Engaging in Primary Health Care

Report of Primary Health Care Working Party
Primary health care, for most people, is the first point of contact for the prevention, diagnosis, treatment and ongoing management of many conditions that might otherwise make enjoying life a little difficult. The team providing that contact is just that – a team of health professionals. Those professionals include physiotherapy, general practice, nursing and pharmacy among others.

Physiotherapists play an important role in the team to support rehabilitation, working one-on-one with patients or co-ordinating and overseeing group exercise programmes. Physiotherapists are also important in helping patients and their families recover and live well with long-term conditions and/or when recovering from illness. Physiotherapy may extend well beyond an acute episode for the many New Zealanders living with long-term conditions and recovering from accident injuries.

Physiotherapists help and encourage people to become more active, thus reducing their risk of developing chronic diseases, and improving the health of those with existing conditions.

Physiotherapy is not just about intervening when movement or function is threatened – it is about helping people go back to work, enjoy busy lives with their families and participate in their community life without constraint. The complexity of these needs will not be met by physiotherapy on its own, but by health professionals working together and connecting the benefits of their practice – the sum being greater than its parts.

The Primary Health Care Strategy envisaged a multi-disciplinary team of capable health professionals to meet the complex and diverse needs of their patients. The Ministry of Health sees the full realisation of this team, including the strong contribution of physiotherapy, as being a future that is close at hand. The next stage of Primary Health Care Strategy implementation will reinforce the integration and connected practice of the many professions required to support the needs of patients and their families – as close to home as practicably possible.

Margie Apa  
Deputy Director General  
Sector Innovation and Capability  
Ministry of Health
Healthcare both within New Zealand and internationally is changing. Since the Alma Mata declaration in 1978 there has been a gradual shift in focus on how healthcare is provided from one that is focused on the individual to one that has more of a population based focus. This shift has been formalized within New Zealand with the creation of the Primary Healthcare Strategy in 2001. This strategy lays out how healthcare is to be delivered with more of a population focus.

Physiotherapy is an established component of the New Zealand healthcare sector delivering services within the District Health Board structure as well as in private clinics situated in community settings. As such as a profession it is well placed to play a greater role in Primary Healthcare. In order to fulfill this potential the profession is challenged with educating the broader healthcare sector as to the areas that it can positively impact the health of the population, with a specific focus on their local population.

This document has been created with the intent to provide the necessary background to allow physiotherapists regardless of setting to better understand and engage with the primary healthcare sector. A secondary purpose of this document is to be available to educate the primary healthcare sector as to the value that physiotherapy can add to the health of their local population.

As with any document, the value lies not in the document itself, but rather in how the document is used. To this end, it is envisaged that this should be only a beginning that is built upon as collaboration between physiotherapy and the primary healthcare sector allows for the fulfillment of the potential of both.

Thanks needs to be extended to the working group given the mandate of creating this document:

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Their time energy and effort are reflected in the quality of the final product.

Martin Chadwick (Chair)
NZSP Primary Healthcare Working Party
Health care has changed dramatically in industrialized countries since the middle of the 19th century to the present time.

From the middle of the 19th century to early 20th century infectious diseases were responsible for a high death rate, and a shorter life expectancy, compared to today’s statistics. The greatest impact on the control of infectious diseases was the improvement in poor living conditions and overcrowding. Improved water supplies, sanitation and housing, and education about nutrition and personal hygiene rather than medical interventions, brought about significant improvements in the health of the population.

From the 1930s onwards non communicable diseases and injuries emerged as the major health problems. Subsequently rapid diagnosis and “treatment interventions” were the primary method of controlling these problems.

Since the 1970s technological advances have provided more and more expensive treatments for previously fatal illnesses. This combined with the increasing life expectancy of the population in the developed world, resulting in the consequent health problems of an aging population, has led to a rapidly escalating health budget. The continually increasing health budget is unsustainable.

However alongside this there is an epidemic of non communicable diseases such as type II diabetes, cardiovascular disease and cancer, which increases the likelihood of premature death. These diseases can be attributed to a range of changes in society associated with the determinants of health that have disproportionately affected lower socioeconomic groups.

