Rehabilitative Care Alliance

Patient and System-Level Benefits of Rehabilitative Care

A primer to support planning by OHTs and Ontario Health

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Section 1: Introduction

INTRODUCTION

Rehabilitation is an essential component of Ontario's new vision for connected care.

Whether it takes place in the hospital or in the community, rehabilitation is a key component of improving outcomes for both patients and the health care system.

Rehabilitation promotes recovery from illness or injury and helps with the prevention and management of chronic conditions. It can reduce disability, optimize participation in daily living and help individuals remain independent in their homes well into their older years. Rehabilitation can also help prevent admissions and re-admissions, reduce costs, improve efficiency and reduce hallway health care by shortening length of stay, reducing emergency department visits and helping patients flow through the system.

Using the primer to support planning

In Ontario's changing health care context, Ontario Health Teams (OHTs) are taking on responsibility and accountability for the planning and provision of health care across the continuum. This primer is designed to help OHT administrators and planners as well as regional/provincial policy-makers by outlining how rehabilitative care can improve patient and system outcomes in primary care, hospitals (acute care, rehab or complex continuing care) and in the community. A good understanding of the benefits of rehabilitative care across the continuum is central to providing holistic and integrated care.

To achieve these outcomes, OHTs must ensure rehabilitative care providers are at the planning table. Partnering with local and regional rehabilitative care providers will strengthen planning and evaluation of patient care and services. The active participation of rehabilitation partners is particularly important given the complexities and particular considerations that may be unique to certain populations regarding access, service delivery and capacity planning.

For assistance in identifying and contacting local/regional rehabilitative care stakeholders, contact the Rehabilitative Care Alliance.

How the primer is organized

This primer has been organized to provide a brief overview of rehabilitative care (Sections 2-3); information relevant to particular parts of the care continuum (Sections 4-6); and sector-specific appendices that highlight additional rehabilitative care considerations for particular rehab populations. While the primer is evidence-based, it is not intended as an in-depth, comprehensive treatise on rehabilitative care or a best practices framework for clinicians. It has been written for OHT administrators and planners and regional/provincial policy-makers to support their understanding of rehabilitative care.

Readers can choose to read the primer in its entirety, select the sections that are relevant to them and/or select a specific sector within the care continuum. The sections provide the following:

- Section 2 - Benefits of rehabilitative care provides a brief overview of rehabilitation, including how rehabilitative care is helpful to patients and to the health care system. It also addresses the potential costs/risks that may arise in the absence of timely access to rehabilitative care. This section also includes information on rehabilitative care within the context of COVID-19.

- Section 3 - About rehab professionals provides brief descriptions of rehab professionals, examples of their areas of expertise and links to their professional associations where further information can be obtained.

- Section 4 – Rehab in primary care, Section 5 – Rehab in inpatient settings and Section 6 – Rehab in home and ambulatory settings provide information on rehabilitative care that is sector-specific. Each of these sections includes the following:
    - Introduction: A brief introduction that describes that sector of the care continuum and the role of rehabilitative care professionals within that sector
    - Patient and system-level benefits of rehabilitative care: Evidence-based information on how rehabilitative care is used within the sector
    - Rehabilitative care considerations: Information on rehab post-injury/illness, rehab for progressive/chronic conditions and rehab for prevention. Information describes patient characteristics, how rehab can help, rehabilitative care recommendations and where to access rehab
    - References

- Appendix A – Primary care, Appendix B – Inpatient, Appendix C – In-home & ambulatory are sector-specific appendices describing additional rehab care considerations for populations/conditions typically requiring rehabilitative care along with links to other resources or research literature.

Section 2: Benefits of rehabilitative care

BENEFITS OF REHABILITATIVE CARE

Rehabilitative care…

- **… is an essential element of client-centered, integrated care.** People may require rehabilitative care as a result of illness, injury, disability, pain, chronic disease or aging. This can include a broad range of interventions that help to restore and maximize functional and cognitive abilities. Rehabilitation professionals develop comprehensive, goal-directed plans with patients and families that assess and address all aspects of a person's needs, including their physical, cognitive and psychosocial needs.

- **… is provided in settings across the continuum of care.** Rehab professionals (audiologists, dietitians, kinesiologists, nurses, occupational therapists, physiatrists, physiotherapists, psychologists, social workers, speech-language pathologists) and other rehab professionals are located in primary care (family health teams, community health centres), the community (schools, ambulatory care, home care, retirement homes), hospitals (acute and post-acute) and long-term care. Rehab professionals are key members of interprofessional teams and rehabilitative care is integral to bundled care for many populations.

- **… contributes to seamless transitions and supports successful return to community settings.** Rehab plans assess function and what individuals require to transition to the next level of care. This may include cognitive and/or physical rehabilitation, skills re-training for activities of daily living, modifications to the home environment, psychosocial counseling, prescription of assistive devices, caregiver support and exercise programs. Rehabilitation helps individuals adjust to new levels of function and manage complex conditions. Rehabilitation professionals work with individuals to help them adapt their skills, reintegrate into the community and remain at home.

- **… improves quality of life for children and their families:** More than 1 in 10 youths in Canada have one or more disabilities.[1] Rehab enables children and youth to learn and develop life skills, be creative and interact with their environment/community.[2, 3]

COSTS/RISKS OF NOT PROVIDING REHABILITATIVE CARE

According to the WHO's World Report on Disability,[4] estimating unmet rehabilitation needs is difficult due to a lack of rigorous data. Nevertheless, the current evidence on the benefits of rehabilitative care suggests that the absence of rehabilitative care services can lead to negative consequences at both the patient and system level.

At a patient level, unmet rehabilitative care needs can limit an individual's performance of activities of daily living and level of independence. Participation in vocational, social and/or recreational activities may also be limited. Without access to rehabilitative care, an individual may also experience a deterioration in health and poor overall quality of life.[4] Moreover, limited or delayed access to rehabilitative care can set in motion a cascade of inter-related negative consequences. For example, an injury or physical impairment that is not addressed through rehabilitative care can lead to loss of function, which in turn can lead to further injury, restrictions in the ability to use assistive devices, increased dependency and reduced psychosocial functioning.[5]

At a system level, the absence of a rehabilitative care approach and interventions can result in longer hospital stays, delays in discharge, increases in alternate level of care (ALC) days and risk of readmission, all of which contribute to financial and social costs for the system.[4, 6] From a broader perspective, the absence of rehabilitative care can have other economic consequences such as those associated with a smaller workforce or restricted level of workforce participation as a result of injury, impairment or disability, or sick time.

Adequate rehabilitative care services must be provided in order to avoid these negative consequences. In Ontario, responding to the demand for rehabilitative care services has been challenging due to a number of factors including lengthy waitlists, geographical distance, funding limits and rationing of services.

REHABILITATIVE CARE IN THE CONTEXT OF COVID-19

Rehabilitative care plays an important role in addressing the impact of COVID-19 on patients in acute care, post-acute and home and community settings. Patients may experience a number of impairments resulting from the management of the virus and the virus itself. The effects of ventilation, sedation, and prolonged bed rest can result in physical deconditioning and impairments that affect swallowing, mobility, cognition and mental health among other potential consequences.[7, 8] Those who are older or who have pre-

existing medical conditions (e.g., cancer, chronic kidney disease, chronic obstructive pulmonary disease, serious heart conditions, type 2 diabetes mellitus) are at an increased risk of severe illness and may experience poorer outcomes and greater residual impairments following COVID-19.[9] The effects of COVID-19 may persist over the long-term (e.g., reduced exercise capacity and independence in performing activities of daily living; poorer quality of life) due to the multifaceted and complex consequences of post intensive care syndrome and its effects on physical and cognitive functioning and mental health.[10, 11]

Within this context, the role of rehabilitative care includes but is not limited to:

- assessing for impairments in functioning (e.g., physical, cognitive, swallowing, communication, respiratory, psychosocial, activities of daily living)
- determining and implementing a treatment plan within the patient's current environment
- formulating discharge plans for rehabilitative care as the patient transitions to the next level of care or to home.

When planning for or providing rehabilitative care, infection prevention protocols must be considered. As a result, rehabilitative care may be delivered face-to-face, via tele-rehab methods or by a combination of both. The RCA has developed several COVID-19 rehab resources and recently released a guidance document on rehabilitative care best practices for frail seniors within the context of COVID-19.

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Section 3: About rehab professionals

ABOUT REHAB PROFESSIONALS

Rehabilitative care is provided by health professionals, who as a result of their training, have developed a specialized skill set to help individuals recover from physical, cognitive (thinking/memory) or communication (speaking/language and hearing) problems caused by an injury or illness. Rehab professionals can also play a role in the prevention of functional decline and helping individuals age safely at home.

Rehab professionals work independently as sole practitioners or as part of an interprofessional team with other rehab and health practitioners (e.g., nurse practitioners, geriatricians and other medical specialists) to develop and implement a coordinated and holistic plan of treatment for individuals. Rehab professionals may be assisted by rehab therapist assistants in supporting the delivery of rehab services. A rehab therapist assistant (e.g., occupational therapist assistant, physiotherapy assistant) can only work under the direction and supervision of the rehab professional. This is because the rehab professional is regulated and has the expertise to conduct assessments and develop treatment plans specific to the needs of individuals. Rehab therapist assistants help with the carrying out of treatment by assisting with particular tasks assigned and monitored by the rehab professional.[1, 2]

Rehab professionals include audiologists, dietitians, kinesiologists, occupational therapists, physiatrists, physiotherapists, psychologists, rehabilitation nurses, social workers and speech-language pathologists, as well as other regulated health professionals.

Audiologists are trained health professionals with knowledge and expertise in the prevention, identification, assessment, treatment and (re)habilitation of auditory and balance disorders; they provide care to all age groups. Untreated or improperly managed auditory dysfunction can have a profound impact at any age and can result in compromised speech, language, cognitive and social development in toddlers, poor academic performance in children, and isolation and depression in adults; inappropriate hearing aid amplification is very dangerous and can further damage residual hearing. Audiologists provide the following services:

- Provide comprehensive evaluation of auditory function
- Prescribe, fit and prescribe assistive hearing devices including hearing aids, sensory aids, alerting systems and captioning devices to maximize use of residual hearing, ensure safety and minimize impact of hearing impairments

- Provide counselling and aural (re)habilitative services (e.g., auditory skill development, speech reading, etc.) to maximize communicative function and benefits of amplification
- Evaluate and provide interventions for tinnitus and vestibular function

Source: The Ontario Association of Speech-Language Pathologists and Audiologists

Dietitians are experts in the science of nutrition to enhance lives and improve health across health care settings and in the community. For example:

- In hospitals, dietitians assess and plan nutrition care for patients who need special diets, including those with kidney disease, tube feeds, cancer and digestion issues.
- In doctor's offices, they provide counselling in areas such as cholesterol, diabetes, feeding young children, weight management and allergies.
- In long-term care homes and other facilities, they direct resident care and manage food systems, staff and budgets to provide safe and nutritious meals.

