target Groups	▪ People who live in remote communities. ▪ People who do not have access to transport or who have access to irregular transport only. ▪ People who cannot access a facility at regular times e.g. people who work outside the area, people working on the land, shift workers. ▪ People who are less physically mobile.
Strategies for overcoming barriers/issues	▪ Develop accessible and age-relevant information. ▪ Provide integrated programs e.g. 1 centre based program every 2 weeks, self-managed programs in between. ▪ Access to aids e.g. DVD, online support/information, telelink. ▪ Phone coaching support, Library of equipment.
Model 8 – Funded In home Community Based Provision (NEW) Description: Support provided by trained staff and volunteers?? (Home Carers) as part of the HACC service provided to residents in their own home.	
Benefits/Advantages /Opportunities	▪ Increases accessibility to opportunities in remote/small communities. ▪ Does not require participant to travel from home ▪ Can be linked with existing HACC service provision and so does not require another management structure. ▪ Can be tailored to those less able
Disadvantages/Barriers/ Issues	▪ Program will require funding. ▪ Viability of the program will be dependent on ongoing government funding. ▪ Some older people feel uncomfortable with people going into their home. ▪ Training and retaining of qualified personnel. ▪ Significant travel will be required to deliver the service in remote areas.
Primary Target Groups	▪ People with limited mobility. ▪ People lacking confidence.
Strategies for overcoming barriers/issues	▪ Access to appropriate training opportunities for providers. ▪ Funding from government. ▪ Making access to other community providers that can purchase services at full cost eg CACPs & EACH clients

Appendix 2 - Background Paper 1 – Document Review

Document 1 – Review of Strength Training for Older Adults in Victoria (VICFIT for Department of Victorian Communities)

- Defines Strength Training as 'resistance training which used free and/or fixed weights with the aim of increasing strength' (p viii)
- Focus of the report is on 'adults over 50'
- Research shows significant benefit relating to:
  - Physical Health – falls prevention, Type 2 diabetes, minimising the effects of arthritis and onset of osteoporosis, maintaining general mobility
  - Physiological Health – quality of life, body image, self efficacy, mood / anxiety / depression
- A rapid growth in Strength Training programs in the last 5 years. More than 10,000 participants in Victoria across 200 programs.
- Most programs conducted in fitness centres (50%), community health centres (23%) and community halls (23%). Other venues include hospitals (10%), rehabilitation facilities (5%) and nursing homes (5%).
- The majority of participants are female and in the 60-70 year age groups.
- Sessions are attended 2-3 times per week for approximately 45 mins+.
- The main barriers to participation are identified as:
  - a lack of knowledge about the activity
  - discomfort associated with group settings particularly in an unfamiliar environment.
  - intimidation of the fitness centre setting.
  - sustainability of instructors.
  - physical access issues
  - financial constraints
- Issues identified by program providers include:
  - financial viability of programs
  - lack of business planning and evaluation
- lack of clarity around best practice re program content
- lack of qualifications of staff
- lack of male participants
- Summary of feedback relating to Frail Older Adult participation
  - often seen as 'for young people and males'
  - barriers to participation are lack of interest, lack of trained staff, lack of space, high incidence of depression and immobility
- Summary of feedback relating to participation by Aborigines
  - barriers to participation are general disinterest in exercise, no or limited understanding of health benefits
  - incentives for participation are social interaction, improved clarity of thinking and physical health improvements, increased involvement in family life, increased self esteem, improved diet
  - opportunities relate to integration with fitness industry and community health services
- Summary of feedback relating to participation by CALD communities
  - major barriers to participation are negative image, cost, lack of transport, self-conscious in a public facility, fear of injury
  - incentives for participation are limited. Would rather consider other options e.g. dancing
- Summary of feedback relating to participation by People with Disabilities
  - barriers to participation are lack of knowledge about the subject, uncertainty / fear / apathy, lack of suitable transport, perceived lack of suitable instructors, specific needs of individual participants / high care requirements
  - incentives for participation are awareness of potential health benefits, socialisation