In 1978 a World Health Organization (WHO) forum met in the USSR to examine the inequalities in health within societies, with the aim of achieving population health gains. The outcome was the Alma Ata Declaration, which was the first international declaration to recognize the importance of primary health care.

The Alma Ata Declaration recognised that the population’s health could not be treated by medical intervention alone. It required inter-sectoral collaboration and community involvement in addressing the determinants of health, with a focus on reducing health inequalities.
Determinants of health extend well beyond the domain of traditional health services. Governments are recognizing they need to work with local communities and be responsive to their differing needs. This involves governmental and non-governmental organizations (NGOs) and the private sector all working together to address such wider determinants if we are to see real health gains and inequality reduction across society.

In 2001 the New Zealand government released the Primary Health Care Strategy (PHCS) outlining the future direction of primary health care in New Zealand in line with these wider international shifts.

Figure 1. Determinants of health
The shift presented in the PHCS can be explained as a move from services being provided in a primary medical care model, to one where it is provided in a primary health care model. The changes are highlighted in table 1.

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<th><strong>Primary Medical Care</strong></th>
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**Table 1. The Shift to Primary Health Care**

Physiotherapists have an important role to play in the movement towards primary health care. This has been recognized by the World Confederation for Physical Therapy (WCPT) which advocates the provision of primary health care that is mindful of:

- Local culture
- Socio-economic and political circumstances
- Provision of equitable access for all to effective services.

Physiotherapists are encouraged to work with the relevant agencies to promote and facilitate the development of primary health care identifying the core elements of:

- Promotion of good health
- Prevention of health problems
- Treatment / intervention
- Rehabilitation

**Implications for physiotherapy**

The health system in New Zealand is evolving in response to changes in health issues and in recognition of the importance of the wider determinants of health. This shift is characterised by a focus on a more preventative, health promoting, collaborative and community centred model of care. The New Zealand Primary Health Care Strategy underpins these changes.

Physiotherapy is traditionally well aligned with such principles and is strongly positioned to be a key player in a leadership role in implementing the changes within the Primary Health Care Strategy.
The Primary Health Care Strategy and PHOs – A Summary

The PHCS underpins the government’s intentions for the primary health sector and marks the shift to more of a primary health care focus in the delivery of wider health services.

The Primary Health Care Strategy (PHCS) provides direction for the future of the service priority area of primary health care within the health system. The Strategy follows on from the New Zealand Health Strategy and the New Zealand Disability Strategy.

The PHCS is to be led and coordinated locally by Primary Health Organisations (PHOs). PHOs have been created by District Health Boards (DHBs) working in partnership with local communities and health care providers to best suit their needs.

The Vision and Key Directions

The 2001 vision states:

- People will be part of local primary health care services that improve their health, keep them well, are easy to get to and co-ordinate their ongoing care.
- Primary health care services will focus on better health for a population, and actively work to reduce health inequalities between different groups.

It was anticipated that this vision would be achieved in 5-10 years. The 6 key directions in primary health care for achieving the vision are:

- work with local communities and enrolled populations
- identify and remove health inequalities
- offer access to comprehensive services to improve, maintain and restore people’s health
- co-ordinate care across service areas
- develop the primary health care workforce
- continuously improve quality using good information

The vision encompassed new directions for primary health care, including:

- a move towards funding based on population needs as opposed to fees for services
- the need for multi-disciplinary involvement
- greater emphasis on population health and the role of the community
- greater emphasis on health promotion and preventative care
The attainment of the vision and directions necessitates a move to a system where services are organized around the needs of the community – PHOs are the structures for achieving this.

**Primary Health Organisations**

PHOs are the local structures for leading and coordinating primary health care to meet the needs of their population. People are encouraged to join PHOs by enrolling with a provider of primary health care services, currently a GP or local health clinic.

The guiding principles for PHOs are that they:
- are expected to involve their communities in their governing processes
- must give all providers and practitioners equal involvement in their organisation’s decision-making
- must direct their services towards improving and maintaining population health alongside first line services for health restoration
- will be not-for-profit bodies who are fully and openly accountable for all public funds received
- will have voluntary membership for primary health care practitioners

**Implementing the Strategy**

The important principles for ensuring a smooth transition to the PHCS are:
- protecting the gains made and building on successful initiatives
- collaborating with providers and communities of the primary health care sector
- focusing on evolutionary change, and encouraging developments that emphasize multi-disciplinary approaches
- reducing the barriers (particularly financial) for groups with the greatest health need by improving access and adding services
- supporting the development of PHO and Maori and Pacific providers, and promoting their benefits through a public information campaign
**Implications for physiotherapy**

The PHCS was implemented to assist in improving the effectiveness of health care services that are delivered in the primary health care sector where the majority of physiotherapists practice.