Source: Dietitians of Canada

Kinesiologists use human movement to treat and/or prevent musculoskeletal injuries or chronic conditions in order to improve physical performance, function, health and overall wellness. Kinesiologists assist with the prevention and management of chronic conditions through the use of education, physical activity, exercise-based strategies and behaviour change modifications.
They also engage in behaviour change techniques, counselling theories and strategies through exercise-based strategies that improve and foster positive mental health. Intake assessments are used alongside motivational interviewing to understand a client's physical and/or mental wellness. This allows the kinesiologist to create an individualized care plan that will assist the patient/client in reaching their health and wellness goals. Clinical kinesiology services include the following:

- Musculoskeletal assessment
- Postural evaluation and education
- Rehabilitative and functional re-training exercise
- Fitness conditioning for weight loss, cardiovascular training, and muscular development
- Diabetes management strategies
- Cardiac rehabilitation
- Cancer rehabilitation

- Stroke rehabilitation
- Mental health management
- Corporate wellness program design and implementation
- Hydrotherapy

Source: Ontario Kinesiology Association

Occupational Therapists, often called OTs, work with individuals of all ages whose ability to engage in daily activities have been hampered. This may be as a result of injury, illness, chronic disease, mental health issues, developmental delays, learning problems, aging or other health conditions. OTs, as regulated health professionals, work with their clients in a variety of settings (e.g., home, work, hospitals, clinics and schools) to:

- Promote health and well-being for people of all ages and across the spectrum of care
- Create solutions that help people do what they want, when and where they want
- Promote participation in productive and meaningful activities in daily life
- Enhance an individual's quality of life, and
- Empower individuals, allowing them to live life to its fullest

Source: Ontario Society of Occupational Therapists
Canadian Association of Occupational Therapists

Physiotherapists are skilled health professionals who assess, diagnose within scope, and analyze the impact of injury, disease, disorders, or lifestyle on movement and function. Physiotherapy is a health profession that promotes physical activity and overall health; prevents and rehabilitates disease, injury, and disability; and manages and improves acute and chronic conditions, activity limitations, participation restrictions and physical performance through intervention and education. Physiotherapists are trained to use diagnostics and assessment procedures and tools to develop and implement preventive and therapeutic courses of intervention to promote optimal mobility, physical activity and overall health and wellness. Physiotherapists work with people in one-on-one or group-based settings. They provide treatment in all health care settings in Ontario including hospitals, long-term care facilities, home care, community-based clinics, schools, private practice clinics and primary care networks. Working with patients, physiotherapists promote independence and prevent injuries and disability, addressing conditions such as:

- Heart and lung disease related sequelae
- Musculoskeletal injuries (sprains, strains, fractures)

- Stroke, brain injury, spinal cord injury
- Cancer related sequelae
- Incontinence and pelvic dysfunction
- Chronic pain and chronic conditions (e.g., diabetes, arthritis, osteoporosis)
- Pre-operative preparation and post-surgery recovery

Source: Ontario Physiotherapy Association
Canadian Physiotherapy Association

Physiatrists are physicians who specialize in physical medicine and rehabilitation, dealing with the evaluation and treatment of patients whose functional abilities have been impaired. The disabilities and impairments may result from injuries or diseases such as:

- Stroke
- Neuromuscular disorders
- Musculoskeletal disorders
- Cardiopulmonary diseases
- Arthritis
- Peripheral vascular disease
- Cerebral palsy

The physiatrist can help to improve a person's functional capabilities through medical treatment and by organizing and integrating a program of rehabilitation therapy such as physical, occupational, speech or psychological therapies, or social nursing, prosthetic, orthotic, engineering and vocational services.

Source: The Association of Academic Physiatrists cited in
Canadian Association of Physical Medicine & Rehabilitation

Psychologists specialize in understanding and treating normal and abnormal mental states, as well as perceptual, cognitive, emotional, and social processes and behaviour. They study how thoughts, attitudes, emotions and relationships inform our mental states and behaviour. They also study how different regions of the brain affect behaviour, thoughts, emotions, perceptions, social interactions and cognition (thinking skills). They do this by engaging in research, implementing research into assessment techniques (i.e., standardized testing) and into treatment techniques (i.e., psychotherapy techniques) as well as teaching. They work with individuals, groups, families as well as in larger organizations such as hospitals, schools, correctional institutions and other related

government institutions as well as in industry. Psychologists work on improving mental and cognitive health. Some of their research and practice areas include but are not limited to:

- psychological factors and problems associated with physical conditions and disease (e.g. diabetes, heart disease, stroke)
- psychological factors and management of terminal illnesses
- cognitive functions such as learning, memory, problem solving, intellectual ability and performance
- the perception and management of pain
- mental health problems such as depression, anxiety, phobias
- neurological, genetic, psychological and social determinants of behaviour
- brain injury, degenerative brain diseases
- developmental and behavioural abilities and problems across the lifespan
- addictions and substance use and abuse (e.g. smoking, alcohol)
- stress, anger and other aspects of lifestyle management

Source: Ontario Psychological Association

Rehabilitation nursing is focused on patients and families. It acknowledges and witnesses the patient/family experience, enables patients and families to adapt to illness and injury and uses therapeutic communication and integration of therapeutic skills in activities of daily living as a way to make a difference to rehabilitation outcomes. All nurses in rehabilitation must have specialized knowledge and skills, specific to the patient population being served.

Source: Personal Communication - Irene Simpson, President, Ontario Association of Rehabilitation Nurses

Social workers help people get the most out of their relationships, work and community life. They help with identifying the source of stress or problems, strengthening coping skills and finding effective solutions for issues such as:

- Adjusting to life crises
- Pressures related to being a caregiver
- Managing stress, anxiety and depression
- Grief and loss
- Helping people connect to resources and find where to get help
- Relationship issues

- Addictions

Social workers provide a variety of services including but not limited to: individual, family and couple assessment and counselling; psychotherapy; vocational assessments/rehabilitation; stress management; counselling for eating disorders; and grief, loss and trauma counselling.

Source: Ontario Association of Social Workers

Speech-language pathologists are professionals with specialized knowledge, skills and clinical training in assessment and management of communication and swallowing disorders. Speech, language and associated cognitive disorders can adversely affect academic performance, workforce integration, and social interaction. Individuals with untreated swallowing disorders can find themselves at risk of dehydration, malnutrition, and pulmonary compromise. Areas assessed and managed by speech-language pathologists include the following:

- Language disorders to improve ability to understand spoken and written language, convey ideas verbally and in writing, and communicate in social situations
- Cognitive communication disorders to improve the reasoning, problem solving, memory and organization skills required to communicate effectively
- Speech disorders to improve articulation (pronunciation) and to help those who stutter improve their fluency
- Swallowing disorders to ensure that patients/clients are on safe diets and not at increased risk for choking or food/liquid build-up in the lungs

Source: The Ontario Association of Speech-Language Pathologists and Audiologists

The Ontario Ministry of Health provides additional information on other regulated health providers. To learn more about the individual scopes of practice and controlled acts available to each profession, see the Regulated Health Professionals Act and the Social Work and Social Service Work Act, 1998.

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Section 4: Rehab in primary care

REHAB IN PRIMARY CARE

In this section:

- Introduction
- Patient and system-level benefits of rehabilitative care
- Rehabilitative care considerations
  - Rehab post injury/illness
  - Rehab for progressive/chronic conditions
  - Rehab for prevention
- References

INTRODUCTION

Primary care is one element within the primary health care model. While primary health care refers to an approach that encompasses a broad spectrum of services that contribute to health (e.g., income, housing, employment, etc.), primary care refers to services that are specifically focused on health, including those aimed at health promotion, illness and injury prevention, and the diagnosis and treatment of illness and injury.[1] There are several different approaches to delivering primary care services, some of which include access to interprofessional teams (e.g., family health teams and community health centres).[2,3]

As the first point of entry into the health care system for clients, primary care can play a large role in connecting individuals to rehabilitative care services to support health promotion and maintenance, disease and fall prevention, management of chronic conditions/illnesses as well as assessment and treatment of impairments as a result of injury, illness and or hospitalization. Rehab professionals include audiologists, dietitians, kinesiologists, occupational therapists, physiatrists, physiotherapists, psychologists, rehabilitation nurses, social workers, speech-language pathologists, as well as other regulated health professionals as described in Section 3: About rehab professionals.

Health care providers working within primary care can find information on rehabilitative care programs and services at rehabcareontario.ca. This resource, developed by the Rehabilitative Care Alliance, provides information on rehabilitative care for specific conditions and regions across Ontario.

PATIENT AND SYSTEM-LEVEL BENEFITS OF REHABILITATIVE CARE

The following are examples of the role that rehabilitative care can play in primary care to achieve patient and system level benefits.

- **Patients with chronic conditions** are high users of health care, and although they may be a small proportion of the family physician's caseload, they require a disproportionate amount of time owing to the complexity of their conditions and the need for intensive management, case coordination, coaching and support.[4] In Canada, 70% of Canadians 45 years or over have two or more chronic diseases and 80% of adult visits to general practitioners (GPs) in Canada are due to chronic disease management.[5] Patients with chronic diseases often have more functional impairments and fluctuations in their health than other patients and require more care coordination. These patients require fully integrated care using a team-based approach involving primary care and rehabilitation professionals.[4] Rehabilitative care has been shown to be effective in the prevention and management of chronic conditions (e.g., hypertension, emphysema, Type 2 Diabetes, Parkinson's, multiple sclerosis, arthritis) and optimizing quality of life.[6] Regular exercise, which is often prescribed as part of a rehabilitative treatment plan, is widely accepted as an essential lifestyle behaviour that contributes to chronic disease prevention and management.[7]

- **Patients with a cancer diagnosis** are now living longer. As survival rates for many types of cancer increase, many cancer diagnoses can be viewed as a chronic illness involving multiple phases. Accordingly, the expectations of patients have shifted as well; patients want to live a full and active life. As the population ages, the incidence rate for cancers is expected to rise, and older patients often have multiple comorbidities and higher risk of disability.[8] It is expected that two in five Canadians will develop cancer in their lifetimes.[9] Rehabilitative care is an essential core component to cancer care.[10] It can address the symptoms and functional issues that may arise from the illness and/or its treatment. [8]. Common symptoms include pain, weakness, lymphedema, anxiety and depression, loss of mobility and independence, fatigue and sleep disruption — all of which affect an individual's ability to participate in self-care, activities of daily living, daily routines, work and avocational activities. These can be improved through rehabilitative care.[8] Symptoms including anxiety and depression, fatigue, physical

functioning and quality of life have shown improvement in cancer patients who are prescribed and/or participate in various forms of exercise.[11, 12]

- **Seniors experiencing falls** accounted for 81% of injury-related hospitalizations among seniors over 65 years of age in 2017/18.[13] Rehabilitative care in the forms of multifactorial risk assessment, multiple-component group and home-based exercise programs, and home safety assessment and modifications are effective in reducing the rate and/or risk of falls.[14] Long-term exercise (i.e., over one year or more) significantly reduces the risk of falls and injurious falls in individuals 60 years or older.[15] Structured exercise intervention that is tailored to the individual's physical functioning and interests reduces the risk of falls.[16]

- **Patients with dementia** can also benefit from rehabilitative care. Studies have shown the effectiveness of occupational therapy for individuals with mild to moderate dementia living at home. An occupational therapist can evaluate the impact of impairments on activities of daily living, modify the home environment, teach compensatory strategies and also train caregivers on effective supervision methods. Psychosocial counselling with caregivers has been shown to delay the need for nursing home placement for people with dementia.[17] It has also been shown that individuals with hearing loss have an increased rate of developing dementia and a more rapid rate of cognitive decline.[18] Audiologists therefore play an important role in mitigating the effects of hearing loss by conducting hearing assessments, prescribing hearing aids and providing education on hearing impairment and the wearing of hearing aids. There is some emerging evidence suggesting that physical exercise may be helpful for increasing executive function in older adults with Alzheimer's Disease who live in the community.[19]

- **Patients with low back pain** who have early access to physiotherapy for the treatment of non-specific lower back pain reduce the use of high cost medical services (i.e., imaging services, radiography and ED visits) and overuse of pharmacological treatment. Individuals with early access to physiotherapy had an 89% lower likelihood of receiving an opioid prescription**.** As lower back pain is reported as the most common type of pain experienced by patients in the U.S. and the highest contributor to years lived with a disability, early access to rehabilitative care provided by a physiotherapist benefits the patient and the health care system. [20]

- **Seniors wishing to age in place** can benefit from individualized rehabilitative care services, such as occupational therapy, to increase or maintain their level of independence with activities of daily living (e.g., dressing, bathing, toileting, walking) and

instrumental activities (e.g., shopping, food preparation) and also reduce the need for conventional home care supportive services. The focus of the rehabilitative care services may include optimizing strength, balance and endurance; supporting chronic disease self-management; providing nutrition management; identifying assistive devices and modifications to the home environment to increase safety; and providing strategies to reduce social isolation.[20, 21] In addition, individualized exercise prescription and programing facilitates optimal physical functioning in older adults.[22]

