ONTARIO PHYSIOTHERAPY ASSOCIATION
FREEDOM TO FUNCTION

Physiotherapy in Primary Health Care

WHAT IS PHYSIOTHERAPY?

Physiotherapy[1] is a health profession that promotes individuals' and populations' wellness, mobility and independent function by:

- Promoting physical activity and overall health;
- Preventing disease, injury, and disability;
- Managing acute and chronic conditions, activity limitations, and participation restrictions;
- Improving and maintaining optimal functional independence and physical performance;
- Rehabilitating injury and the effects of disease or disability with therapeutic exercise programs and other interventions; and
- Educating and planning maintenance and support programs to prevent re-occurrence, re-injury or functional decline.

Physiotherapy services are those that are performed by physiotherapists or any other trained individuals working under a physiotherapist's direction and supervision.

Physiotherapists are self-regulated health professionals that work interprofessionally and collaboratively to assess and treat individuals across the life-span who have illness, injury or disability affecting the neuro-musculoskeletal, cardiopulmonary, vascular, and neurological systems. For example, physiotherapists may help individuals with:

- musculoskeletal conditions and pain related to activities or injuries at work, leisure or sports,
- falls prevention and treatment interventions for individuals for whom falling is an identified problem
- degenerative changes related to aging such as arthritis,
- neurological conditions such as stroke, Parkinson's, multiple sclerosis, and spinal cord injury,
- cardiopulmonary conditions such as asthma, COPD and CHF,
- palliative care,
- urological changes and pelvic pain related to women's and men's health,
- chronic disease such as diabetes, hypertension, chronic pain, low back pain and osteoporosis,
- physical conditions related to mental health.

[1] The definition of physiotherapy/physiotherapist adapted from "2012 Description of Physiotherapy in Canada" by the Canadian Physiotherapy Association, accessed at http://www.physiotherapy.ca/getmedia/e3f53048-d8e0-416b-9c9d-38277c0e6643/DoPEN(final).pdf.aspx on June 10th, 2013.

Physiotherapists have a Master's level university-based education that provides a foundation of modern science for the profession.

The entry-level educational curriculum includes, but is not limited to, the study of:

- biological sciences (e.g. human/functional anatomy, human physiology, pathology, pathokinesiology, with specific and focused training on the diagnosis of musculoskeletal conditions)
- applied sciences (e.g. human development, biomechanics and exercise physiology);
- clinical sciences (e.g. physical and functional pharmacology.);
- scientific inquiry (e.g. research, statistics, literature reviews) and professionalism and ethics (e.g. health policy, legislation and regulation, interdisciplinary practice, management).
- Psychosocial sciences (e.g. psychology, sociology, cultural anthropology) are also foundational to a physiotherapist's education, and are often studied prior to or concurrently with the entry-level physiotherapy program.

Physiotherapy interventions are founded upon and integrate "the best current research evidence with clinical experience and patient values." Education of clients, caregivers, and other health professionals about injury prevention, ergonomics, fitness, health and wellness is a large focus of the physiotherapy profession.[2]

PHYSIOTHERAPISTS IN PRIMARY HEALTH CARE

As self-regulated health professionals, physiotherapists are accountable for meeting the legal, regulatory and professional standards of practice requirements for their practice including meeting standards for liability insurance coverage.

Physiotherapists' unique contribution to health care stems from advanced understanding of how the body moves, what keeps it from moving well and how to restore mobility.

Physiotherapists integrated into a primary health care organization can make a significant contribution to continuously improving the quality of the individual's health care experience, improving health for a defined population, managing per capita costs and improving team function and physician's work life.

The case for physiotherapy being the most cost-effective solution for addressing musculoskeletal conditions and chronic diseases in primary health care is compelling whether the approach needed is rehabilitation and/or primary or secondary health promotion and prevention of injury and illness.

27.8% of North American patients presenting to a primary care physician have a chief symptom that is directly related to the musculoskeletal system. [3] Given the extent of consultations of a musculoskeletal nature in primary care in Ontario and the proven effectiveness of physiotherapy interventions for acute

[2] Accreditation Council for Canadian Academic Programs, Canadian Alliance of Physiotherapy Regulators, Canadian Physiotherapy Association, Canadian Universities Physical Therapy Academic Council. Essential Competency Profile for Physiotherapists in Canada, Toronto: Authors: 2004.