To be effective in this environment, physiotherapists need to be aware of the health needs specific to their local population. To maximise the opportunities presented by the PHCS, physiotherapists need to work in partnership with other primary health providers and wider community to address these needs.
Funding Under the Primary Health Care Strategy

Key Points

- The key funding shift signalled by the PHCS has been a move from a ‘fee for service’ model to a ‘capitation’ model.
- This means that a bulk payment is made by Ministry of Health (MOH) for the care of an enrolled population, irrespective of how many services are used or required. This capitation funding is adjusted for various factors such as the population age, ethnicity and socioeconomic status.
- People enrol with their PHO through their GP. GPs can be contracted to only one PHO.
- A range of other services and funding streams to GPs and wider primary health care services through PHOs, continue from funding agencies (most commonly DHBs).
- General Practices, through their local PHO, remain the centre of primary health care. However there is a shift from medical centres to integrated health centres.

The PHCS presents a vision encompassing the wider primary health care sector including wider determinants within the community setting. The funding for this broader picture is diverse and includes both private and public aspects. The primary health care sector makes up about 7.5% of total Vote: Health budget.
In addition to the capitation-based population funding it is common that a range of other service programmes, initiatives and contracts are held and being negotiated through your local PHO(s).

**Implications for physiotherapy**

- Talk with your local PHOs to find out what future options are developing regarding primary health care services to ensure physiotherapy involvement and these are included in the budget.
- A small amount of funding for health promotion and services to improve access may be available from capitation funding.
- The most likely source of funding for programmes involving physiotherapy services is through additional contracts and initiatives being set up or secured by your PHO either from the DHB or more widely.
- PHOs as leaders and co-ordinators generally secure funding for programmes in partnership with other lead organisations/groups.
Physiotherapists Engaging with the PHCS

Know your community

Primary health care is planned around the needs of the community. All communities are different. The needs of your community will feature in each DHB’s needs analysis; these will usually be found on the DHB’s website. The PHOs in your community are working to meet these needs. There may be more than one PHO for an area to ensure differing population needs are met and these are not always geographically defined. You can access a complete list of PHOs in your region and contacts for them on the MOH website or you can contact your local DHB. There is scope for physiotherapists as part of their communities to be involved in all aspects of PHO activities.

1. Developing relationships with your PHOs

1.1. Through targeted programmes to meet the population’s needs

- PHOs are interested in new, innovative and effective ways of improving the health of their communities so proposals with this aim will be of interest. Proposals targeting a group whose needs are not currently being met are desirable, especially where there are health inequalities. Proposals seeking to improve the health of the population through health promotion principles are sought. The MOH have developed a guide to developing health promotion programmes (MOH 2003).

- Know your population health needs e.g. elderly, Maori, large proportion of pre-schoolers. Any proposals need to be tailored to meet an identified need that is not being addressed e.g. Falls prevention or OA knee classes for an elderly population.

- Are there patterns you have identified in your clinical practice that could be translated into a community based programme for the population covered by your PHO? e.g. Diabetics with stress urinary incontinence

- Inequalities: Primary health care is focused on reducing health inequalities among those populations known to have the worst health status: Maori, Pacific people and those living in NZ deprivation index 9-10 decile areas.
• **Health Promotion:** The Primary Health Care strategy wishes to focus on programmes that will assist communities gain health improvement using a whole of community approach. Behaviour change programmes are expected to be a key way of improving health. Physiotherapists therefore need to shift their focus to health promotion and promoting self management. PHOs are funded to provide health promotion programmes within their communities. Examples of these currently operating are 'Healthy Ageing,' 'Healthy Living with a chronic condition,' and pulmonary rehabilitation programmes.