- **Patients with musculoskeletal conditions** can benefit from physiotherapy assessment and treatment, as well as kinesiology interventions and exercise conditioning. Experienced physiotherapists have been shown to be more knowledgeable in the management of musculoskeletal conditions than medical students, physician interns and residents, and all physician specialists excluding orthopaedists.[23] Physiotherapy treatment has been shown to reduce or eliminate neck pain, muscle weakness and loss of stability. [24, 25] It can reduce disability, promote recovery from injury and reduce the risk of re-injury and sports-related injuries. Exercise therapy as a physiotherapeutic rehabilitation intervention reduces pain and improves activities of daily living in patients with musculoskeletal pain. It has also been shown to decrease workplace claims and loss of worktime and increase physical functioning and earlier return to work. [24, 26] Kinesiologists who provide exercise intervention and conditioning promote safe movement mechanics, lowering the rate of injury and re-injury.[27]

- **Integration of a physical therapist into primary health care benefits patients, providers and the overall system.** Patient access to physiotherapy in community health centres has resulted in improved function, reduced pain, high satisfaction rates (≥ 96% satisfied/very satisfied) and increased access to physiotherapy services. From a provider and system perspective, the presence of physiotherapy within primary care has resulted in a high rate of satisfaction among physicians and nurse practitioners (97%), a reduction in the number of appointments with physicians and nurse practitioners for pain medication and/or reduced function and mobility (76%); a reduction in pain medication prescriptions (58%); and more appropriate referrals to specialists (76%).[25] Providing direct access to physiotherapists in primary care as the first point of contact for simple to complex musculoskeletal conditions has been shown to reduce the need for primary care involvement [29] and costly investigations (e.g., MRIs).[30]

REHABILITATIVE CARE CONSIDERATIONS

Rehab post-injury/illness

Rehab post-injury or illness	
Patient characteristics	Examples of patients seen in primary care post-injury or illness: • Patients who have experienced a sudden onset, life-altering disability who may or may not have required hospitalization • Patients following injury or surgical procedure who have functional impairments resulting in decreased function (e.g., in activities of daily living, mobility, communication, cognition, swallowing)
Patient population examples	Patient populations include, but are not limited to those who have experienced: • Brain injury, stroke, cancer, spinal cord injury, musculoskeletal conditions/injuries, multi-system complex health conditions, falls/fractures, work-related injuries
How rehab can help	• The role of rehab may include providing assessment and treatment of ongoing functional impairments and optimizing community reintegration and overall quality of life. This may include, but is not limited to: o Assessing and developing treatment plan to address functional impairments, as needed o Linking patients with wellness/health promotion programs o Promoting adaptation of/to the home environment o Increasing self-management skills o Providing patient/caregiver education to enhance coping with impairments, activity limitations and participation restrictions. Note: For patients who are being seen in primary care following hospital discharge, primary care should confirm with patients whether they have had any rehabilitative care already or if rehab referrals have been initiated. • For information on the role of rehab in inpatient settings, see Section 5 of the primer. • For information on the role of rehab in community-based settings, see Section 6 of the primer

Rehab post-injury or illness	
Rehabilitative care considerations / recommendations	See Appendix A: Primary care rehabilitative care considerations

Where to access rehab	Information on rehabilitative care programs and services can be found on the Rehabilitative Care Alliance's rehabcareontario.ca website. Information can be found for specific regions.
	
	For information pertinent to rehabilitative care post-injury or illness, look for information under the following categories:
	• Hospital-based outpatient rehabilitative care and subcategories such as:
	  o Hospital-based outpatient therapy
	  o Specialized clinics and services
	• Community-based rehabilitative care and subcategories as applicable. In-home rehabilitative care can also be found under this category.
	• Condition or population-based rehabilitative care

Rehab for progressive/chronic conditions

Rehab for progressive/chronic conditions	
Patient characteristics	• Patients with a chronic disease/condition or multi-system complex conditions • Patients may be experiencing a flare-up or worsening of symptoms due to a debilitating event or progressive condition • Caregiver strain or burnout should be taken into consideration
Patient population examples	• Patients with a chronic disease or condition (e.g., arthritis, pain syndrome, diabetes, chronic obstructive pulmonary disease, congestive heart failure and coronary arterial disease, certain types of cancer, multiple sclerosis and other neurological conditions etc.)

Rehab for progressive/chronic conditions	
How rehab can help	• Assess impairments or disability • Triage for the need for surgical assessment and/or specialist referral • Provide consultation regarding patient's functional needs/status • Provide treatment to improve, develop or restore lost or impaired function and reduce risk of hospitalization • Provide intermittent re-assessment/treatment and/or periodic oversight to maintain and/or prevent further decline • Increase self-management skills and assist patient in optimizing independence, maintaining activity and quality of life • Assess need for and use of assistive devices • Provide education to caregivers on illness/condition and provide strategies to optimize their support efforts and lower stress
Rehabilitative care considerations / recommendations	See Appendix A: Primary care rehabilitative care considerations

Where to access rehab	Information on rehabilitative care programs and services can be found on the Rehabilitative Care Alliance's rehabcareontario.ca website. Information is available for specific regions.
	
	For information pertinent to rehabilitative care for progressive/chronic conditions, look for information under the following categories:
	• Hospital-based outpatient rehabilitative care and community-based rehabilitative care. Subcategories include:
	  o Hospital-based outpatient therapy and community-based therapy
	  o Prevention and education
	  o Specialized clinics and services
	• Condition or population-based rehabilitative care

Rehab for Prevention

Rehab for prevention	
Patient characteristics	• Seniors with multiple co-morbidities and complex health needs • Patients presenting with a change in functional status or functional decline or would benefit from prevention of re-injury of an MSK issue • Individuals living in the community (home, retirement homes, LTCHs) who have functional goals that can be met by participating in group intervention, including falls prevention classes
Patient population examples	• Seniors with multiple co-morbidities and complex health needs may be at risk for falls • Patients presenting with a change in functional status or functional decline who may be at high risk of not living independently
How rehab can help	• For seniors at risk of falls, rehabilitative care involves conducting a physical and cognitive examination in addition to an individualized risk assessment (e.g., review of environmental hazards) and using the findings, as needed, to prescribe an exercise program (e.g., strength training, balance and gait training); advise on the use of assistive devices; and provide education on how to improve environment safety, change positions safely, manage weather conditions and reduce the fear of falling. • Patients who may be at high risk of permanent loss of living independently in the community or of institutionalization if nothing is done, may benefit from a coordinated rehabilitative care approach to address a change in functional status. The RCA's Direct Access Priority Process supports early identification of individuals with restorative potential who require inpatient rehabilitative care and facilitates referrals directly from the community. • Rehabilitative care can be provided to maintain and/or to prevent a decline in functional/clinical status as a result of de-conditioning, a health condition, pain or aging. It can help to optimize independence, reduce the risk of injury and maximize overall quality of life. This may include, but is not limited to: o Linking patients with wellness/health promotion programs o Assessing barriers/risks to patient's ability to maintain independence o Promoting adaptation of/to the home environment

Rehab for prevention	
	○ Increasing self-management skills ○ Providing patient/caregiver education to enhance coping with impairments, activity limitations and participation restrictions.
Rehabilitative care considerations / recommendations	RCA pathway to rehabilitative care for frail older adults presenting to Primary Care post-fall RCA's Direct Access Priority Process RCA checklist to rule out acute cause of recent functional decline NICE guideline-falls in older people: assessing risk and prevention (June 2013) See also Appendix A: Primary care rehabilitative care considerations
Where to access rehab	Information on rehabilitative care programs and services can be found on the Rehabilitative Care Alliance's rehabcareontario.ca website. Information can be found for specific regions and conditions. For information pertinent to rehabilitative care for prevention, look for information under the following categories: • Community-based or hospital-based rehabilitative care ○ Rehabilitative care: community-based prevention and education ○ Rehabilitative care: specialized clinics and services • Community-based rehabilitative care ○ Rehabilitative care: fall prevention programs • Condition or population-based rehabilitative care

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Section 5: Rehab in inpatient settings: acute and post-acute

REHAB IN INPATIENT SETTINGS

In this section:

- Introduction
- Patient and system-level benefits of rehabilitative care
- Rehabilitative care considerations
  - Rehab post-injury/illness
  - Rehab for progressive/chronic conditions
  - Rehab for prevention
- References

INTRODUCTION

This section refers to rehabilitative care that is provided in inpatient settings. In the inpatient acute care setting, rehabilitative care is primarily focused on assessing and initiating treatment of the rehabilitative care needs of patients, providing patient/caregiver education and assisting with transition planning. Early intervention in the acute care setting has been shown to reduce length of stay, reduce hospital-associated deconditioning and increase the likelihood of discharge to home. In the inpatient rehab and complex continuing care setting, the focus is delivering more intensive and frequent rehabilitation using a coordinated, interprofessional approach to enable individuals with impairments and disabilities to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels.[1]

To find information on inpatient rehabilitative care programs and services, refer to the Rehabilitative Care Alliance's resource, rehabcareontario.ca. Information can be found for specific conditions and regions across Ontario.

PATIENT AND SYSTEM-LEVEL BENEFITS OF REHABILITATIVE CARE

The following are examples of the role that rehabilitative care can play in acute and post-acute (rehab and complex continuing care) inpatient settings to achieve patient and system level benefits.

- **Early assessment and intervention by rehabilitative care professionals** within a hospital setting is important for a number of reasons. It serves to identify the patient's baseline status and functional deficits (e.g., physical, cognitive, communication) and psychosocial situation; inform an early discharge planning process; and activate a process for providing support and education to patients and caregivers regarding the patient journey ahead.[2]

- **Early rehabilitative care in acute care can reduce length of stay**. For example, the length of stay for seniors admitted following isolated hip fracture can be reduced by more than 10 days when early rehabilitative care is provided. Reduced length of stay in turn has a positive effect on overall patient flow.[3] From a systems perspective, about 13,000 people living in Ontario experience a hip fracture every year and the health care expenditures associated with hip fracture are substantial, accounting for nearly $500 million of health care spending per year in Ontario. Rehabilitative care programs have been shown to improve patient outcomes, including functional status, leg strength, health status, balance, mobility, instrumental activities of daily living and social functioning.[4]

- **Early rehabilitative care in acute care can increase likelihood of discharge to home.** Rehabilitation consisting of occupational therapy and other rehabilitative care services provided to patients with various conditions (e.g., stroke, spinal cord, arthritis, cardiovascular disease, orthopaedic dysfunction, neurological disorders, etc.) who were admitted to acute care resulted in more discharges to the home environment. From a patient perspective, discharge to home maintains involvement with family and community and supports overall quality of life. From a systems perspective, discharge to home reduces the demand for long-term care home placement.[5]

- **Early mobilization of acute care patients, assessment of functional status and provision of multidisciplinary exercise interventions result in positive patient and system level outcomes.** Functional decline, rapid loss of muscle strength (i.e., up to 5% per week) and reduced ability to ambulate independently are common in seniors who are hospitalized and spend the majority of their days in bed. Reducing the risk of such hospital-acquired functional loss through early mobilization, assessment and a multidisciplinary rehabilitative care has been shown to decrease length of stay, ALC days, risk of depression

and the duration of delirium. It also improves patients' functional and cognitive status and increases their rate of discharge to home.[6]

- **Early rehabilitative care involvement pre-operatively and in the acute care phase prepares patients and caregivers** for surgery and the trajectory of functional recovery, the rehabilitation process and the transition to the next phase of the recovery process.[7, 8]

- **Following a stroke, patients benefit from early, intensive stroke rehabilitation** in both the acute and subacute stage of stroke. Stroke rehab helps to improve arm and leg motor recovery and language and communication function, which in turn improves mobility, independence in self-care and participation in leisure activities. Best outcomes are achieved in stroke-specific units where rehabilitative care is provided by a multidisciplinary team of stroke specialists who offer comprehensive and intensive services to patients, often with the involvement of the caregiver.[2]