[3] Pinney S, Regan W. D. Educating Medical Students About Musculoskeletal Problems Are Community Needs Reflected in the Curricula of Canadian Medical Schools? The Journal of Bone & Joint Surgery JBJS.ORG Volume 83-A · Number 9 · September 2001 p1317-1320

and chronic physical conditions, physiotherapists are well positioned to complement family physicians, nurse practitioners and their teams in managing the health needs of patients with physical disorders, chronic pain, chronic disease, acute or chronic musculoskeletal conditions and with community-based health / wellness promotion and disease prevention activities.

Physiotherapists have specialist training in the diagnosis, analysis and management of these complex musculoskeletal conditions in the presence of disease and aging to maintain mobility and function within the interdisciplinary team.

In their summary of current literature which mostly focused on the integration of physiotherapy in primary health care setting, Cott et al., (July 2004) found that where this integration had occurred the results included:

- Increased levels of satisfaction with service by both the patients and the physicians,
- Decreased wait times,
- Increased cost effectiveness when compared to institutional care,
- Reduced rates of referral to specialists, and
- Improved outcomes for patients including quality of life measures.[4]

PHYSIOTHERAPIST SERVICES IN PRIMARY HEALTH CARE ORGANIZATIONS

Physiotherapists focus on physical function through their extensive knowledge base of multiple body systems, the musculoskeletal, the neuromuscular and cardiorespiratory systems, their inter-relation, and the pathologies that impact on these systems. Physiotherapists have the skills and competencies to achieve goals of individuals and populations across the continuum of care from health promotion/disease prevention, self-management, treatment and rehabilitation.

The following are examples of the roles and activities of physiotherapists in primary health care:

- Assessment, diagnosis within scope of practice, treatment including individualized exercise programs, self-management and education for patients with musculoskeletal complaints
- Assessment, education and management programs for incontinence and pelvic pain
- System navigation assistance for those who need to access physiotherapy and other services in the community
- Mobility aides assessment and assistance in navigating funding options for devices
- Falls prevention programs including outreach programs in community
- Collaborative triaging with physician for specialist care for musculoskeletal conditions
- Assessment and triaging for back pain including providing self-management program and education, referral to community-based treatment programs and identification of need for additional diagnostics, specialist referral
- Assessment, education, self-management programs and counseling for increased activity for those with obesity, pre-diabetes, diabetes, arthritis and other chronic diseases
- Facilitate linkages with community programs, assessment of appropriateness of programs for those with chronic conditions including pain management, providing counseling on safe participation for those with chronic conditions

[4] Cott, C.A. et al, for ACREU, Adult Rehabilitation and Primary Health Care in Ontario, July 2004, p. 11.

- Pain management programs, counseling and education on self-management techniques for those with chronic pain issues.
- Assessment, individualized self-management programs and treatment for those with mobility and pain issues related to cancer including those in palliative phase
- Support and education for caregivers for assistance of those with chronic diseases including prevention of injury programs for caregivers
- Return to work programs
- Individualized self-management and lung health programs which teach patients skills to manage their acute periods and counseling for those with chronic cardiorespiratory conditions such as asthma, COPD and deconditioning after illness.
- Osteoporosis education and individualized self-management programs

APPENDIX A

EXAMPLES OF PHYSIOTHERAPISTS AND CHRONIC DISEASE MANAGEMENT AND PREVENTION

Clinical evidence demonstrates that the successful implementation of any Chronic Disease Management Strategy relies on effective self-management, combined with peer support and access to community healthcare. Patients must make the transition from being passive users of healthcare services to being active partners in healthcare. Outcomes improve for patients with chronic disease when patients are directly involved in setting their own goals.[5] Patients must also understand how the achievement of those goals will improve their health status and they must believe that they can reach those goals.

Physiotherapists have the scope of practice and extensive competencies in the rehabilitation component of Ontario's healthcare system. Physiotherapy is also one of the largest rehabilitation professions, with over 7000 registered practitioners spread across Ontario. Physiotherapy is adaptable to the full range of healthcare delivery venues and physiotherapists have a presence across the continuum of healthcare delivery. Physiotherapists also readily integrate into interdisciplinary healthcare delivery models and characteristically work closely with physicians and increasingly with nurse practitioners.

In addition to our expertise in the treatment of acute musculoskeletal, neurological, and cardiorespiratory conditions, physiotherapy has been noted as having an important role in the management of many chronic diseases and conditions and a role in the primary and secondary prevention of illness and injuries. Some examples include:

Diabetes: According to Ministry figures approximately 900,000 Ontarians have Type 1 or Type 2 diabetes. Physiotherapists educate patients on the benefits of regular physical activity and have the knowledge and training to prescribe individualized exercise plans for each patient's coexisting medical conditions, which may include heart disease, high blood pressure and stroke.[6] Physiotherapists also assist with management of the vascular or peripheral neuropathy complications that arise from diabetes dealing with foot disorders, balance difficulties and protective strategies to prevent further damage.