• **Workforce shortages** Workforce planning recognizes the need to configure the workforce differently to meet the population needs in the future. This opens more opportunities for the physiotherapy profession as potential first points of contact in lieu of GPs, especially in areas where there is a shortage of GPs.

• **Increased access to services** Physiotherapists are well qualified to offer diagnosis and management programmes as a first point of contact, thus improving access to services. This is well understood by people with musculoskeletal problems but not so well utilised by people with other problems e.g. respiratory, continence.

### 1.2. Through clinical governance and advisory roles
There is scope for physiotherapists to be involved in the governance of PHOs e.g. becoming a Board member. Many PHOs also have various advisory groups and physiotherapists have the skills and knowledge to be part of these – what does your PHO have?

### 1.3. Through strengthening the Multidisciplinary approach
The multidisciplinary team approach helps reduce duplications or gaps in care enhancing the delivery of primary health care. Strengthening relationships with health care and other providers in the wider community will improve this coordination of care. This will help everyone understand what physiotherapy can offer. Talk to other health professionals who may be in a position to advocate for your services. Are there opportunities to carry out joint assessments with other providers, sharing assessment findings with the care team to strengthen the team approach and ensure a smooth plan of care for the patients?
2. **Joint approach as a profession.**  
It is important for physiotherapists to collaborate with their colleagues. Physiotherapists also need to work with other health professionals providing similar services, to obtain the best outcomes for patients and strengthen programmes. Work needs to continue to close the gap between primary and secondary services to reduce unmet needs and any skill deficiency to ensure continuity of care. Make certain that you are able to demonstrate a good outcome for any funding received.

3. **Changing role of physiotherapy**  
Are you in a position to help design and supervise programmes provided by carers or gym instructors? Do you have skills as a motivator of behaviour change or an educator running health skills groups?

4. **Start talking**  
Invite people from your PHO to talk at branch meetings or with a collective group of practices in your community. Ask for a copy of the PHO’s plan to see where you could link in. Offer to be involved in future planning using data on your practice’s key areas of unmet need.

The PHOs have been focused on the development phase. Now is the perfect time to start planning a different looking future with them.

**Implications for physiotherapy**

Physiotherapists as providers of health services are in a position to promote and reinforce activities of the PHO. Finding out what your local PHOs are offering is a way of establishing links. Are you changing your thinking from 1:1 intervention to other ways of working? From treating a condition as it comes through the door to actively targeting populations with a condition and developing a best practice programme that involves the multidisciplinary team? Market your skills as a physiotherapist with quality reports to referrers that teach them a lot about what physiotherapy has to offer within the wider primary health care sector.
Physiotherapy already provides services across the health spectrum from wellness to injury and disease to disability issues. There is strong research based evidence to support our interventions in a range of areas relevant to the objectives of the PHCS related to injury prevention and chronic disease management. There is also increasing evidence relating to the role physiotherapists can play in health promotion. This includes the promotion of general fitness programmes, workplace assessments and programmes specifically designed for the elderly.

A brief summary of areas where physiotherapy is important is given here and more detailed information regarding specific studies is in the Appendix.

**Osteoarthritis**

The main research involving physiotherapy interventions is on osteoarthritis of the knee. Interventions include:

- education, including self management
- aerobic exercise to increase general fitness
- hydrotherapy
- strengthening exercises particularly of the quadriceps muscle
- provision of walking aids and orthotics

If your PHO has a proportion of elderly patients, a proposal could be put forward to include individual and group exercises, combined with a medication review by the pharmacist and dietary advice from the dietician (obesity is a contributing factor in OA of the lower limbs).

**Osteoporosis**

Physiotherapists have a role to play in the prevention of osteoporosis by encouraging physical activity in all their patients. For elderly patients who have been diagnosed with osteoporosis, exercise can still help in building up bone density. Physiotherapists also have an important role in falls prevention with this group.

**Falls**

Physiotherapists often see elderly patients in their practices, either following a fall or for treatment of some other condition. For these patients a falls risk assessment should form a part of their initial physiotherapy assessment or they could be part of a falls risk assessment clinic set up at their local PHO.
Physiotherapists can also provide more targeted interventions for some of their clients and advice on the provision of walking aids. The Otago Exercise Programme is a well recognised intervention for the prevention of falls for people over 80.