- **Inpatient rehabilitative care provided by an interprofessional team using a focused, coordinated approach improves functional outcomes**. The benefits of inpatient rehab on improving functional outcomes (e.g., mobility, self-care, cognition, quality of life, etc.) have been shown for patients of various diagnoses. These include, but are not limited to, patients with acquired brain injury, stroke, spinal cord injury and multiple sclerosis, Guillain-Barré syndrome, multiple sclerosis, Parkinson's disease and stroke, and hip fracture with or without dementia.[9, 10, 11, 12, 13] The incidence of hip fractures in Canada is projected to increase four-fold by 2041, with 31-51% of individuals with hip fracture experiencing dementia and/or delirium. Access to inpatient rehabilitation programs with expertise in treating patients with cognitive deficits will benefit not only these patients (by improving their functioning) but also the health care system (by reducing length of stay in acute care).[14]

- **Occupational therapy assessment and treatment is associated with lower readmission rates** for patients admitted with heart failure, pneumonia and acute myocardial infarction. Occupational therapists assess the functional needs of complex patients and help inform effective discharge planning by determining whether patients can be safely discharged home or need further rehabilitation, assessing whether they require assistive devices to assist with performing activities of daily living (e.g., long-handled reachers and shoehorns, elevated commode seats, specialized eating utensils, etc.) and providing training to patients and caregivers on strategies to manage basic needs**.**[15]

- **Speech-language pathology interventions address the most prevalent communication difficulties in patients with an acquired brain injury: cognitive-communication disorders.** The reported incidence rates of cognitive-communication disorders are as high as 80-100%. These disorders are defined as difficulties in communication (listening, speaking, gesturing, reading, writing, conversational interaction) resulting from cognitive impairments (attention, memory, organization, reasoning, executive function) and impaired behavioural-self regulation.[16]

REHABILITATIVE CARE CONSIDERATIONS

Rehab post-injury/illness

Rehab post-injury or illness	
Patient characteristics	Examples of patients seen in inpatient acute or post-acute beds following injury or illness: • Patients who have experienced a sudden onset, life-altering disability and were admitted to an acute care hospital • Patients who are deconditioned as a result of illness or a complicated/extended hospital stay • Patients with complex medical needs and/or a history of recurrent hospital admissions
Patient population examples	Patient populations include, but are not limited to: • Frail seniors who until recently were able to live independently in the community • Patients admitted to hospital for treatment of illness or injury such as: o Brain injury, cardiopulmonary conditions, stroke, cancer, peripheral vascular disease, acute respiratory conditions (flu, pneumonia), complications as a result of cancer treatment, falls/fractures, spinal cord injury, work related injuries, burns, amputations
How rehab can help	Rehabilitative care begins with a comprehensive assessment. • Providing an early assessment, education and advice pre-operatively prepares the patient/caregiver for the consequences of surgery on function and stages of recovery (e.g., for patients requiring an

Rehab post-injury or illness	

	amputation, patients requiring total joint replacement). Where possible, pre-operative assessment is conducted before admission.
	• The assessment serves to identify functional loss/decline, restorative potential and the impact of impairments on daily functioning:
	  o Functional impairments affecting mobility, performance of activities of daily living (ADLs) and instrumental ADLs, cognition and cognitive-communication, swallowing, safety
	  o Need for assistive devices and/or environmental modifications
	• Assessment findings are used to develop individualized treatment plans; plans to support early discharge from acute care hospital, or discharge plans from inpatient rehab to support and maximize re-integration to community.
	
	Interventions are provided to improve, develop or restore function and may include, but are not limited to:
	• Supporting early mobilization and ability to move/transfer
	• Improving balance, lower/upper extremity strength and increasing coordination
	• Improving seating and positioning
	• Addressing cognitive-communication deficits to improve reasoning, problem-solving, memory and organization skills required to communicate effectively
	• Providing recommendations and treatment to address swallowing disorders and speech disorders
	• Prescribing assistive devices to support participation in activities of daily living, reduce pain and improve overall quality of life
	• Providing compensatory strategies, recommendations for environmental modifications and training to increase, maintain or improve functional capabilities and minimize impact of functional impairments
	• Ensuring sufficient nutrition and providing nutritional recommendations
	• Enhancing coping of patient/caregivers including emotional functioning and adjustment to a condition/illness and its psychosocial consequences

Rehab post-injury or illness	
	• Providing patient/caregiver education to enhance coping with impairments, activity limitations and participation restrictions
Rehabilitative care considerations / recommendations	There are a number of frameworks and resources that outline rehabilitative care best practices for particular populations. For example, see: • RCA Total Joint Replacement Framework • RCA Guidance for post Shoulder Arthroplasty • RCA Hip Fracture Framework • Frail Senior/Medically Complex Compendium • Canadian Stroke Best Practices The RCA's Definitions Framework for Bedded Levels of Rehabilitative Care outlines the key components of bedded levels of rehabilitative care including the patient characteristics, medical/nursing/rehab resources and therapy intensity for each level. The framework also includes eligibility criteria for the bedded levels, including a definition for restorative potential. See also Appendix B: Acute and post-acute inpatient rehabilitative care considerations

Where to access rehab	Information on rehabilitative care programs and services can be found on the Rehabilitative Care Alliance's rehabcareontario.ca website. Information can be found for specific regions.
	
	For information pertinent to rehabilitative care post-injury or illness, look for information under the following categories:
	• Inpatient rehabilitative care. Subcategories include:
	  o Rehabilitative care – activation/restoration
	  o Rehabilitative care – complex medical management – short and long term
	  o Rehabilitative care – high intensity
	  o Rehabilitative care – low intensity
	• Condition or population-based rehabilitative care

Rehab for progressive/chronic conditions

Rehab for progressive/chronic conditions	
Patient characteristics	• Patients with a chronic disease/condition • Patients experiencing a worsening of symptoms due to a debilitating event or progressive condition • Caregiver strain or burnout should also be taken into consideration
Patient population examples	• Patients with a chronic disease or condition (e.g., arthritis, pain syndrome, chronic obstructive pulmonary disease, congestive heart failure and coronary arterial disease, failure to thrive, multiple sclerosis, neurological conditions and others)
How rehab can help	• Assess impairments or disability resulting from acute exacerbation • Provide treatment to improve, prevent or slow deterioration in functioning in areas of a person's life, develop or restore lost or impaired function • Provide consultation regarding patient's functional needs/status and recommendations to maintain and/or prevent further decline • Increase self-management skills and assist patient in optimizing independence, maintaining activity and quality of life • Assess need for and use of assistive devices • Provide education to caregivers on illness/condition and provide strategies to optimize their support efforts and lower stress
Rehabilitative care considerations / recommendations	See Appendix B: Acute and post-acute inpatient rehabilitative care considerations
Where to access rehab	Information on rehabilitative care programs and services can be found on the Rehabilitative Care Alliance's rehabcareontario.ca website. Information can be found for specific regions. For information pertinent to rehabilitative care for progressive/chronic conditions, look for information under the following categories:

Rehab for progressive/chronic conditions	
	• Hospital-based outpatient rehabilitative care and community-based rehabilitative care Subcategories include: o Hospital-based outpatient therapy and community-based therapy o Prevention and education o Specialized clinics and services • Condition or population-based rehabilitative care

Rehab for prevention

Rehab for prevention	
Patient characteristics	• Seniors who present in emergency department with a potentially reversible functional/loss for whom home- and/or ambulatory–based rehabilitative care is not a safe, effective or available option, and who are at risk of institutionalization (acute care or LTC) if nothing is done (See RCA's Direct Access Priority Process) • Patients with multiple co-morbidities and complex health needs may be at risk of falls • Caregiver strain or burnout should also be taken into consideration
Patient population examples	• Frail seniors • Caregivers of patients with changes in functional status and/or complex needs
How rehab can help	• In an acute care setting, a rehabilitative care assessment can help inform recommendations for preventing a decline in functional/clinical status, which may be as a result of de-conditioning, a health condition, pain or aging. Rehabilitative care involvement may include, but is not limited to: o Identifying treatment plan as needed o Providing patient/caregiver education to enhance coping with impairments, activity limitations, participation restrictions and to put in place supervision strategies

Rehab for prevention	
	○ Linking patients/caregivers to community programs, wellness/health promotion programs and other resources ○ Assessing barriers/risks to patient's ability to maintain independence ○ Promoting adaptation of/to the home environment ○ Increasing self-management skills
Rehabilitative care considerations / recommendations	RCA Pathway to rehabilitative care for frail older adults presenting to ED post-fall RCA's Direct Access Priority Process RCA Checklist to rule out Acute Cause of Recent Functional Decline NICE Guideline-Falls in older people: assessing risk and prevention (June 2013) See also Appendix B: Acute and post-acute inpatient rehabilitative care considerations
Where to access rehab	Information on rehabilitative care programs and services can be found on the Rehabilitative Care Alliance's rehabcareontario.ca website. Information can be found for specific regions. For information pertinent to rehabilitative care for prevention post-discharge from acute care or inpatient rehab, look for information under the following categories: • Community-based or hospital-based rehabilitative care ○ Rehabilitative care: community-based prevention and education ○ Rehabilitative care: specialized clinics and services • Community-based rehabilitative care ○ Rehabilitative care: fall prevention programs • Condition or population

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Section 6: Rehab in home and ambulatory settings

REHAB IN HOME AND AMBULATORY SETTINGS

In this section:

- Introduction
- Patient and system-level benefits of rehabilitative care
- Rehabilitative care considerations
  - Rehab post-injury/illness
  - Rehab for progressive/chronic conditions
  - Rehab for prevention
- References

INTRODUCTION

Community-based rehabilitation (in-home and ambulatory settings) is focused on enabling individuals with impairments and disabilities to reach and maintain their optimal physical, sensory, intellectual, communicative, psychological and social functional levels. This focus promotes health and well-being, re-integration to and participation in community living and serves to optimize quality of life.[1] It is delivered in ambulatory settings (hospitals, community clinics or health centres) or in the home and is provided by or under the supervision of a regulated rehabilitative care professional or an integrated, interprofessional team of regulated health professionals in an individual, group or virtual format. Home-based rehabilitative care for the purpose of progressing rehabilitative care goals or the maintenance of functional status is typically restricted to patients who are unable to access the services in a setting outside of the home due to their condition[2] or a lack of supports to access care outside the home (e.g., lives alone, lengthy distance from rehab provider, etc.).

Individuals might need community-based rehabilitative care to assess and treat functional impairments following an injury or surgical procedure or the sudden onset of a life-altering disability. For patients with a debilitating or progressive chronic condition, rehabilitative care can help when there are flare-ups or a worsening of symptoms. Rehabilitative care can also be provided to

maintain and/or to prevent a decline in a person's functional/clinical status because of de-conditioning, a health condition, pain or aging. It can help to optimize independence, reduce the risk of injury and maximize overall quality of life.

For information on the role of specific rehabilitative care professionals, see Section 3: About rehab professionals

To find information on rehabilitative care programs and services, refer to the Rehabilitative Care Alliance's rehab portal, rehabcareontario.ca. Information can be found for specific conditions and regions across Ontario.

PATIENT AND SYSTEM-LEVEL BENEFITS OF REHABILITATIVE CARE

The following are examples of the role that rehabilitative care can play in home and community/ambulatory settings to achieve patient and system level benefits.