Children and adolescents with Type 1 diabetes may develop complications such as limited joint mobility and impaired growth in the late pubertal development.[7] Physiotherapists are educated on the special precautions that need to be taken for children with Type 1 diabetes when participating in certain sports, along with other exercise considerations for healthy growth in children. Physiotherapists can also educate children and caregivers on the monitoring of their blood glucose levels when participating in physical activity.[8]

Arthritis: According to the Canadian Community Health Survey of 2003, 17.6% of Ontarians reported having arthritis/rheumatism. Studies have shown that physicians often do not provide adequate information on exercise or on the resources available for those diagnosed with arthritis (such as the

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[5] Institute for Healthcare Improvement, http://www.ihi.org/IHI/Topics/ChronicConditions/AllConditions/Changes/, September 2008 and http://patienteducation.stanford.edu/programs/cdsmp.html

[6] Australian Physiotherapy Association, Position Statement Physiotherapy and Diabetes, March 2006, http://apa.advsol.com.au/independent/documents/position_statements/public/PhysiotherapyandDiabetes.pdf

[7] International Society for Pediatric and Adolescent Diabetes, Consensus Guidelines 2000, http://www.diabetesguidelines.com/health/dwk/pro/guidelines/ispad/ispad.asp

[8] Australian Physiotherapy Association, Positions Statement Physiotherapy and Diabetes, March 2006.

availability of The Arthritis Society), or do not refer to physiotherapy despite this being noted as an effective approach to the management of this condition.[9] In the primary care pilot project called 'Getting a Grip on Arthritis: A National Primary Health Care Community Initiative' the project included physiotherapists in the provision of resources and development of tools for the education of providers and their patients around the resources available, how to exercise, medication and how to cope with arthritis and pain. The initiative had a significant impact on patient with 83% reporting increased ability in self-management of these chronic conditions.[10] Poor management of these conditions can contribute to the need for extensive surgical interventions as the joints deteriorate as seen in the increasing numbers of hip and knee replacements done in Ontario. In a report for ACREU, the analysis of the best practice literature showed that; "There is conclusive evidence in the literature for the following rehabilitation interventions for persons with RA and OA: client education, exercise (aerobic and strengthening), joint protection instruction, and assistive devices."[11]

Chronic Musculoskeletal Conditions: As examples, 20.3% of the Ontario population reported having back problems (excluding arthritis and fibromyalgia) [12]and 11.3% of the Ontario population reported having Repetitive Strain Injury.[13] In industrial countries, musculoskeletal problems are the most common cause of chronic disability.[14] In Ontario, musculoskeletal problems are the leading reason for visits to primary care physicians and the leading cause of disability.[15] A survey of effectiveness of physiotherapy interventions for chronic musculoskeletal conditions such as chronic low back pain, hip and knee osteoarthritis and rheumatoid arthritis found that exercise can reduce disability and pain. [16]

Obesity: the number of people in Ontario who are overweight or obese is reaching epidemic proportions. A strong base of evidence indicates that exercise, combined with diet, is effective as a weight loss and weight management strategy. Those with obesity regardless of age often have corresponding joint problems, deconditioning and other barriers to the very activities that are the keys to their recovery. With their awareness of pathology and the body systems impacted by obesity, physiotherapists are ideally suited to identify exercise strategies targeted to overweight individuals and to coordinate comprehensive obesity management programs.[17]

Incontinence: According the Agency for Health Care Policy and Research in the United States, one in four women between 30 and 59 years of age have experienced an episode of stress urinary incontinence. They note that over 50% of elderly persons either at home or in long term care have

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[9] Glazier, R.H. et al, Management of Common Musculoskeletal Problems: A Survey of Ontario Primary Care Physicians, Canadian Medical Association Journal, 1998, April 21; Vol. 158 (8), pp. 1037-40;
and Health Canada, Initiative Fact Sheet, Getting a Grip on Arthritis: National Primary Health Care Community Initiative, November 2006; and Cott, C.A. et al, for ACREU, Adult Rehabilitation and Primary Health Care in Ontario, Final Report, July 2004, p. 8.
[10] Health Canada, Initiative Fact Sheet, Getting a Grip on Arthritis: A National Primary Health Care Community Initiative, November 2006.
[11] Cott, C. et al, for ACREU, A Client-Centred Health Service Model of Primary Health Care and Rehabilitation for Arthritis, April 2005, p. 21.
[12] Canadian Community Health Survey, cycle 2.1, 2003.
[13] Canadian Community Health Survey, cycle 2.1, 2003.
[14] Herbert, R.D. et al, British Medical Journal, Vol. 323, 6 October, 2001, p. 788.
[15] Glazier Richard H. et al Management of Common musculoskeletal problems: a Survey of Ontario primary care physicians CMAJ April 21, 1998; 158 (8) p. 1037-1040
[16] Herbert, R.D. et al, p. 789; and
[17] Canadian Physiotherapy Association, Physician Briefings for Physicians – Obesity, May 2008