**Diabetes**

Physiotherapists are the health professionals who are recognised as providers of physical activity programmes, especially for those requiring an individualised programme.

Again this is an opportunity to get involved at your local level – physiotherapists should be part of every Diabetes Service and involved in programmes in the community perhaps at the local Marae or Pacific Island Centre.

**Cardiopulmonary Rehabilitation**

The New Zealand Guidelines document on Cardiac Rehabilitation (2002) recommends that for people with cardiac disease including CHF:

- Exercise advice should be individualised and consider clinical characteristics, lifestyle, attitudes, culture and environment

Physiotherapists are obviously an essential part of the team which usually includes dieticians, social workers, occupational therapists and nurses.

**Cancer**

Evidence strongly suggests that exercise is not only safe and feasible during cancer treatment but that it can also improve physical functioning and quality of life. The evidence is particularly strong for breast and colorectal cancer survival rates and there is some evidence that exercise can help in the prevention of colorectal cancer.

### Implications for physiotherapy

Physiotherapists as providers of health services are in a position to promote and reinforce activities of the PHO especially with regards to the needs of the local population. There is a growing body of evidence on the areas where physiotherapy could add value to the delivery of primary health care service. The key is to understand the needs of your own local population and engage with your local PHO regarding the skills that physiotherapy brings in addressing local health needs.
Developing Innovative Services and Programmes – What Do I Need To Do?

Key Messages

- Get to know your local PHO and find out what health priorities they have identified within your community. Focus on those needs that would benefit from physiotherapy.
- You might be able to help your PHO by letting them know about needs you have identified from your patients. For example, you may have a number of patients who have heard about a cardiac exercise programme available in another suburb or town and asked if there was one available in their own community.
- Focus strongly on the positive health outcomes from physiotherapy for the patient or community group.
- Explore options with your PHO for ways that physiotherapy services could be included in their programmes.
- See if the PHO would consider an initial draft proposal which you could explore and discuss together prior to finalising. Remember that collaborative, multi-disciplinary and community-centred approaches are favoured.
- It is most likely that your discussions with the PHO will lead to a proposal that includes other stakeholders as well as physiotherapists being put forward to potential funders (such as the DHB).
- Find out how the PHO assesses and makes decisions on business proposals. Are they willing to explore and discuss a draft proposal?
- Work with the planning and funding division of your DHB. They may sometimes put out requests for proposals (RPF) for programmes on their local DHB website.
- Innovation funding is supported by the MOH through funding initiatives such as the rural innovation fund (RIF) http://www.moh.govt.nz/moh.nsf/indexmh/rural-innovations-fund

Writing a Business Proposal – What do I need to consider?

- Introduction/Summary
  - What exactly am I proposing?
  - What identified need is it fulfilling?
  - What is the expected outcome?
- The proposed initiative
  - How and where will it be delivered?
  - Timeframes? (e.g. lead-in time, start, finish, one-off or ongoing initiative)
- By whom? (consider whether other colleagues should be involved)
- For whom? (what is the patient/community group)
- What are the boundaries or who/what does the proposal not include?
- How will a successful outcome be measured?
- Linkages with identified needs
  - With local community needs already identified by the PHO?
  - With local community needs you have identified from your patients?
  - With other/wider primary health care providers?
  - With government health priorities? (see www.moh.govt.nz)
- Cost considerations
  - Any one-off costs? (e.g. capital expenditure; staff training)
  - Ongoing costs (e.g. hire of premises; staff time; overheads; travel; return on investment etc)
- Supporting evidence for value to be received from the proposal
  - Is there any relevant research, case studies and/or cost benefit analyses that will support my proposal? (See Appendix for examples.)

Business Proposal Check List
- Have I already made contact with my local PHO?
- Do I know what the PHO thinks the needs of my community are?
- Can I help the PHO identify other community needs?
- Do I know who to approach and work with to develop my proposal?
- Which other physiotherapists, health professionals or community groups should I involve in the development and implementation of my proposal?
- Can I explain clearly how my proposal will positively contribute to the health needs of the community?
- Do I have a thorough understanding of my service, including details of referrals (including self-referral) rates and patient demographics?
- Have I completed or do I have access to research results/cost-benefit analyses of the proposed service?
- Have I completed a thorough cost and risk assessment of my service?
Implications for physiotherapy

Physiotherapists as provider of health services are in a position to promote and reinforce activities of the PHO especially with regards to the needs of the local population. The key is to understand the needs of your own local population and engage with your local PHO as to the skills that physiotherapy brings in addressing local health needs.