  - Note that there is no model for the delivery of Strength Training to older adults with a disability
  - Opportunities relate to introductory programs run by GPs and allied health care providers
- Issues identified by Providers of Strength Training programs
  - inadequacy of space, lighting, ventilation (30%)
  - inadequate spaces in facilities e.g. change rooms (39%), showers (45%), lockers (60%), ramp access (30%), meeting / eating areas (32%), access to public transport (43%).
  - Most common types of equipment used - wrist / ankle weights (94%), free weights (68%), fixed machines (50%), fitballs / therobands (42%)
  - Program Structure
  - number of providers that get medical clearance / do pretest (46%), obtain medical history (59%), get physio assessment (12%)
  - session frequency 2-3 times a week for approximately 45 mins+ in class format
  - content that is designed to cater for medical conditions (65%)
  - Development and Organisation
  - most program providers (71%) stated that they did not target their program at any particular group. 27% stated they targeted specific medical conditions, 15% females, 13% males and 9% people with disabilities
  - 63% of program providers stated that their program was endorsed by a third party e.g. COTA (30%), a community health service (5%), the Gp association (3%)
  - most program providers stated that their programs were prescribed by fitness instructors (cert 111 38%, cert IV 29%, Human Movement Degree 21%, physiotherapists 27%
  - approximately 11% of program prescribers and 19% of program providers did not hold suitable qualifications. The largest number of unqualified staff were found in community hall settings
  - participation by females can range from 50% to 90%
  - age is largely in 61-70 years of age range
  - participation is encouraged / improved by affordability (70% of provider respondents) advertising (64% of provider respondents) and promoting the benefits(56% of provider respondents)
  - cost of programs – 67% of programs cost $5 or less, 50% of providers stated that programs were not financially viable. Half of programs are subsidised. Only fitness centre providers stated that revenue covered costs.
  - programs were generally not formally evaluated (81% of providers).
  - Future Directions
  - 73% of providers stated that they planned to expand programs
  - 67% indicated that increased funding was needed to subsidise programs
  - Improved communication between health professionals, state wide ‘benefits’ campaign
- Issues identified by Focus Group Attendees
  - people have mixed perception / images of Strength Training – boring, unsocial through to enjoyable
  - participants had positive view of Strength Training
- Recommendations contained in the report:
  - A programs framework for future programs in Victoria
  - A service delivery model to guide ‘best practice’ that addresses referral and feedback procedures, screening, settings, staff qualifications and program content
  - Guidelines relating to quality, safety and sustainability of Strength Training programs
  - Incentives e.g. a state program register, to encourage providers to adopt guidelines

  - Initiatives to increase program participation e.g. government co-ordinated awareness campaign
- Implications for the Bendigo and Loddon Strength Training Development Plan 2007 – 2012:
  - defining Strength Training activities as those that use free and / or fixed weights may create a perception that programs have to be facility based and / or require equipment
  - was the review therefore limited to programs that use free and / or fixed weights?
  - need to identify desired outcomes and then identify different options for achieving these outcomes i.e. different environmental settings, alternative provider options etc.

Document 2 – Strength Training in the Upper Hume Region (Centre Active Recreation Network for Wodonga Regional Health Service)

The report investigates the Strength Training activities in the Upper Hume region (Shire of Wodonga, Indigo and Towong). The findings provide a snapshot and can form a representation of similar circumstances and issues throughout rural and regional Victoria.

The major focus of this report was to consider:

1. the operational characteristics of Strength Trainign programs
2. whether the programs have the capacity to upskill their instructors if increased qualifications are required, and;
3. the impacts on participants/instructors if the strength training programs ceased to exist.

Key Findings:

- The type of program offered was either a 'PowerPal', 'Living Longer Living Stronger' or a general/basic strength training program.
- Numerous programs have a large volunteer component particularly with volunteer instructors.
- Compulsory requirements for additional training would have an adverse impact on a significant number of programs primarily due to those instructors who are volunteers. (Capacity to undertake further training is generally easier for instructors in paid positions – subject to financial constraints).
- Individual programs have few, if any qualified instructors.
- Programs generally have more than one instructor.
- Of the programs surveyed 50% were PowerPal programs. There is current discussion within the industry on whether a PowerPal accreditation is an acceptable qualification for Strength Training instructors.
- Feedback from the program instructors places a high value on strength training programs particularly from a health and wellbeing (physical and social connectedness) perspective of participants.
- Almost 90% of programs surveyed charged $2 or less.
- Almost 80% of programs had one fifth male participants. Males are not participating in Strength training programs as much as females in the Upper Hume region.
- There tends to be substantial age gap with participants (30 – 55 years).
- Programs receive funding assistance for the purchase of equipment however some programs also use their own funds or other sources (for example donations) to purchase equipment indicating that funding may not be sufficient.
- Referrals of older adults to the programs come from various sources. Approximately one third of referrals come from existing clients with only 15% referred by health professionals. Word of mouth (50%) was also a very effective form of referral.