- **Ambulatory pulmonary rehabilitation is more cost-effective than in-home programs.** Centre-based pulmonary rehabilitation is preferred for its access to exercise equipment, additional psychosocial support provided in a group setting, and access to a multidisciplinary team and specialists.[3]

- **Home-based pulmonary rehabilitation may be recommended if there are barriers to participation in centre-based programs, including situations of limited resources and availability.** The services should be consolidated under the role of a single health care professional with expertise in pulmonary rehabilitation. All patients receiving home-based pulmonary rehabilitation should have a formal program of home exercise developed.[3]

- **Early supported discharge to rehabilitative care in the home is recommended for patients recovering from mild to moderate stroke;** it is intended as an alternative to a complete course of inpatient rehabilitation and may serve as a transition point to ambulatory or community stroke rehabilitation. Services should be provided five days per week at the same level of intensity as in the inpatient setting.[4]

- **Ambulatory rehabilitation or home-based rehabilitation is recommended for individuals recovering from a mild stroke.** However, factors that must be taken into consideration include: age, the availability of a caregiver, the severity of cognitive/perceptual needs, the presence of severe aphasia/dysphagia and profound inattention/neglect.[4]

- **Ambulatory rehab is recommended for most patients following joint replacement.** Ambulatory rehab provides access to specialized equipment and a team-based interprofessional approach, as well as the opportunity to provide rehabilitative care using a group modality that provides patients with a supportive, social environment. As such, it is more cost-efficient than home-based therapy.[5] The optimal location for community rehabilitative care following total and hemi shoulder and reverse arthroplasty is in an outpatient ambulatory setting.[6]

- **Timely access to specialized ambulatory rehabilitation** is recommended for individuals with ongoing disability after traumatic brain injury to facilitate continued progress and successful community reintegration.[7]

- **A systematic referral to community programs for cardiac rehabilitation is vital** in improving patient's participation in supervised exercise programs. Cardiac rehabilitation services provided through an integrated interprofessional team, led by a program manager is strongly recommended for patients with coronary artery disease, particularly those with multiple modifiable risk factors. In order for patients to obtain optimal benefit from exercise programs, cardiac rehabilitation should commence within 30 days of hospital discharge.[8]

- **Patients who have experienced a hip fracture** and who are medically stable, cognitively intact, and able to mobilize short distances benefit from early supportive discharge to home supported by a community-based rehabilitation program.[9] Rehabilitative care programs for patients with hip fracture have been shown to improve patient outcomes, including functional status, leg strength, health status, balance, mobility, instrumental activities of daily living and social functioning.[10] Key components of community-based rehabilitation for patients following hip fracture include: education on safety and falls prevention; training to improve independence in self-care, transfers, ambulation and activities of daily living; balance and gait training; the provision of a progressive strengthening exercise program and information regarding environmental modifications.[11]

- **Patients with chronic conditions benefit from rehabilitative care.** These patients are high users of health care; in Canada, 70% of Canadians 45 years or over have two or more chronic diseases and 80% of adult visits to GPs in Canada are due to

chronic disease management.[12] Rehabilitative care has been shown to be effective in the prevention and management of chronic conditions (e.g., hypertension, emphysema, Type 2 Diabetes, Parkinson's, multiple sclerosis, arthritis) and optimizing quality of life.[13]

- **Cognitive rehabilitation and cognitive training is recommended for patients who have undergone cancer treatment** in a community-based (and/or inpatient program) to help patients improve their cognitive skills and find ways to cope with cognitive problems. Up to 75% of patients with a cancer diagnosis experience cognitive problems during treatment, and 35% have issues that continue for months after treatment has finished. Occupational therapy and vocational rehabilitation is recommended to help people with activities of daily living and job-related skills.[14] Rehabilitative care can also address the functional issues that may arise from the illness and/or the treatment. Common symptoms include pain, weakness, lymphedema, anxiety and depression, loss of mobility and independence, fatigue and sleep disruption — all of which affect an individual's ability to participate in self-care, ADLs, daily routines, work and avocational activities and can be improved through rehabilitative care.[15]

- **Seniors experiencing falls** accounted for 81% of injury related hospitalizations among seniors over 65 years of age in 2017/18.[16] Rehabilitative care in the forms of multifactorial risk assessment, multiple-component group and home-based exercise programs, and home safety assessment and modifications, are effective in reducing the rate and/or risk of falls.[17] It is also important to note that hearing loss is one of the risk factors for falls with the risk factor increasing substantially relative to small increments of hearing loss (i.e., 140% increased risk for every 10 decibels of hearing loss).[18] Approximately one-third of older adults who fall also report hearing difficulties.[19] Age-related changes can also include poorer balance due to changes in the vestibular system. Audiologists play a key role in the assessment and management of hearing and vestibular function.[19]

- **Seniors wishing to age in place** can benefit from individualized rehabilitative care services, such as occupational therapy, to increase or maintain their level of independence with activities of daily living (e.g., dressing, bathing, toileting, walking) and instrumental activities (e.g., shopping, communicating with family and friends, food preparation) and also reduce the need for conventional home care supportive services. The focus of the rehabilitative care services may include optimizing strength, balance and endurance; chronic disease self-management; nutrition management; identifying assistive devices and modifications to the home environment to increase safety; and providing strategies to reduce social isolation.[20, 21]

- **Provision of specialized, coordinated, interprofessional acquired brain injury (ABI) in-home rehabilitation services results in better outcomes than generic services.** In a two-year follow-up study, persons receiving the specialized ABI rehabilitative care services had improved health status and community integration when compared to baseline. Those who received generic rehab services (i.e., not specialized in ABI) showed greater disability and received fewer rehab therapy services.[22]

- **Patients with musculoskeletal conditions** benefit from physiotherapy assessment and treatment in ambulatory care settings. Physiotherapy has been shown to reduce or eliminate neck pain, muscle weakness and loss of stability.[23, 24] It can also reduce disability, promote recovery from injury and can reduce the risk of re-injury and sports-related injuries. Exercise therapy as a physiotherapeutic rehabilitation intervention reduces pain and improves activities of daily living in patients with musculoskeletal pain. It has also been shown to decrease workplace claims and loss of work time and increase physical functioning and earlier return to work. [23] Exercise intervention and conditioning provided by kinesiologists promotes safe movement mechanics, lowering the rate of injury and re-injury.[25]

REHABILITATIVE CARE CONSIDERATIONS

Rehab post-injury/illness

Rehab post-injury or illness	
Patient characteristics	Examples of patients seen in home or ambulatory rehab settings following injury or illness: • Patients following injury or surgical procedure or sudden onset, life-altering disability who have functional impairments resulting in decreased function (e.g., in activities of daily living, mobility, communication, cognition, swallowing) and who do not (or no longer)* require a bedded level of rehabilitative care to address these rehab needs. * At the time of injury/illness, patients may have required an admission to hospital for acute care treatment and/or inpatient rehabilitative care.

Rehab post-injury or illness	
Patient population examples	Patient populations include those who have experienced: • Brain injury, stroke, cancer, spinal cord injury, musculoskeletal conditions/injuries, multi-system complex health conditions, falls/fractures, work-related injuries • An exacerbation of a chronic condition
How rehab can help	• The role of community-based rehab, including in-home rehab, is to: o Enable individuals with impairments and disabilities to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels o Promote health and well-being and re-integration to community living o Improve quality of life. • Rehabilitative care assessment and treatment may include, but is not limited to: o Assessing and developing treatment plan to address functional impairments, as needed o Linking patients with wellness/health promotion programs o Promoting adaptation of/to the home environment o Supporting timely transition from (e.g., early supported discharge) or preventing admission to acute or rehab hospital o Increasing self-management skills o Providing patient/caregiver education to enhance coping with impairments, activity limitations and participation restrictions. Note: Patients receiving ambulatory and in-home rehab may or may not have participated in an inpatient rehabilitative program. The status of a previous referral to, or participation in, inpatient rehab should be confirmed with the patient. For information on the role of rehab in post-acute inpatient settings, see Section 5 of the primer.
Rehabilitative care considerations / recommendations	See Appendix C: In-home and community-based rehabilitative care considerations

Rehab post-injury or illness	

Where to access rehab	Information on rehabilitative care programs and services can be found on the Rehabilitative Care Alliance's rehabcareontario.ca website. Information can be found for specific regions.
	
	For information pertinent to rehabilitative care post-injury or illness, look for information under the following categories:
	• Hospital-based outpatient rehabilitative care and subcategories such as:
	  o Hospital-based outpatient therapy
	  o Specialized clinics and services
	• Community-based rehabilitative care and subcategories as applicable. In-home rehabilitative care can also be found under this category.
	• Condition or population-based rehabilitative care

Rehab for progressive/chronic conditions

Rehab for progressive/chronic conditions	
Patient characteristics	• Patients with a chronic disease/condition • Patients experiencing a flare-up or worsening of symptoms due to a debilitating event or progressive condition • Patient's caregivers may be experiencing strain or burnout and should be taken into consideration
Patient population examples	• Patients with a chronic disease or condition (e.g., arthritis, pain syndrome, chronic obstructive pulmonary disease, congestive heart failure and coronary arterial disease, certain types of cancer, neurological conditions among others)
How rehab can help	• Assess impairments or disability • Provide consultation regarding patient's functional needs/status • Provide treatment to improve, develop or restore lost or impaired function and reduce risk of hospitalization

Rehab for progressive/chronic conditions	
	• Provide assessment, time-limited treatment and education to prevent functional decline/injury or maintain functional performance (e.g. strength, mobility, balance, fall prevention, etc.) • Provide intermittent re-assessment/time-limited treatment and/or periodic oversight to maintain and/or prevent further decline • Increase self-management skills and assist patient in optimizing independence, maintaining activity and quality of life • Assess need for, and use of, assistive devices • Provide education to caregivers on illness/condition and provide strategies to optimize their support efforts and to lower their stress • Link patients to wellness-focused health promotion/prevention promotion programs in the community (e.g., group exercise, wellness promotion classes, swimming, walk-fit, yoga, tai-chi, pilates, peer support and friendly visiting programs)
Rehabilitative care considerations / recommendations	See Appendix C: Home and community-based rehabilitative care considerations

Where to access rehab	Information on rehabilitative care programs and services can be found on the Rehabilitative Care Alliance's rehabcareontario.ca website. Information is available for specific regions.
	
	For information pertinent to rehabilitative care for progressive/chronic conditions, look for information under the following categories:
	• Hospital-based outpatient rehabilitative care and community-based rehabilitative care (includes In-home rehabilitative care). Subcategories include:
	  o Hospital-based outpatient therapy and community-based therapy
	  o Prevention and education
	  o Specialized clinics and services
	• Condition or population-based rehabilitative care

Rehab for Prevention

Rehab for Prevention	
Patient characteristics	• Individuals with reduced physical, cognitive and/or speech-language functioning (e.g., patients with neuromuscular, musculoskeletal, and cardio-respiratory, etc. conditions) who require rehabilitative care to prevent a decline in functional status and/or to promote their capacity to remain at home • Individuals may include: o Seniors with multiple co-morbidities and complex health needs o Patients presenting with a change in functional status or functional decline o Individuals living in the community (home, retirement homes, long-term care homes) who have functional goals that can be met by participating in group intervention (e.g., falls prevention classes)
Patient population examples	• Seniors with multiple co-morbidities and complex health needs who may be at risk for falls • Patients presenting with a change in functional status or functional decline who may be at high risk of not being able to live independently • Individuals, including caregivers, experiencing stress or burnout
How rehab can help	• For seniors at risk of falls, a rehabilitative care approach involves conducting an individualized risk assessment (e.g., review of environmental hazards) and using the findings, as needed. This may include prescribing an exercise program (e.g., strength training, balance and gait training), advising on the use of assistive devices and providing education on how to improve environment safety, change positions safely, manage weather conditions and reduce the fear of falling. • Patients (those at high risk of permanent loss of living independently in the community or of institutionalization if nothing is done) may benefit from a coordinated rehabilitative care approach to address a change in functional status. The RCA's Direct Access Priority Process supports early identification of individuals with restorative potential who require inpatient rehabilitative care and facilitates referrals directly from the community. • Rehabilitative care can be provided to prevent a decline in functional/clinical status as a result of de-conditioning, a health condition, pain or aging. It can help to optimize independence, reduce the risk of injury and maximize overall quality of life. This may include, but is not limited to:

Rehab for Prevention	
	○ Linking patients to secondary prevention clinics (e.g., stroke clinics), self-management programs and wellness/health promotion programs ○ Assessing barriers/risks to patient's ability to maintain independence ○ Promoting adaptation of/to the home environment ○ Increasing self-management skills ○ Providing patient/caregiver education to enhance coping with impairments and to understand risk factors, activity limitations and participation restrictions. • For individuals (patients and caregivers) experiencing stress or burnout, a mindfulness-based stress reduction program can help reduce stress and pain levels, increase activity levels and improve self-esteem.
Rehabilitative care considerations / recommendations	RCA Pathway to rehabilitative care for frail older adults presenting to Primary Care post-fall RCA's Direct Access Priority Process RCA Checklist to rule out Acute Cause of Recent Functional Decline NICE Guideline-Falls in older people: assessing risk and prevention (June 2013) See also Appendix C: Home and ambulatory rehabilitative care considerations
Where to access rehab	Information on rehabilitative care programs and services can be found on the Rehabilitative Care Alliance's rehabcareontario.ca website. Information can be found for specific regions and conditions. For information pertinent to rehabilitative care for prevention, look for information under the following categories: • Community-based or hospital-based rehabilitative care ○ Rehabilitative care: community-based prevention and education ○ Rehabilitative care: specialized clinics and services • Community-based rehabilitative care ○ Rehabilitative fare: Fall prevention programs • Condition or population-based rehabilitative care