For information about Primary Health Organisations and their purpose: www.moh.govt.nz/primary

A complete list of PHOs in your region and contacts for them are on the Ministry of Health website http://www.moh.govt.nz/moh.nsf/indexmh/contact-us-pho

The Ministry of Health Primary Care site has an e-register of primary care projects already in place and how they are funded. http://www.moh.govt.nz/moh.nsf/indexmh/phcs-iwp-eregister-name

APPENDIX  Evidence supporting physiotherapy in primary care

Physiotherapy in Primary Care

There are areas in the New Zealand Health Strategy (Ministry of Health, 2001) strategy where physiotherapy interventions can make a difference:

- Increase the level of physical activity
- Reduce the incidence and impact of cancer
- Reduce the incidence and impact of cardiovascular disease
- Reduce the incidence and impact of diabetes

Alongside the Health Strategy is the Health Targets: Moving towards healthier futures (Ministry of Health, 2007) and again there are areas relevant to physiotherapy:

- Improving elective services
- Reducing ambulatory sensitive (avoidable) hospital admissions
- Increasing physical activity
- Reducing obesity

One of the main focuses for physiotherapy interventions is the treatment of musculoskeletal conditions. The most comprehensive study of musculoskeletal pain in New Zealand was by William Taylor (2005). He identified the overall prevalence of pain was 47.4% and this prevalence was higher in older people. Musculoskeletal problems are a well recognised reason for decreased physical activity leading to dependence in older age (Warburton, Whitney Nicol, & Bredin, 2006). The following article gives examples of research supporting physiotherapy interventions in the treatment of musculoskeletal problems and other areas of practice.

The information in brackets following the headings indicates the relevance of the topic to the Health Strategy and Health Targets mentioned above.

**Osteoarthritis: [Increase the level of physical activity; Reducing ambulatory sensitive (avoidable) hospital admissions; Improving elective services]**

The main research into physiotherapy interventions is for osteoarthritis of the knee. These interventions include education including self management; weight loss where appropriate; exercise both aerobic to increase general fitness and strengthening exercises particularly of the quadriceps muscle. Physiotherapists are often involved in the provision of targeted exercise programmes to improve the strength of supporting muscles, increase range of movement and assist with strategies to enable the patient to become more active. A longitudinal study in Denmark (Covinsky, Lindquist, Dunlop, Gill, & Yelin, 2008) identified that people who report a history of arthritis in middle age are more likely to develop mobility and ADL difficulties as they enter old age. The authors reinforce the need for adequate treatment at an early stage in the disease to prevent or minimise the disabling effects of arthritis.
A recent review of osteoarthritis of the knee (Hunter & Felson, 2006) recommended: “non-pharmacological treatments should be tried first.” Another review (Jamtvedt et al., 2008) also supported exercise for reducing pain and improving function. Weight loss was also effective for decreasing the level of disability and it was recommended that physiotherapists work as part of a team with dieticians to combine an effective exercise programme with a weight reduction programme.

Hay and her colleagues (2006) looked at the effectiveness of community physiotherapy and an enhanced pharmacy review for people with knee pain. One of the most significant findings was a decrease in the use of NSAIDs in both groups. Not only is this a cost saving but NSAIDs are the most common cause of iatrogenic disease and are not recommended for long term use particularly in the elderly. Also the physiotherapy arm of the trial had fewer GP visits, again a significant cost saving. A problem identified in these trials is how to ensure continued adherence to the exercise programme once the interventions by the physiotherapist have finished.

One way forward is the addition of class-based exercise programmes as an adjunct to a home exercise programme. A study in the UK (Richardson et al., 2006) examined the cost effectiveness of this intervention and concluded: “the provision of an additional class-based exercise programme should be considered for patients with osteoarthritis of the knee.” The use of an exercise programme and strength training for the knee was also backed up by an earlier Australian study (Segal, Day, Chapman, & Osborne, 2004). The authors found THJR and TKJR were the most cost effective treatments for quality-adjusted life-year (QALY) closely followed by an intensive exercise and strength training programme for the knee based in primary care. It must be noted that the level of risk for exercise and strength training compared to surgery is very low.