The report and survey results clearly identify the requirement for training qualifications for instructors has an impact on the Strength Training programs. The report identifies that minimum qualifications could be addressed through a specifically designed course/qualification that is

specific to the needs of volunteer instructors (combination of content from the Certificate 3 course as well as the 'Fitness Training for Older People Instructor Course').

Document 3 – Evaluation of a Transition Model of Strength Training (Latrobe University for Bendigo Health Care Group, April 2005)

The Bendigo Health Care Group's Rural Health Team (RHT) has been conducting strength training classes for older adults since the year 2000. An evaluation of the program found it to be very effective and in line with the Council on the Ageing's drive to link strength training programs with fitness centres, the RHT designed a Transition Model of Strength training to move participants (view to reduce waiting lists) to a community based YMCA facility.

This report evaluates the Transition Model with the aim to:

- ascertain the perceived barriers, benefits and general issues;
- assess participant well being;
- determine instructor and YMCA satisfaction with the program;
- ascertain the suitability of the venue (community gym);
- assess the attendance and re-enrolment rates.

Definitions:
'**Strength training**' as a scientifically proven method of improving muscle strength and is defined as resistance training which uses free and/or fixed weights with the aim of increasing muscular strength (Office of Senior Victorians, Review of Strength Training for Older Adults in Victoria – Victoria Government: Department for Victorian Communities 2004).
'**Strength training program**' is a programme based on the principles of progressive resistance training (Council on the Ageing – Victoria, Living Longer Living Stronger Program, 27 April 2004).

Discussion and key findings:

- It was determined that the Transition Model of Strength training was of limited success (despite efforts to address the known barriers of older adults using community gyms and fitness centres);
- Quantitative data indicated participant satisfaction with the program was high and participant well being was either maintained or had increased by the end of the program;
- Qualitative data revealed that participants much preferred the original venue as it allowed for more effective and satisfactory social interaction. Similarly the program instructors satisfaction was low, and like the majority of participants, the instructors preferred the smaller size and more intimate setting of the Stewart Cowen Centre to the YMCA gym. The YMCA satisfaction with the program was also low, owing to concerns with OH&S issues associated with overcrowding in the gym and the impact of the program on YMCA members;
- Staff/participant ratios at the YMCA gym were maintained at the same levels as the centre based program. Opportunities for interaction between participants and between participants and instructors was adversely affected. This contributed towards the large numbers of people in the gym combined with the design and infrastructure of the gym.
- Only 10 out of 54 participants (approximately 18%) took up the option to continue the program at the gym indicating the importance of the social context of strength training classes for older adults cannot be underestimated.
- Although re-enrolment rates indicated that virtually the same number of people wanted to continue strength training classes in the future, the overwhelmingly majority wished to do so at the original venue.
- The evaluation of the Transition Model places doubt on the suitability of community gyms for the delivery of strength training to older adults. The most appropriate facility for conducting strength training programs are small intimate facilities that allow for the social context of the program or more appropriately support participants who are too frail for the gym.

- The fixed equipment of the gym did provide significant benefits for disabled participants and some of the more able bodied participants, particularly the male participants.
- The evaluation of the transition Model stimulated interest to establish 'senior gyms' in alternative venues (for example senior citizens centres).

Report Recommendations include:

1. Class participants are given the option to return to the Stewart Cowen Centre, where more sessions could be created to cater for the growing numbers on waiting lists.
2. The Bendigo Health Care group and the YMCA continue to collaborate to enable those participants who enjoy and benefit from the gym environment to continue classes in the gym.
3. The focus on moving participants to gyms is expanded to include an exploration of other appropriate venues for example senior citizens centres.
4. That Strength Training Programs for older adults continue to use qualified personnel with specific training in strength training for older adults.
5. There is some degree of physiotherapist involvement with all Strength Training Programs for older adults.
6. The importance of the social context of classes be a key consideration in the establishment of any strength training programs.
7. That COTA give consideration to further exploration of the 'transition to gyms' model in light of the findings of this report.
8. That agencies involved in the funding and/or building of community recreation facilities be mindful of the infrastructure and OH&S issues identified in the report.