incontinence.[18] Their evidence based guidelines for the treatment of these conditions lists pelvic muscle rehabilitation as the first on the list of recommended treatment approaches.[19] In a survey of literature, training the pelvic floor muscles produced large reductions in the risk of incontinence as it affects socialization, sex life and physical activity.[20] Physiotherapists apply their knowledge and skills in musculoskeletal treatment techniques with additional specialized training to provide pelvic floor rehabilitation and incontinence treatments.

Falls: Falls are a major cause of injury and disability in older adults; just the fear of falling can reduce activity levels and result in increased problems with weakness and balance leading to more falls. According to a paper establishing evidence-based guidelines for falls prevention, approximately one third of those over 65 will fall annually and half of those will have repeat falls. The majority of accidental deaths in this age group are due to falls.[21] Screening all for risk factors such as balance impairments and lower extremity strength are important elements of a falls prevention program and a program of physiotherapy including exercise for women over 80 regardless of risk factor status is supported by the evidence.[22]

[18] Agency for Health Care Policy and Research, http://www.ahrq.gov/clinic/uiovervw.htm, September 2008
[19] Ibid.
[20] Herbert et al, BMJ, vol. 323, 6 October 2001, p. 789.
[21] Moreland et al, Evidence-Based Guidelines for the Secondary Prevention of Falls in Older Adults, Gerontology, 2003:49:93-116.
[22] Ibid.

APPENDIX B

OTHER RESOURCES

Soever, Leslie for the College of Physiotherapists of Alberta, Alberta Physiotherapy Association and the Canadian Physiotherapy Association, Discussion Paper: Primary Health Care and Physical Therapists - Moving the Profession's Agenda Forward.
http://www.internetgroup.ca/clientnet_new/docs/publications_primaryhealthcare.pdf

College of Physiotherapists of Alberta, Alberta Physiotherapy Association and the Canadian Physiotherapy Association: Primary Health Care – A Resource Guide for Physical Therapists
http://www.physiotherapyalberta.ca/files/primary_health_care_1.pdf

Canadian Physiotherapy Association: The Value of Physiotherapy in Specific Patient Populations (Information sheets that include Stroke, Cardiovascular, Low Back Pain, Paediatric Care):
http://www.physiotherapy.ca/Advocacy/Legislation/The-Value-of-Physiotherapy

Ontario Physiotherapy Association series of briefing notes and infographics related to frail elderly, stroke, CVD/CHF, COPD: http://www.opa.on.ca/about_phys_value.shtml

APPENDIX C

SUPPORTING EVIDENCE FOR THE ROLES OF PHYSIOTHERAPISTS IN PRIMARY HEALTH CARE

	Evidence
System Effectiveness Research has shown that physiotherapy diagnosis and evidence-based treatments are effective and cost-efficient in treating a variety of physical health problems.	Strong evidence was found to support physiotherapy at the PHC level for the following conditions • Arthritis[23, 24, 25, 26] • Coronary Heart Disease[24] • Chronic Lung Disease[24] • Incontinence[24] • Diabetes[24] • Osteoporosis[24] • Fall prevention[24] • Low back pain[24] • Total hip and knee replacements[25] • Urinary incontinence[27]
Other conditions where some supporting evidence for physiotherapy is present	• Mental health[24] • physical inactivity (CPA, Physician Briefing) • obesity in children and adults (CPA, Physician Briefing) • case management/navigator role[24]
Effectiveness of physiotherapy in primary health care settings	There is evidence of decreased wait times for surgery, increased return to work, fewer emergency room visits, fewer imaging studies and increased patient satisfaction Richardson J, Letts L, Wishart L, Stewart DA, Law M, Wojkowski S. Rehabilitation in Primary Care: National and International Examples and Training Requirements. Ontario, Canada; 2006. Evidence has shown that physiotherapist's monitoring of patient function through EMR in primary care can increase activity levels Richardson et al. BMC Family Practice 2013, **13**:29 http://www.biomedcentral.com/1471-2296/13/29