An excellent review of the role physiotherapists can play in the treatment of OA knees in the Primary Health Organisations in New Zealand was done by Duncan Reid and Peter Larmer in the NZJP (2007). They discuss the current low referral rate from GPs to physiotherapy and suggest physiotherapists liaise with their local PHOs on how to access people with OA who are often sitting on long waiting lists for joint replacement surgery. As well as individual treatments they suggest initiating group exercise programmes and the use of hydrotherapy sessions. A study comparing water based and land based treatments found in favour of water based treatment for relieving pain (Silva et al., 2008).

As well as the role physiotherapists can play in the early treatment of OA they also play an important part in the rehabilitation of patients following joint replacement surgery. A systematic review looking at the effectiveness of physiotherapy exercise after knee arthroplasty for osteoarthritis (Minns, Barker, Dewey, & Sackley, 2007) supported the use of physiotherapy interventions which focused on functional activities after discharge rather than a traditional home exercise and advice programme. Studies on interventions based on improvements in functional activities demonstrated better outcomes than studies.
focused on increasing range of movement or muscle strength as the outcome. Most of the studies involved short-term programmes following discharge, and Herbert comments “more lengthy and intensive physiotherapy exercise may be needed to overcome the considerable deficits in muscle strength and endurance that are evident in these patients” (Herbert, 2007). The findings in this study are important to New Zealand as one of the government’s health priorities is improving elective services and it has allocated increased funding to joint replacement surgery. This has had little flow-on effect to increased physiotherapy services for patients post- surgery, especially following discharge from hospital.

There is some research on the effectiveness of physiotherapy for OA hips and this research is continuing.

**Osteoporosis: [Increase the level of physical activity; Reducing ambulatory sensitive (avoidable) hospital admissions]**

The Chartered Society of Physiotherapy (1999) produced physiotherapy guidelines for the treatment of osteoporosis which emphasise the positive role of physiotherapists in exercise prescription for those at risk, and falls prevention strategies for the frail elderly. At the end of last year Osteoporosis New Zealand published a report (Brown, McNeill, Radwan, & Willingale, 2007) on the enormous costs and health burden of osteoporosis here. The report recommended that:

- the diagnosis of osteoporosis by DXA scan be funded for women over 50 years who have experienced a low trauma fracture;
- active steps be taken urgently to increase awareness of the significant health burden of osteoporosis amongst the population and health professional; and
- osteoporosis be adopted by Government as a national public health priority

When looking at the last two recommendations it is interesting to note a report in the BMJ (Jarvinen, Sievanean, Khan, Heinonen, & Kannus, 2008) on osteoporosis. The report does not deny that people with osteoporosis are more likely to sustain a fracture following a fall, but makes the salient point that it is the fall which causes the fracture, not the osteoporosis. It goes on to suggest there is high level evidence that up to 15% of falls can be prevented with simple interventions such as exercise and the reduction of predisposing and situational risk factors. One such intervention is the Otago Exercise Programme (OEP), which physiotherapists are involved in delivering throughout the country.

Physiotherapists often see elderly patients in their practices, either following a fall or for treatment of some other condition. For these patients a falls risk assessment should form a part of their initial physiotherapy assessment or physiotherapists could be part of a falls risk assessment clinic set up at their local PHO. Suggested questions by physiotherapists include a history of past falls and their ability to get up after a fall, a brief gait assessment to get an indication of any obvious muscle weakness or balance deficits, and an assessment of their time and ability to get up from a chair. Sometimes interventions can be put in place by the treating physiotherapist or a referral to an OEP provider instigated, if appropriate.
In order to get ACC funding for the Otago Exercise Programme you must:

- be aged 80 years or older (65 years or older if Maori or Pacific);
- be living independently in the community;
- have had a fall in the previous twelve months, or deemed to be at high risk of having a fall when assessed by a registered health professional; and.
- be referred by a registered health professional.