Document 4 – Municipal Public Health Plan 2004 - 2006 (Shire of Loddon, August 2004)
The goal of the Municipal Public Health Plan is to create an environment which supports a strong and healthy community.

The Loddon community profile indicates the population is decreasing (2004 figures compared to 1996). Over one quarter (25.9%) of the population is 60 years of age or over.

Some relevant issues/opportunities identified in the Municipal Public Health Plan include:

- Transport
- Community connectedness
- Improved knowledge, coordination and access to existing services

The Municipal Public Health Plan identifies a range of priorities, particularly relevant to an older adults strength training program, for action under the following three key areas:

1. **Specific Health Issues** (Heart, Dental and Mental health)

- Provide information and to educate (peer education) the community on the benefits of healthy eating and physical activity.
- The provision of opportunities for increased physical activity (through the provision of quality recreation facilities. An outcome of this action would be an increase on walking and strength training)
- Provide opportunities for social interactions (increase access to community facilities)

2. **Access to Services** (Childcare, Housing, Farm Safety and transport)

- Improve quality of footpaths and greater pedestrian access to support increased physical activity and social interactions.

3. **Target Population Groups** (children, youth and older adults)

   The Municipal Public Health Plan identifies that early childhood development is an influencing factor in determining the quality of health in older adults.

- Increase health promotion activities targeting older adults to encourage older adults to remain active and connected to their communities.
- Maintain a coordinated approach to the delivery of health promotion and illness prevention (focus on heart disease, chronic obstructive pulmonary disease and depression).

Document 5 – Bendigo-Loddon Ageing Framework Summary and Priorities for Action
(Bendigo Loddon Primary Care Partnership)

The Bendigo-Loddon Ageing Framework was developed primarily due to:

- the ageing of the population and the impact on services over the next 20 years and beyond;
- recognition among service providers of the fragmentation between services and the need for a more cohesive approach to service delivery to assist older adults;
- the need to have a more planned and strategic approach to meeting the growing demand for aged care services in the community, and;
- exploring more innovative service models and best practice across aged care services to make Bendigo-Loddon a more "age friendly" community.

There are six service groups identified that support older adults in the Bendigo-Loddon region. The service groups are:

1. Housing, including independent living retirement accommodation;
2. Community participation;
3. Primary care, health promotion and community health;
4. Community care;
5. Acute care, including rehabilitation; and
6. Residential aged care, in low care (hostels) and high care (nursing homes)

The ageing framework identifies two main strengths of the system namely the range of agencies, from those covering all age groups to those focused specifically on older adults; And the spread of agencies across the private, not-for-profit and public sectors.

Limitations of the service system identified that there are no clear pathways through the system. (The initial contact for older adults within the system can be through a multitude of service providers including their GP). In addition there are unclear and overlapping responsibilities among service providers. (Due to the numerous amount of service providers there are problems around direct service provision, planning, funding and transferring information about clients).

The Bendigo-Loddon Primary Care Partnerships (PCP) recognises the need to take a collaborative approach in the delivery of aged care services.

In addressing the future demand for aged care services the Bendigo-Loddon PCP is committed to continuing:

- Collaboration across agencies and sectors;
- Consolidation of existing services; and,
- Identification of opportunities for new activities that will add value to existing services.

Implementation of the Action Plan will primarily occur through existing PCP structures and will be overseen by a Steering Committee.

Key aims of the Framework with relation to 'strength training programs' focus around:

- Create an age friendly environment to enhance access to community facilities and involvement in services.
- Promote awareness of the benefits of exercising and of social participation.
- Enhance the opportunities available to participate in a wide range of recreation activities through an increased focus by leisure and sporting organisations.
- Engage all relevant primary care and community health services in an integrated approach to health promotion for older adults.

Key strategies of the Framework that support 'strength training programs' include:

- Establish a structure to drive Healthy Ageing for Older Adults;
- Strengthen and promote physical activity opportunities;
- Support programs that foster participation in healthy lifestyle activities, and;
- Improve physical access and safety in local communities.