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APPENDIX A: ADDITIONAL PRIMARY CARE REHABILITATIVE CARE CONSIDERATIONS

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
Acquired brain injury (ABI)	• Individuals with ongoing disability after traumatic brain injury should have ***timely access to specialized outpatient or community-based rehabilitation*** to facilitate continued progress and successful community reintegration.	Clinical Practice Guideline for the Rehabilitation of Adults with Moderate to Severe Traumatic Brain Injury (October 2016)
Amputee	• Best practices for care of patients with amputated limbs recommends ***rehabilitation through all levels of care, pre-and post-op,*** with care following the patient and delivered during inpatient care and into the community.	British Association of Chartered Physiotherapists in Amputee Rehabilitation, Clinical guidelines for the pre- and post-operative physiotherapy management of adults with lower limb amputation, 2nd Edition, 2016
Burns	• Burn therapy starts immediately or as soon after presentation for treatment as possible and continues till scar maturation which is commonly 12-18 months. The time to reach scar maturity varies between individuals.	ACI Statewide Burn Injury Service, Physiotherapy and Occupational Therapy Clinical Practice Guidelines, July 2014.
Chronic obstructive pulmonary disease (COPD)	• Pulmonary rehabilitation is recommended for the management of moderate to severe chronic obstructive pulmonary disease (COPD) in stable patients and for patients following an acute exacerbation (within one month of hospital discharge) at an accessible and clinically appropriate location (inpatient, ambulatory, or home). • COPD patients who have completed pulmonary rehabilitation are recommended to transition to an exercise program to	Health Quality Ontario; Ministry of Health and Long-Term Care. Quality-Based Procedures: Clinical Handbook for Chronic Obstructive Pulmonary Disease (Acute and Post-acute), (February 2015). February 2015. 88 p.

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	support the maintenance of functional gains, but parameters of delivery still need to be decided.	
Congestive heart failure / coronary arterial disease (CHF/CAD)	• Cardiovascular rehabilitation (CR) is an important specialized component of chronic cardiovascular disease care and chronic disease management that uses a multifaceted approach focused on: reducing cardiovascular risk factors, using behaviour modification strategies to sustain healthy lifestyles and promote pharmacological adherence, and providing therapeutic exercise training. • CR for persons with established cardiovascular disease should be provided to: (1) individuals with any of the following diagnoses: acute coronary syndrome, chronic stable angina or chronic stable heart failure; (2) following percutaneous coronary or valvular intervention, coronary artery bypass surgery, cardiac valve surgery, cardiac transplantation or ventricular assist device implantation. (p. 7) • CR is also recommended for those who have not had a cardiovascular event but have cardiovascular risk factors (e.g., hypertension, diabetes, hyperlipidemia) and are high risk for future cardiovascular events. (p. 7) • There is emerging evidence that CR would also benefit patients with atrial fibrillation, peripheral artery disease, cerebrovascular disease and following cardiac resynchronization therapy. (p. 8)	Cardiac Care Network. Standards for the Provision of Cardiovascular Rehabilitation in Ontario. Sept 2014
	• A systematic referral to community programs for cardiac rehabilitation is vital in improving patient's participation in	Cardiac Care Network of Ontario & Ministry of Health and Long-Term Care.

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	supervised exercise programs. • In order for patients to obtain optimal benefit from exercise programs, cardiac rehabilitation should commence within 30 days of hospital discharge. • Cardiac rehabilitation is strongly recommended for patients with coronary artery disease, particularly those with multiple modifiable risk factors.	Quality-Based Procedures Clinical Handbook for Coronary Artery Disease. September 2014.
Developmental disabilities	• The best practice guidelines for the journey to adult life for youth with disabilities are broad and emphasize the key role of multidisciplinary teams, community supports and the importance of setting the goal of the child/youth's transition to be an active member in the community. • The child/youth will need different supports at different times, although the focus is on using community and community supports as much as possible in order to provide the best transition and integration into their community.	Stewart, D., et al. The Best Journey to Adult Life For Youth with Disabilities An Evidence-based Model and Best Practice Guidelines For The Transition To Adulthood For Youth With Disabilities, 2009
Geriatric	• Older people in contact with health care professionals should be asked routinely whether they have fallen in the past year and asked about the frequency, context and characteristics of the fall(s). • Older people who present for medical attention because of a fall, or report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should be: o Offered an individualized, multifactorial falls risk assessment performed by a health care professional with	NICE Guideline: Falls in older people: assessing risk and prevention (June 2013)

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	appropriate skills and experience, normally in the setting of a specialist falls service. o Observed for balance and gait deficits and assessed for their ability to benefit from interventions to improve strength and balance.	
	• The SF7 Toolkit is a Senior Friendly Care (sfCare) resource that supports clinical best practices for health care providers across the sectors of care. It also includes self-management tools for older adults and their caregivers. The toolkit focuses on seven clinical areas that support resilience, independence and quality of life and includes information for particular sectors of care: ○ Delirium (p. 6-10, primary care p.12) ○ Mobility (p. 18-22, primary care p.24) ○ Continence (p. 30-34, primary care p.36) ○ Nutrition (p. 42-45, primary care p.47) ○ Pain (p. 53-57, primary care p.59) ○ Polypharmacy (p. 66-71, primary care p.73) ○ Social Engagement (p. 79-82, primary care p.84)	Regional Geriatric Program of Toronto. Senior Friendly Care SF7 Toolkit, v2 2019
	• Evidence-based approaches to geriatric care include interdisciplinary comprehensive geriatric assessment and comprehensive individualized care plans, informed by assessment of geriatric syndromes. These approaches improve health outcomes and are associated with improved independence, decreased lengths of stay and decreased rates of re-hospitalization.	Provincial Findings from MOHLTC Assess and Restore Funded Projects: 2014/15 Summary 2015/16 Summary 2016/17 Summary 2017/18 Summary 2018/19 Summary

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	• Integration with primary care, and improved recognition of frailty and restorative potential within primary care, improves earlier identification of risk and can increase capacity of primary care to manage the complexity of frail older adults in the community. • Formalized and evidence-based, cross-sectoral partnerships and clinical pathways help facilitate timely access to the right care in the right place, and are associated with decreased wait times, decreased lengths of stay and a decrease in ALC days.	
	• Age-related hearing loss typically begins in individuals who are in their forties; however, the sharpest rise occurs in those over the age of 80, with 50% to 80% of individuals in this range being affected. • Hearing loss is associated with many biopsychosocial consequences, including: accelerated cognitive decline, depression, increased risk of dementia, falls, poorer balance, hospitalizations, reduced communication function, social isolation, loss of autonomy, reduced driving ability and financial decline. • Rehabilitative care through audiology services can optimize functioning and reduces distress and social isolation. Audiology intervention can include aural rehabilitation, the provision of assistive hearing devices, perceptual training and	Davis, A., McMahon, C.M., Pichora-Fuller, K.M., Russ, S., Lin, F., Olusanya, B.O., Chadha, S., & Tremblay, K.L. (2016). Aging and Hearing Health: The Life-course Approach. Geronotologist, Vol. 56, No. S2, S256–S267, https://doi.org/10.1093/geront/gnw033

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	education, and counselling on how to use devices and modify environments to optimize the listening experience.	
Musculoskeletal (MSK)	• MSK conditions include disorders that affect bones, joints or connective tissue. They include arthritis and related conditions. Physiotherapy within a multidisciplinary program improves physical function, reduces disability and contributes to return to work and other activities.	Canadian Physiotherapy Association.(2012) The Value of Physiotherapy – Musculoskeletal Conditions. Childs, J.D., Whitman, J.M., Sizer, P.S., Pugia, M.L., Flynn, T.W., & Delitto, A. (2005) A description of physical therapists' knowledge in managing musculoskeletal conditions. BMC Musculoskeletal Disorders, 6:32 Downie, F., McRitchie, C., Monteith, W., & Turner, H. (May 2019) Physiotherapist as an alternative to a GP for musculoskeletal conditions a 2-year service evaluation of UK primary care data. *British Journal of General Practice*, 69(682):e314-e320
Oncology	• Rehabilitation, as an essential core component to cancer care, relies on many rehab professions (e.g., physiotherapy, occupational therapy, dietetics, speech and language therapy, podiatry). • Up to 75% of people with cancer experience cognitive problems during treatment; 35% have issues that continue for months after finishing treatment. These problems vary in	Rankin, J., Robb, K., Murtagh, N., Cooper, J., & Lewis, S. (Eds.) (2008) *Rehabilitation in cancer care.* Wiley-Blackwell.

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	severity and often make it hard to complete daily activities. • Cognitive rehabilitation and cognitive training is recommended to help patients improve their cognitive skills and find ways to cope with cognitive problems. • Occupational therapy and vocational rehabilitation is recommended to help people with the activities of daily living and job-related skills. • Physiotherapists manage cancer-related fatigue (CRF) by recommending exercise and teaching energy-conservation techniques. They also recommend and/or use exercise with a variety of cancer populations, across all stages of the disease trajectory, in particular during advanced stages of the disease. • Anxiety and depression, fatigue, physical functioning and quality of life have shown improvement in cancer patients who are prescribed and/or participate in various forms of exercise. Kinesiologists use education, intake assessments, exercise-based strategies and other considerations to create an individualized care plan that will assist the patient/client in reaching their health and wellness goals.	American Society of Clinical Oncology. Attention, Thinking, or Memory Problems. Approved by the Cancer.Net Editorial Board 04/2018 Donnelly, C.M., Lowe-Strong, A., Rankin, J.P., Campbell, A., Allen, J.M., & Gracey, J.H. (2010) Physiotherapy management of cancer-related fatigue: a survey of UK current practice. *Support Care Cancer.* 18:817–825 https://doi.org/10.1007/s00520-009-0715-2. Campbell, K.L., Winters-Stone, K.M., Wiskemann, J., May, A.M., Schwartz, A.L., Courneya, K.S., Zucker, D.S., Matthews, C.E., Ligibel, J.A., Gerber, L.H., Morris. G.S., Patel, A.V., Hue, T.F., Perna, F.M., & Schmitz, K.H. (2019). Exercise Guidelines for Cancer Survivors: Consensus Statement from International Multidisciplinary Roundtable. *Med Sci Sports Exerc* . Nov; 51(11):2375-2390. DOI: 10.1249/MSS.0000000000002116.
Shoulder arthroplasty	• The optimal location for community rehabilitative care following total and hemi shoulder and reverse arthroplasty is	Rehabilitative Care Alliance (2019) Rehabilitative Care Best Practice

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	in an outpatient ambulatory setting. • For more information on considerations, initiation, frequency and duration of rehabilitative, see the RCA Best Practice Guidance document on rehabilitative care for patients following shoulder arthroplasty.	Guidance for Patients Post Shoulder Arthroplasty
Spinal cord injury	• The "ideal" scenario for modern SCI care is thought to be treatment in specialized, integrated centres with an interdisciplinary team of health care professionals providing care as early as possible following injury and throughout the rehabilitation process, including appropriate discharge to the community with ongoing outpatient care and follow-up.	Spinal Cord Injury Research Evidence
Stroke	• People with stroke living in the community who have difficulty with activities of daily living should have access, as appropriate, to therapy services to improve or prevent deterioration in these activities.	Ontario Stroke Evaluation Report 2012 Network: Prescribing System Solutions to Improve Stroke Outcomes
Total joint replacement	• Based on silver-level (level II) evidence, multidisciplinary rehabilitation following primary hip or knee replacement is recommended to optimize outcomes at the level of activity and participation. Coordinated interprofessional rehabilitative care can be more easily provided in a team-based outpatient setting than an in-home setting. • See the complete RCA guidelines or quick reference guides (Ambulatory) (In-Home) on rehabilitative care for patients following hip and knee replacement	Rehabilitative Care Alliance (2019) Rehabilitative Care Best Practice Framework for Patients with Primary Hip and Knee Replacement

APPENIDIX B: ADDITIONAL ACUTE AND POST-ACUTE INPATIENT REHABILITATIVE CARE CONSIDERATIONS

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
Acquired brain injury (ABI)	• Every individual with traumatic brain injury should have ***timely, specialized, interdisciplinary rehabilitation services.*** • To achieve optimal efficiencies of inpatient rehabilitation, individuals with traumatic brain injury should receive ***a minimum of three hours per day of therapeutic interventions,*** ensuring focus on cognitive tasks.	Clinical Practice Guideline for the Rehabilitation of Adults with Moderate to Severe Traumatic Brain Injury (October 2016)
Amputee	• Best practices for care of patients with amputated limbs recommend ***rehabilitation through all levels of care, pre-and post-op,*** with care following the patient and delivered during inpatient care and into the community. • Early assessment and planning of rehabilitation can commence at pre-op stage and helps to prepare the patient for rehabilitation. A pre-amputation consultation also enables the physiotherapist to give appropriate advice, information and reassurance; issues such as phantom limb sensation and avoidance of falls may be discussed.	British Association of Chartered Physiotherapists in Amputee Rehabilitation, Clinical guidelines for the pre- and post-operative physiotherapy management of adults with lower limb amputation, 2nd Edition, 2016
Burns	• Burn therapy starts immediately or as soon after presentation for treatment as possible and continues till scar maturation which is commonly 12-18 months.	ACI Statewide Burn Injury Service, Physiotherapy and Occupational Therapy Clinical Practice Guidelines, July 2014.