Falls: [Increase the level of physical activity; Reducing ambulatory sensitive (avoidable) hospital admissions]

The OEP mentioned above is a well recognised intervention for the prevention of falls for people over 80. A trial is currently underway by physiotherapists at AUT University and Otago University evaluating the effectiveness of a Tai Chi programme for falls prevention.

Diabetes: [Increase the level of physical activity; Reduce the incidence and impact of diabetes; Reducing obesity]

A Systematic Review on interventions to prevent or delay Type 2 Diabetes was published in the BMJ (Gillies et al., 2007). The article compared the long-term effect of pharmaceutical interventions with lifestyle interventions. Both were equally effective in preventing or delaying the development of Type 2 diabetes in at-risk populations. Pharmaceutical interventions always involve ongoing expenses and there are often risks. The concluding statement provides a challenge for physiotherapy:

"Should what is fundamentally a lifestyle issue really be treated with a lifelong course of medication? As compliance is the key to the success of lifestyle interventions, strategies to assist compliance need to be carefully thought through and implemented."

The value of lifestyle interventions is continually being recognised, the main two being alterations in diet and increases in physical activity.

Physiotherapists are the health professionals who are recognised as providers of physical activity programmes, especially for those requiring an individualised programme. Again this is an opportunity to get involved at your local level – physiotherapists should be part of every Diabetes Service.

Cardiopulmonary Rehabilitation: [Increase the level of physical activity; Reduce the incidence and impact of cardiovascular disease]

A press release put out in 2007 by Professor Richard Beasley of the Medical Research Institute reported that chronic obstructive respiratory disease (COPD) affects one in ten New Zealand adults. A NICE report (National Centre for Clinical Excellence, 2004) recommends pulmonary rehabilitation for people with COPD should be tailored to the patient’s needs and should include physical...
training, disease education, nutritional, psychological and behavioural intervention. A further study identified that the benefits of a COPD outpatient rehabilitation programme persist for at least 2 years.

A Cochrane Review (Lacasse, Goldstein, Lasserson, & Martin, 2006) concluded:
“Pulmonary rehabilitation relieves dyspnoea and fatigue, improves emotional function and enhances patients’ sense of control over their condition. These improvements are moderately large and clinically significant. Rehabilitation forms an important component of the management of COPD.”

The New Zealand Guidelines document on Cardiac Rehabilitation (2002) recommends that for people with cardiac disease including CHF:

- Exercise advice should be individualised and consider clinical characteristics, lifestyle, attitudes, culture and environment

The guideline also notes that physical activity has a small effect on serum lipids, blood pressure, obesity and smoking cessation, and significantly reduces cardiovascular and total mortality.

Physiotherapists are obviously an essential part of the team.

**Cancer: [Reduce the incidence and impact of cancer]**

The Journal of the American Cancer Society produced an edition dedicated to the role of nutrition and physical activity in the prevention and treatment of cancer (Doyle et al., 2006). Evidence strongly suggests that exercise is not only safe and feasible during cancer treatment but that it can also improve physical functioning and importantly various aspects of quality of life. The evidence is particularly strong for breast and colorectal cancer survival rates and there is some evidence that exercise can help in the prevention of colorectal cancer. The report notes:

“Although some cancer survivors can adopt an exercise programme independently, many will benefit from referral to an exercise specialist... A physical therapist is the appropriate resource for survivors with injuries, pain or specific post-surgical issues such as lymphodema or amputation.”

The CSP has also produced a position statement on the role of physiotherapy for people with cancer (The Chartered Society of Physiotherapy, 2003).

Physiotherapists need to work in with their local cancer services, Cancer Society and PHO to provide these services.
Glossary

ACC  Accident Compensation Corporation

Care Plus  Additional funding to PHOs for people who have to visit a GP or nurse more frequently because of a chronic condition, such as diabetes or heart disease, acute medical or mental health needs, or a terminal illness.

Deprivation Index  A measure of socio-economic status calculated for small geographic areas. The scale ranges from 1 to 10, where 1 represents the areas with the least deprived scores and 10 the areas with the most deprived scores.

DHB  District Health Board

GP  General Practitioner

MOH  Ministry of Health

NGO  Non-governmental Organisation

PC  Primary Care

PHCS  Primary Health Care Strategy

PHO  Primary Health Organisation

Vote: Health  The amount of public money the Government allocates annually for health care.

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