Document 6 - Loddon Recreation Strategy

Summary of points relevant to the project:

- The report provides 8 principles to guide the provision of recreation and related services, programs and infrastructure. Of particular relevance to this project are:
  Principle 1. Benefits of Recreation - Support is provided to recreation in recognition of the personal, social, environmental and economic benefits that it returns to the community.
  Principle 5. Sustainability - Planning and provision for recreation must be sustainable into the future.
  Principle 7. Equity of Provision - Groups providing recreation opportunities will be treated equitably and according to clear criteria.
  Principle 8. Access to Opportunities - Recreation planning will seek to minimise social, physical, economic, and geographic barriers to participation.

- The document also includes a number of recommendations that are relevant to this project including:
  Recommendation 2 - Healthy Lifestyle Groups
  Action: Support the establishment and promotion of 'healthy lifestyle' activity groups e.g. 'mums and prams' walking groups, 'walk and coffee' groups.

  Recommendation 5 - Gymnasium Facilities
  Action: Work with local communities to investigate opportunities to establish sustainable gymnasium facilities at appropriate locations.

  Recommendation 6 - Fitness/Exercise Programs
  Action: Actively encourage the establishment and promotion of exercise rograms/classes for a range of age groups e.g. gentle exercise for older adults, youth fitness programs.

  Recommendation 16 - Community Houses
  Action: Work with Committees to maximise provision and promotion of recreation opportunities provide through Community Houses.

  Recommendation 19 - Increased Participation by 'Isolated Groups'
  Action: Recognise and support initiatives that encourage participation by people that are 'isolated in the community' (e.g. financially, physically)

  Recommendation 63 - Programming Opportunities at Local Schools
  Action: Continue discussions with the YMCA to investigate

Document 7 – Bendigo Health Wellbeing Framework (City of Greater Bendigo, 2003)

The Bendigo Health and Wellbeing Framework (Framework) provides the key policy and planning framework for health and wellbeing. The Framework incorporates the Council's vision for the health and wellbeing of the community. This document is in accordance with the Health Act 1958 and fulfils the requirement of Council's Municipal Public Health Plan.

The Framework's key policy statement outlines Council's role in addressing the health responsibilities and goals in relation to health planning and development through an integrated approach and does so by linking Council's corporate and service planning processes. The framework builds on the Determinants of Health outlined by the World Health Organisation and supports the notion of the Social Model of Health.

Council examines and addresses the health and wellbeing of the community across the following three dimensions:

- Physical – incorporating the built and natural environment.
- Social – providing opportunities to participate in community life.
- Economic – encouraging economic development.

The Framework identifies Council's role as advocate, facilitator, regulator and provider in addressing the health and wellbeing needs of the community. Council will also work in partnership with other agencies who play a pivotal role in health and wellbeing.

The Framework provides an overview of Council's key priorities in addressing the Social Determinants of Health through the provision of services, programs and infrastructure. The most relevant with regards to strength training programs include:

- Advocate for additional funding to meet the future service needs of our growing ageing population.
- Implement the recommendations of the Aged Care Strategy.
- Facilitate improved service co-ordination between aged and disability service agencies via Primary Care Partnerships.
- Develop appropriate facilities for Planned Activities Groups.
- Assist in attracting and retaining additional General Practitioners.

Document 8 – Bendigo Plus 25

A Community Plan outlining the vision, key achievements and actions for the City of Greater Bendigo until the year 2030. There are many action items that would support strength training programs focusing around the health and wellbeing in particular:

- collaborating to facilitate seamless delivery of health services
- developing and expanding the range of health services to meet the needs of the community
- supporting the development of local professionals through the provision of education and training
- providing accessible services for disadvantaged, elderly and young people
- educating and informing our community about healthy living
- ensuring that health and lifestyle benefits are considered in all aspects of development of Greater Bendigo e.g. provision of cycling and walking tracks
- developing community wellbeing indicators to better understand the community's broad health needs
- ensuring recreation and leisure activities are accessible to everybody
- supporting the development of a diverse range of recreational activities eg. skate parks, walking and cycling tracks
- increasing participation and improving physical, mental and social wellbeing through recreation and leisure.