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	The time to reach scar maturity varies between individuals.	
	• An interdisciplinary burn rehab team provides intensive rehabilitation care to patients who require 24-hour hospital care and have ongoing, complex rehab and surgical needs and/or infection control issues.	GTA Rehab Network. Burn Rehab Definition Framework. May 2010
Chronic obstructive pulmonary disease (COPD)	• Pulmonary rehabilitation is recommended for the management of moderate to severe chronic obstructive pulmonary disease (COPD) in stable patients and for patients following an acute exacerbation (within one month of hospital discharge) at an accessible and clinically appropriate location (inpatient, outpatient, community or home). • COPD patients who have completed pulmonary rehabilitation are recommended to transition to an exercise program to support the maintenance of functional gains.	Health Quality Ontario; Ministry of Health and Long-Term Care. Quality-Based Procedures: Clinical Handbook for Chronic Obstructive Pulmonary Disease (Acute and Post-acute), (February 2015). February 2015. 88 p.
Congestive heart failure / coronary arterial disease (CHF/CAD)	• Cardiovascular rehabilitation (CR) is an important specialized component of chronic cardiovascular disease care and chronic disease management that uses a multifaceted approach focused on: reducing cardiovascular risk factors, using behaviour modification strategies to sustain healthy lifestyles and promote pharmacological adherence, and providing therapeutic exercise training.	Cardiac Care Network. Standards for the Provision of Cardiovascular Rehabilitation in Ontario. Sept 2014
Geriatric	• Geriatric rehab improves functional outcomes, reduces nursing home admissions and mortality.	Achterberg WP, Cameron ID, Bauer JM, Schols JM. (2014) Geriatric Rehabilitation: State of the Art and

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	• There is strong evidence that using an interprofessional approach with team coordination and care planning is effective. Team members should include geriatricians, nurses, physiotherapists, occupational therapists, speech therapists and social workers.	Future Priorities. JAMDA 20 396-398. https://doi.org/10.1016/j.jamda.2019.02.014
	• Goal-setting together with the patient is an essential aspect of geriatric rehabilitation.	Van Seben, R., Reichardt, L., Smorenburg, S., & Buurman, B. (2017). Goal-setting instruments in geriatric rehabilitation: a systematic review *J Frailty Aging*. Chapter 7. Vol. 6, DOI: 10.14283/jfa.2016.103
	• The RCA Frail Seniors Rehabilitative Care Best Practice Framework outlines best practices for the rehabilitative care of frail seniors across the continuum. The cross-continuum information is organized under two categories: o Processes of care. These refer to evidence-based actions or interventions performed during the delivery of patient care. o Clinical areas that are specific to the care of frail seniors	RCA Frail Seniors Rehabilitative Care Best Practice (2020)
	• Rehabilitation using a comprehensive geriatric assessment approach is an effective intervention that can serve to reduce mortality and improve functional outcomes for hospitalized, frail older adults. • Geriatric rehabilitation should begin at admission (and continue beyond discharge as needed) and involve	Stott DJ, Quinn TJ. (2017) Medicine in older adults. Principles of rehabilitation of older adults. *Medicine*. Volume 45, Issue 1, January 2017, Pages 1-5, DOI: https://doi.org/10.1016/j.mpmed.2016.10.002

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	multiple disciplines who use an interprofessional approach with the patient to deliver holistic, individual rehabilitative care.	
	• Older people in contact with health care professionals should be asked routinely whether they have fallen in the past year and asked about the frequency, context and characteristics of the fall(s). • Older people who present for medical attention because of a fall, or report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should be: o Offered an individualized, multifactorial falls risk assessment performed by a health care professional with appropriate skills and experience, normally in the setting of a specialist falls service. o Observed for balance and gait deficits and considered for their ability to benefit from interventions to improve strength and balance.	NICE Guideline: Falls in older people: assessing risk and prevention (June 2013)
	• The SF7 Toolkit is a Senior Friendly Care (sfCare) resource that supports clinical best practices for healthcare providers across the sectors of care. It also includes self-management tools for older adults and their caregivers. The toolkit focuses on seven clinical areas that support resilience, independence, and quality of life and includes information for particular sectors of care: o Delirium (p. 6-10, in hospital p.13)	Regional Geriatric Program of Toronto. Senior Friendly Care SF7 Toolkit, v2 2019

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	○ Mobility (p. 18-22, in hospital p. 25) ○ Continence (p. 30-34, in hospital p.37) ○ Nutrition (p. 42-45, in hospital p.48) ○ Pain (p. 53-57, in hospital p.60) ○ Polypharmacy (p. 66-71, in hospital p.74) ○ Social Engagement (p. 79-82, in hospital p. 85)	
	The Senior Friendly Care Framework includes the following defining statements related to Senior Friendly processes of care: • Assessment is holistic and identifies opportunities to optimize the physical, psychological, functional and social abilities of older adults. • Care addresses the physical, psychological, functional and social needs of older adults. • Care is guided by evidence-informed practice. • An interprofessional model of care is preferred especially when older adults are frail. • Care is integrated and provides continuity, especially during transitions. • Goals of care may include recovery from illness, maintenance of functional ability and preservation of the highest quality of life as defined by the individual. • Older adults are partners with the care team. • Care is flexible and aligned with an individual's preferences. • Communications and clinical and administrative processes are adapted to meet the needs of older	Regional Geriatric Program of Toronto. Senior Friendly Care. 2019

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	adults. • Older adults are provided information in a way that makes it easy to understand so that they can make informed decisions.	
	• Evidence-based approaches to geriatric care (including interdisciplinary comprehensive geriatric assessment and comprehensive individualized care plans, informed by assessment of geriatric syndromes) improve health outcomes, and are associated with improved independence, decreased lengths of stay and decreased rates of re-hospitalization. • Formalized and evidence-based cross-sectoral partnerships and clinical pathways help facilitate timely access to the right care in the right place, and are associated with decreased wait times, decreased lengths of stay and a decrease in ALC days.	Provincial Findings from MOHLTC Assess and Restore Funded Projects: 2014/15 Summary 2015/16 Summary 2016/17 Summary 2017/18 Summary 2018/19 Summary
	• Age-related hearing loss typically begins in individuals who are in their forties; however, the sharpest rise occurs in those over the age of 80, with 50% to 80% of individuals in this range being affected. • Hearing loss is associated with many biopsychosocial consequences including: accelerated cognitive decline, depression, increased risk of dementia, falls, poorer balance, hospitalizations, reduced communication function, social isolation, loss of autonomy, reduced driving ability and financial decline.	Davis, A., McMahon, C.M., Pichora-Fuller, K.M., Russ, S., Lin, F., Olusanya, B.O., Chadha, S., & Tremblay, K.L. (2016). Aging and Hearing Health: The Life-course Approach. *Gerontologist*, Vol. 56, No. S2, S256–S267, https://doi.org/10.1093/geront/gnw033

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	• Rehabilitative care through audiology services can optimize functioning and reduces distress and social isolation. Audiology intervention can include aural rehabilitation, the provision of assistive hearing devices, perceptual training and education, and counselling on how to use devices and modify environments to optimize the listening experience.	
Hip fracture	• All hip fracture patients are to receive an active rehabilitation program following discharge from acute care. • Post-acute rehab is to begin no later than Day six post-surgery and may occur in: o Bedded settings: inpatient rehabilitation and complex continuing care o Community-based settings: rehabilitation in the home or through outpatient physiotherapy clinics o LTC homes in the case of patients admitted from LTC. • Hip fracture patients who are medically stable, cognitively intact, and able to mobilize short distances benefit from early supportive discharge home to receive a community-based rehabilitation program.	Health Quality Ontario; Ministry of Health and Long-Term Care. Quality-Based Procedures: Clinical Handbook for Hip Fracture Health Quality Ontario & Ministry of Health and Long-Term Care (May 2013). Toronto, ON: Health Quality Ontario; 2013 May. 97
	• Quality Standard: "Patients with hip fracture participate in an interdisciplinary rehabilitation program (in an inpatient setting, a community setting, or a combination of both) with the goal of returning to their	Healthy Quality Ontario (2017) Hip Fracture Quality Standards

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	pre-fracture functional status." • Rehabilitative care programs have been shown to improve patient outcomes, including functional status, leg strength, health status, balance, mobility, instrumental activities of daily living and social functioning. • On discharge from the acute care hospital, all hip fracture patients, including patients with cognitive impairment and those residing in long-term care homes, should have the opportunity to participate in an active interdisciplinary rehabilitation program.	
	• See RCA Rehabilitative Care Best Practice Guidelines Framework for Patients with Hip Fracture for additional specific recommendations pertaining to home and ambulatory rehabilitative care.	Rehabilitative Care Alliance (2018) Rehabilitative Care Best Practice Guidelines Framework for Patients with Hip Fracture
Oncology	• Rehab patients with a good prognosis who require inpatient rehab and whose primary rehab needs are to address general deconditioning pre- or post-cancer surgery/treatment should be referred and transferred directly to a mixed rehab program. • Rehab patients with multiple medical and rehab needs should be referred and transferred to a rehab program with a dedicated oncology team. • Some patients may require a slower-paced rehab program for a longer duration to maximize rehab potential (e.g., patients undergoing chemotherapy treatment).	GTA Rehab Network. Oncology Rehab Definition Framework. June 2009

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	• Up to 75% of people with cancer experience cognitive problems during treatment; 35% have issues that continue for months after finishing treatment. These problems vary in severity and often make it hard to complete daily activities. • Cognitive rehabilitation and cognitive training is recommended to help patients improve their cognitive skills and find ways to cope with cognitive problems. • Occupational therapy and vocational rehabilitation is recommended to help people with the activities of daily living and job-related skills.	American Society of Clinical Oncology. Attention, Thinking, or Memory Problems. Approved by the Cancer.Net Editorial Board 04/2018
Shoulder arthroplasty	• Bedded rehabilitative care typically is not recommended. An outpatient ambulatory rehabilitative care setting is recommended.	Rehabilitative Care Alliance (2019) Rehabilitative Care Best Practice Guidance for Patients Post Shoulder Arthroplasty
Spinal Cord Injury	• The "ideal" scenario for modern SCI care is thought to be treatment in specialized, integrated centres with an interdisciplinary team of health care professionals providing care as early as possible following injury and throughout the rehabilitation process, including appropriate discharge to the community with ongoing outpatient care and follow-up.	Spinal Cord Injury Research Evidence
Stroke	• Patients with moderate or severe stroke who are rehabilitation-ready and have rehabilitation goals should be given an opportunity to participate in inpatient stroke rehabilitation. • Stroke patients should receive, via an individualized treatment plan, at least three hours of direct task-	Health Quality Ontario; Ministry of Health and Long-Term Care. Quality-Based Procedures: Clinical Handbook for Stroke (Acute and Post-acute), (December 2016) Toronto: Health Quality Ontario; 2016 December. 132 p