[23] Cott, C. et al, for ACREU, A Client-Centred Health Service Model of Primary Health Care and Rehabilitation for Arthritis, April 2005.
[24] Fricke, M., for Manitoba Branch of the Canadian Physiotherapy Association and the College of Physiotherapist of Manitoba, Physiotherapy and Primary Health Care: Evolving Opportunities, 2005.
[25] MacKay, C., Devitt, R., Soever, L. and Badley, E.M., for ACREU, An Exploration of Comprehensive Interdisciplinary Models for Arthritis, 2005.
[26] Roddy, E., Zhang, W., Doherty, M., Arden, N.K., Barlow, J., Birrell, F., et al, Evidence-based Recommendations for the Role of Exercise in the Management of Osteoarthritis of the Hip or Knee – The Move Consensus, Rheumatology, 2005, 44(1), 67-73.
[27] Lacima, R.M., and Pera, M., Combined Fecal and Urinary Incontinence – An Update, Current Opinions in Obstetric Gynecology; 2003, 15:405-10.

Physiotherapist involvement in program design for Obesity	Evidence shows strategies to manage obese children needs to target family behavior as well as child's behaviour. Pedometers are effective at encouraging 10,000 paces a day. When over fifty – more likely to lose weight through exercise. Physiotherapists have the skills to design programs. Dr. Nick Kates, Provincial Lead, Quality Management Collaborative for Ontario's Family Health Team Accelerating Primary Care, 2008 Conference, Alberta
Chronic Disease Management Program, Calgary Health Region	The Living Well with a Chronic Condition Program consists of the three key components: disease-specific education, three levels of supervised exercise programs which are offered 2-3 times a week for eight weeks and self-management program run by lay leaders called Row Your Own Boat. Dr. Peter Sargious, Medical Director reports 32% of patients with COPD are walking further. Calgary Health Region – Chronic Disease Management Regional Strategy http://www.calgaryhealthregion.ca/cdm/regional_strategy/overview.html
Reduced Use of Other Health Services	Rehabilitation services provided to 137 patients with chronic disease, who were high users of the health-care system and had received at least four visits to their family physician in the preceding year. Cost savings from reduced hospitalization were $490 per program graduate. Total cost savings during the study were $65,000. Ontario MOHLTC supported demonstration project at Stonechurch Health Centre, Hamilton, Ontario
Reduced Use of Other Health Services	Stanford University which is renowned for their Model for Chronic Disease Management found rehab program resulted in reduced use of health services saving $780/patient http://patienteducation.stanford.edu/programs/cdsmp.html
Reduced Use of Other Health Services	➢ The costs of providing 30 to 60 minutes of self-care education plus at least two follow-up calls for people with knee OA were offset within one-year by decreased frequency and cost of physician primary care visits. Cott, C. et al, for ACREU, A Client-Centred Health Service Model of Primary Health Care and Rehabilitation for Arthritis, April 2005 p. 20. ➢ 85% of UK general practitioners responding to a survey reported inappropriate prescription of non-steroidal anti-inflammatory drugs would be reduced if more resources were provided for physiotherapy services. [28] ➢ A triaging service for patients waiting to see 3 neurosurgeons in Southern Alberta demonstrated only 10% of patients have pathology amenable to neurosurgery and 90% of patients need other strategies.(Canadian Physiotherapy Association www.physiotherapy.ca/?WCE=C=62%7CK=224836) ➢ Use of PT expertise in assessing MSK pathology resulted in equal or better patient outcomes and reduced use of other more costly health

[28] Roberts, C., Dolman, E.A., Adebajo, A.O., Underwood, M., A National Qualitative Survey of Community Based Musculoskeletal Services in the U.K., Rheumatology, 2003, Sep:42(9):1074-8.

	resources (Moore, J. Goss, D. Baxter, R., Deberardino, T., Mansfield, L., Fellows, D., Taylor, D., Clinical Diagnostic Accuracy and Magnetic Imaging of Patients Referred by Physical Therapists, Orthopaedic Surgeons and Non-Orthopaedic Providers, Journal of Orthopaedic Sports Physical Therapy, 35-67-71, 2005.)
Cost Effective Methods of Delivery	➢ 2/3 of patients who call can be effectively managed on the phone. Chartered Society of Physiotherapists, Widening Access to Physiotherapy, http://www.csp.org.uk/uploads/documents/csp_sep_wa2p.pdf ➢ Cost-effective rehabilitation treatments include self-care education, group exercise, walking programs, strength training, hydrotherapy, splinting, adaptive equipment, postural training, and home adaptation. Cott, C. et al, for ACREU, A Client-Centred Health Service Model of Primary Health Care and Rehabilitation for Arthritis, April 2005 p. 20.