Appendix 3 – Existing Funded Strength Training Programs in Loddon - Bendigo

	PROGRAM NAME AND FORMAT	PROVIDER AND CONTACT	DESCRIPTION	TARGET GROUP	OTHER COMMENTS
1	Tarnagulla Strength Training group. Ongoing program.	Inglewood & District Health Service.	▪ An informal community based group working with the supervision of a qualified leader and Physiotherapy support, provided by the Bendigo Rural Health Team. ▪ Meets twice a week. ▪ Small Charge ($3.00) managed by the group. ▪ Group provided most of the equipment through fund-raising. Small amount of funding from IDHS	▪ Primary target group is people in the older age groups. ▪ Other participants welcome. ▪ Socio/economic disadvantaged community & no specific funding.	▪ Venue: Tarnagulla Golf Club rooms. ▪ This group was started originally by community movement (RICH, now IDHS which is not funded) and has had strong local support. The venue (paid by donations) is pleasant and easily reached by locals, and also provides an alternative to Bendigo based programs for people from the surrounding areas. ▪ Need a venue where equipment can be permanently set up. ▪ Classes not at capacity, places available
2	Serpentine Strength Training group. Ongoing program.	Inglewood & District Health Service.	▪ An informal community based group working with the supervision of a qualified leader and Physiotherapy support, provided by the Bendigo Rural Health Team. ▪ Meets twice a week. ▪ Very limited funding provided from IDHS. ▪ Equipment at the venue was supplied by IDHS. ▪ Small charge ($3.00).	▪ Generally focussed on, but not limited to, older age groups.	▪ Venue: Serpentine Public Hall ▪ Provides a health focussed program to the surrounding rural locality. The group meets in a local Hall, which although not the 100% ideal venue (paid by donations), is accessible and has adequate room for participants. Storage space is very limited. ▪ The weights and balls get used by the football club as well. ▪ Classes not at capacity, places available.
3	Inglewood Strength Training Group. Ongoing program.	Inglewood & District Health Service.	▪ An informal community based group working with the supervision of a qualified leader and Physiotherapy support, provided by the Bendigo Rural Health Team. ▪ Equipment at the venue was supplied by IDHS, with the recent addition of a donated fixed gym station. ▪ Very limited funding provided from IDHS. ▪ Small charge ($3.00). ▪ Meets twice a week.	▪ Generally focussed on, but not limited to, older age groups, and persons who have been referred.	▪ Venue: Inglewood & Districts Health Service. ▪ This is the best equipped group within the area, and has the most secure venue. ▪ Group session times do conflict with other local community activities at times. ▪ IDHS accessed funding to refurnish and equip venue. ▪ Classes not at capacity, places available.

	PROGRAM NAME AND FORMAT	PROVIDER AND CONTACT	DESCRIPTION	TARGET GROUP	OTHER COMMENTS
4	Wedderburn Strength Training Group. Ongoing program.	Inglewood & District Health Service.	▪ An informal community based group working with the supervision of a qualified leader and Physiotherapy support, provided by the Bendigo Rural Health Team. ▪ The majority of equipment was supplied by IDHS, with the addition of a couple of donated items, including an exercise bike. ▪ Very limited funding provided from IDHS. ▪ Small charge ($3.00). ▪ Meets twice per.	▪ Generally focussed on, but not limited to, older age groups, and persons who have been referred.	▪ Venue: Wedderburn Senior Citizens Centre. ▪ These sessions are held in a suitable venue (paid by donations), with adequate room for participants, however we need to put away the equipment weekly therefore we need a permanent venue. The equipment is suitable and adequate. ▪ Options for community gym is being explored at the Wedderburn Neighbourhood House. ▪ Classes not at capacity, places available.
5	Elmore Primary Health Services Strength Training Program	Bendigo Community Health Service	▪ Twice a week (Mondays &Thursdays). ▪ Annual registration fee.	▪ Over 50s or people with chronic health problem	▪ Venue: Elmore Football Club rooms . ▪ Medical clearance required. ▪ Approximately 12.
6	Kangaroo Flat Strength Training Program	Bendigo Community Health Service	▪ Am and PM session Monday to Friday. ▪ Annual registration fee. ▪ Supervised by Certificate 4 Fitness Instructors.	▪ Over 60s or people with chronic health problem.	▪ Venue: 13 Helm St Kangaroo Flat. ▪ Medical clearance required. ▪ Participants must be able to exercise independently. ▪ Preferred venue not always available. ▪ Some sessions over-crowded. ▪ Waiting list.
7	Strathdale Strength Training Program	Bendigo Community Health Service	▪ Am and PM session Monday to Friday. ▪ Annual registration fee. ▪ Supervised by Certificate 4 Fitness Instructors.	▪ Over 60s or people with chronic health problem.	▪ Venue: Strath Haven, Edwards Rd., Strathdale. ▪ Medical clearance required. ▪ Participants must be able to exercise independently. ▪ Preferred venue not always available. ▪ Some sessions over-crowded. ▪ Waiting list.
8	'Strength Training Seniors Program' - Eaglehawk	Rural Health Team, Bendigo Health	▪ Participants are assessed by a Physiotherapist and prescribed an individual program. ▪ Sessions are supervised by Cert. 4 Fitness Instructors and there is ongoing support and monitoring by a Physiotherapist. ▪ Cost is $4.00 per class. ▪ Three days per week.	▪ Adults >65 years or younger with a chronic disability	▪ Venue: Stewart Cowen Community Rehabilitation Centre. ▪ Waiting lists apply to cope with the demand. ▪ Overcrowded sessions. ▪ Participants must be able to exercise independently with 'distant' supervision. ▪ Classes at capacity.

Appendix 4 – Feedback from Question Sheets

The following provides a summary of the feedback received as a result of the Question Sheets.

1. What is your understanding or application of the term 'STRENGTH TRAINING'?
   - An exercise program that uses weights and increasing resistance. Resistance can be achieved by various means e.g. body weight, therobands, weights.

2. Should this definition REMAIN THE SAME or should IT CHANGE (i.e. expand)?
   - For consistency should stay with this definition
   - Could expand to include recommendations re frequency of repetitions, sets, training etc.

3. What demographic groups (age, disability etc.) are CURRENTLY the primary focus of existing programs?
   - Over age of 65 or younger adults with a chronic disability (respondent 1)
   - Over 50s, but one program no restricted to over 65s or those with a significant mobility issue. (respondent 2)

4. What demographic groups (age, disability etc.) SHOULD be the focus of programs / initiatives in the future? (identify priority groups 1,2,3 etc.)
   - Limited staff resourcing and access to transport – so cannot cater for frail aged.
   - Programs that target middle aged adults with risk factors for chronic disease.
   - Residents of aged care facilities and day support programs.
   - Those at risk of falling.
   - Those with existing health problems known to be helped by ST.

5. What is the current demand for Strength Training programs (participation rates / waiting lists etc)
   - Waiting list for Bendigo program – approximately 2-3 months. Tightened eligibility criteria because of demand. (respondent 1)
   - Regional programs struggle to survive – many discontinued. (respondent 1)
   - 120+ in programs with 100+ on waiting list which is now closed until 04-08. (respondent 2)

6. Are Strength Training programs accessible enough to the people that need them?
   - Insufficient places in Bendigo – demand exceeds supply.
   - Lack/poor transport makes programs inaccessible for aged and severely disabled.
   - Inadequate staffing and access to venues decreases accessibility.
   - Need to consider that older people want to stay close to their locale.

7. What are the opportunities to create more environments for Strength Training or to make programs more accessible (apart from providing more funding)?
   - Senior Citizens Centres
   - Provision of transport to programs.
   - Joint ventures e.g. programs in residential care facilities that give access to the broader community also.
   - Programs with day support programs.
   - Commercial gyms – make more of these opportunities. Need to address issues of perceptions, cost, staffing etc.

8. What are some of the challenges that you see in the provision of STRENGTH TRAINING PROGRAMS into the future?
   - Rapidly increasing demand.
   - Cannot deal with the current demand.
   - Transition from health care settings to mainstream settings.
   - Adequately trained staff.

- Access and opportunities for regional/rural communities.
- A preventative approach rather than a reactive and intervention approach.
- Workplace programs.
- Transient populations

9. How can local communities better provide for their own program needs?
    - More equipment and resources.
    - Low cost.
    - Access to qualified instructors and physiotherapy support.
    - Assistance with marketing and promotion and set-up costs.
    - Storage.
    - Local venues.

10. What is your understanding of program innovations – locally, nationally, internationally?
    - Funded programs.
    - Home-based programs with 'arms length support e.g. over the phone coaching. Note have been some trial home-based programs with Vets Affairs.

11. What programs are you aware of in the region?
    - Refer Appendix 3

12. What opportunities exist to increase and support the number of trained practitioners across the Bendigo Loddon region?
    - COTA workshops

13. Who are the ADDITIONAL STAKEHOLDERS that you believe should be engaged in this project?
    - Residential Aged care facilities.
    - Council reps
    - DHS
    - McIvor Health
    - Boort District Hospital

Do you have any additional feedback you would like to provide at this point? Please detail:

Appendix 5 – Demographics

City of Greater Bendigo

In 2006 the total population of the City of Greater Bendigo was 91,918. At this time the population over 50 years of age represented 31.9% (29,359 people) of the total population (up from 29.2% or 25,083 people in 2001), and the population over 60 years of age represented 19% (17,440 people) of the total population (up from 17.9% or 15,356 people in 2001).

Compared to regional Victoria as a whole Bendigo has a similar proportion of people in the younger age groups but a smaller proportion in the 65+ age groups.

The largest changes in the age structure in Bendigo between 2001 and 2006 were in the following age groups:

50-59 +2,192
60-69 +1,155
18-24 +880
70-84 +665

By 2021 the population in the City of Greater Bendigo in the over 50 age groups will have increased to 32,110.

Age Group	2006		2008		2021	
	Number	% of the popn.	Number	% of the popn.	Number	% of the popn.
50 to 54	6,629	.8	6,790	6.8	7,994	6.7
55 to 59	5,947	6.1	6,245	6.3	7,537	6.3
60 to 64	4,685	4.8	5,242	5.7	7,024	5.9
65 to 69	4,052	4.2	4,278	4.5	6,244	5.3
70 to 74	3,380	3.5	3,591	3.7	5,163	4.3
75 to 79	3,014	3.1	3,009	3.0	3,910	3.3
85 and over	1,831	1.9	2,276	2.0	2,232	1.9
TOTAL	22,909		29,155		32,110	

The following table highlights the most significant shifts in population for areas within the City of Greater Bendigo between 2001 and 2006.

Area	50-59	60-69	70-84	85+
City of Greater Bendigo	+2,192	+1,155	+665	
Bendigo	+205		-55	
Eaglewk/Sailors Gully	+91		+59	
East Bendigo	+50			
Elmore	-72	+80	+54	
Flora Hill - Quarry Hill - Spring Gully - Golden Gully	+145	+97		+76
Golden Square	+120	+167		
Heathcote - Rural East	+131	+129	+75	
Huntley – Ascot - Epsom	+145			
Kangaroo Flat - Big Hill	+252	+86	+116	
Kennington	+114			+85
Long Gully - West Bendigo - Ironbark	+76		+68	
Maiden Gully	+88	+89		
Marong - Rural South West	+182	+127		
North Bendigo - California Gully - Jackass Flat	+90		+91	
Strathdale	+158		+70	
Strathfieldsaye - Junortoun	+286			

By 2021 the population in the Shire pf Loddon in the over 50 age groups will have increased from 656 or 7.7% of the population to 4,349 or 54.2% of the population.

Age Group	2006		2011		2021	
	Number	% of Total Popn.	Number	% of Total Popn.	Number	% of Total Popn.
50-54	656	7.8	679	8.2	524	6.5
55-59	692	8.2	677	8.1	585	7.3
60-64	539	6.4	715	8.6	735	9.2
65-69	519	6.1	517	6.2	684	8.5
70-74	427	5.1	469	5.6	644	8.0
75-79	354	4.2	359	4.3	411	5.1
80-84	249	2.9	280	3.4	332	4.1
85+	258	3.1	329	4.0	434	5.4
	3,694	43.75	4,025	48.3	4,349	54.2
Total Pop	8,444		8,325		8,018	

SEIFA index of disadvantage

According to the SEIFA Index the Shire of Loddon is the second most disadvantaged of all regional LGAs and the City of Greater Bendigo is ranked 37 out of 59 on the SEIFA Index.

The Index of Relative Socio-Economic Disadvantage is derived from attributes such as low income, low educational attainment, high unemployment, jobs in relatively unskilled occupations and variables that reflect disadvantage rather than measure specific aspects of disadvantage (e.g., Indigenous and Separated/Divorced).