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	specific therapy per day by the interprofessional stroke team for at least six days per week. • Moderate Stroke: In general, patients who qualify for inpatient rehabilitation are those with an early AlphaFIM™ score of 40 to 80*. • Severe Stroke: Patients presenting to hospital with acute stroke, with early AlphaFIM™ score of <40 to be admitted to inpatient rehab (high or low intensity as tolerance permits).	
	• All patients with stroke admitted to hospital and who require rehabilitation should be treated in a comprehensive or rehabilitation stroke unit by an interdisciplinary team. Survivors of severe stroke should be reassessed at regular intervals for their rehabilitation needs.(National Best Practices-Ref 7, Pg15) • The benchmark for date of admission to inpatient rehab post stroke onset is seven days. (p 73)	Ontario Stroke Evaluation Report 2012 Network: Prescribing System Solutions to Improve Stroke Outcomes
Total joint replacement	• Inpatient rehabilitation should not be the first choice for the typical patient following total hip or knee replacement. The Orthopaedic Quality Scorecard indicates that no more than 10% of hip/knee replacement patients should require inpatient rehabilitation. • The timing, frequency and intensity of rehabilitative care services provided in a bedded level of care should be defined in consideration of functional tolerance and	Rehabilitative Care Alliance (2019) Rehabilitative Care Best Practice Framework for Patients with Primary Hip and Knee Replacement RCA Quick Reference Guide for Bedded Rehabilitative Care – Total Joint Replacement

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	goals of the patient. • See the complete RCA Guidelines or Quick Reference Guide on rehabilitative care for patients following hip and knee replacement for additional information on the best practice recommendations for initiation, duration, frequency and clinical considerations.	
	• Confirmation of discharge destination post surgery should be assessed in the pre-admission phase as there may be a few patients (i.e., ≤ 10%) who will require inpatient rehab. • There are numerous individual factors which can impact upon a patient's rehab trajectory following total joint replacement. Patients who might require inpatient rehab are those who present with a combination of concerns related to poor overall functioning/mobility, pre-operative risk factors or non-modifiable barriers in the home environment. (See Appendix A in Guideline for Pre-Admission Rehabilitative Care Processes: Primary, elective, unilateral total joint replacement.)	GTA Rehab Network, (2019) Guideline for Pre-Admission Rehabilitative Care Processes: Primary, elective, unilateral total joint replacement.

APPENDIX C: ADDITIONAL IN-HOME AND AMBULATORY REHABILITATIVE CARE CONSIDERATIONS

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
Acquired brain injury (ABI)	• Individuals with ongoing disability after traumatic brain injury should have ***timely access to specialized outpatient or community-based rehabilitation*** to facilitate continued progress and successful community reintegration. (Adapted from New Zealand Guidance Group 2007, 6.6, p. 116)	Clinical Practice Guideline for the Rehabilitation of Adults with Moderate to Severe Traumatic Brain Injury (October 2016)
	• Provision of specialized, coordinated, interprofessional ABI home-based rehabilitation services to persons with ABI results in better outcomes than those who receive generic services.	Boschen K, Gerber G, Gargaro J. (2010) Poster 178: Comparison of Outcomes and Costs of 2 Publicly-Funded Community-Based Models of Acquired Brain Injury Services. Archives of Physical Medicine and Rehabilitation Vol 91 Issue 10, PE59 https://doi.org/10.1016/j.apmr.2010.07.208
Amputee	• Best practices for care of patients with amputated limbs recommends ***rehabilitation through all levels of care, pre-and post-op*** with care following the patient and delivered during inpatient care and into the community. • Early assessment and planning of rehabilitation can commence at pre-op stage and helps to prepare the patient for rehabilitation. A pre-amputation consultation also enables the physiotherapist to give appropriate advice, information and reassurance; issues such as phantom limb sensation and avoidance of falls may be discussed.	British Association of Chartered Physiotherapists in Amputee Rehabilitation, Clinical guidelines for the pre- and post-operative physiotherapy management of adults with lower limb amputation, 2nd Edition, 2016

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
Burns	• Burn therapy starts immediately or as soon after presentation for treatment as possible and continues till scar maturation which is commonly 12-18 months. The time to reach scar maturity varies between individuals.	ACI Statewide Burn Injury Service, Physiotherapy and Occupational Therapy Clinical Practice Guidelines, July 2014.
	• An interdisciplinary burn rehab team in an outpatient/ambulatory setting is indicated when two or more of the following modalities are needed for more than two weeks: nursing pain management, pressure therapy, splinting skin care, social support (Psych/Counselling), PT/OT to maximize function, ongoing counselling and education specific to burn care. • Services may include assessment only or assessment and treatment. Services may be provided during a one-time visit or multiple visits.	GTA Rehab Network. Burn Rehab Definition Framework. May 2010
Chronic obstructive pulmonary disease (COPD)	• Pulmonary rehabilitation is recommended for the management of moderate to severe chronic obstructive pulmonary disease (COPD) in stable patients and for patients following an acute exacerbation (within one month of hospital discharge) at an accessible and clinically appropriate location (inpatient, outpatient, community or home). • A standardized pulmonary rehabilitation program is about 40 hours in total, with three sessions per week at 1.5 to 2 hours per session. The intensity and duration of PR programs are similar across outpatient hospital and community settings.	Health Quality Ontario; Ministry of Health and Long-Term Care. Quality-Based Procedures: Clinical Handbook for Chronic Obstructive Pulmonary Disease (Acute and Post-acute), (February 2015). February 2015. 88 p.

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	• COPD patients who have completed pulmonary rehabilitation are recommended to transition to an exercise program to support the maintenance of functional gains, but parameters of delivery still need to be decided.	
Congestive heart failure / coronary arterial disease (CHF/CAD)	• Cardiovascular rehabilitation (CR) is an important specialized component of chronic cardiovascular disease care and chronic disease management that uses a multifaceted approach focused on: reducing cardiovascular risk factors, using behaviour modification strategies to sustain healthy lifestyles and promote pharmacological adherence, and providing therapeutic exercise training. • CR programs may operate in a stand-alone community setting or as part of a larger hospital system. CR services shall be provided through an integrated interprofessional team, led by a program manager • CR for persons with established cardiovascular disease shall be provided to: (1) individuals with any of the following diagnoses: acute coronary syndrome, chronic stable angina, chronic stable heart failure; (2) following percutaneous coronary or valvular intervention; coronary artery bypass surgery; cardiac valve surgery; cardiac transplantation; ventricular assist device implantation. (p. 7) • CR is also recommended for those who have not had a cardiovascular event but have cardiovascular risk factors	Cardiac Care Network. Standards for the Provision of Cardiovascular Rehabilitation in Ontario. Sept 2014

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	(e.g. hypertension, diabetes, and hyperlipidemia) and are high risk for future cardiovascular events. (p. 7) • There is emerging evidence that CR would also benefit patients with atrial fibrillation; peripheral artery disease; cerebrovascular disease and following cardiac resynchronization therapy. (p. 8)	
	• A systematic referral to community programs for cardiac rehabilitation is vital in improving patient's participation in supervised exercise programs. • In order for patients to obtain optimal benefit from exercise programs, cardiac rehabilitation should commence within 30 days of hospital discharge. • Cardiac rehabilitation is strongly recommended for patients with coronary artery disease particularly those with multiple modifiable risk factors.	Cardiac Care Network of Ontario & Ministry of Health and Long-Term Care. Quality-Based Procedures Clinical Handbook for Coronary Artery Disease. September 2014.
Developmental disabilities	• The best practice guidelines for the journey to adult life for youth with disabilities are broad and emphasize the key role of multidisciplinary teams, community supports and the importance of setting the goal of the child/youth's transition to be an active member in the community. • The child/youth will need different supports at different times, though the focus is on using community and community supports as much as possible in order to provide the best transition and integration into their community	Stewart, D., et al. The Best Journey to Adult Life For Youth with Disabilities An Evidence-based Model and Best Practice Guidelines For The Transition To Adulthood For Youth With Disabilities, 2009

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
Geriatric	• Older people in contact with health care professionals should be asked routinely whether they have fallen in the past year and asked about the frequency, context and characteristics of the fall/s. • Older people who present for medical attention because of a fall, or report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should be: o Offered an individualized, multifactorial falls risk assessment performed by a health care professional with appropriate skills and experience, normally in the setting of a specialist falls service o Observed for balance and gait deficits and considered for their ability to benefit from interventions to improve strength and balance.	NICE Guideline: Falls in older people: assessing risk and prevention (June 2013)
	• The SF7 Toolkit is a Senior Friendly Care (sfCare) resource that supports clinical best practices for healthcare providers across the sectors of care. It also includes self-management tools for older adults and their caregivers. The toolkit focuses on seven clinical areas that support resilience, independence, and quality of life and includes information for particular sectors of care: o Delirium (p. 6-10, home and community care p.11) o Mobility (p. 18-22, home and community care p.23) o Continence (p. 30-34, home and community care p.35) o Nutrition (p. 42-45, home and community care p.46)	Regional Geriatric Program of Toronto. Senior Friendly Care SF7 Toolkit, v2 2019

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	○ Pain (p. 53-57, home and community care p.58) ○ Polypharmacy (p. 66-71, home and community care p.72) ○ Social Engagement (p. 79-82, home and community care p.83)	
	• Age-related hearing loss typically begins in individuals who are in their forties; however, the sharpest rise occurs in those over the age of 80, with 50% to 80% of individuals in this range being affected. • Hearing loss is associated with many biopsychosocial consequences including: accelerated cognitive decline, depression, increased risk of dementia, falls, poorer balance, hospitalizations, reduced communication function, social isolation, loss of autonomy, reduced driving ability and financial decline. • Rehabilitative care through audiology services can optimize functioning and reduces distress and social isolation. Audiology intervention can include aural rehabilitation, the provision of assistive hearing devices, perceptual training and education and counselling on how to use devices and modify environments to optimize the listening experience.	Davis, A., McMahon, C.M., Pichora-Fuller, K.M., Russ, S., Lin, F., Olusanya, B.O., Chadha, S., & Tremblay, K.L. (2016). Aging and Hearing Health: The Life-course Approach. *Geronotologist*, Vol. 56, No. S2, S256–S267, https://doi.org/10.1093/geront/gnw033
	• Evidence-based approaches to geriatric care (including interdisciplinary comprehensive geriatric assessment, and comprehensive individualized care plans, informed by assessment of geriatric syndromes) improve health	Provincial Findings from MOHLTC Assess and Restore Funded Projects: 2014/15 Summary 2015/16 Summary 2016/17 Summary

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	outcomes, and are associated with improved independence, decreased lengths of stay and decreased rates of re-hospitalization. • Formalized and evidence-based cross-sectoral partnerships and clinical pathways help facilitate timely access to the right care in the right place, and are associated with decreased wait times, decreased lengths of stay, and a decrease in ALC days.	2017/18 Summary 2018/19 Summary
Hip fracture	• All hip fracture patients are to receive an active rehabilitation program following discharge from acute care. • Post-acute rehab is to begin no later than Day six post-surgery and may occur in: o Bedded settings: inpatient rehabilitation and complex continuing care o Community-based settings: rehabilitation in the home or through outpatient physiotherapy clinics o LTC homes in the case of patients admitted from LTC. • Hip fracture patients who are medically stable, cognitively intact, and able to mobilize short distances benefit from early supportive discharge home to receive a community-based rehabilitation program.	Health Quality Ontario; Ministry of Health and Long-Term Care. Quality-Based Procedures: Clinical Handbook for Hip Fracture Health Quality Ontario & Ministry of Health and Long-Term Care (May 2013). Toronto, ON: Health Quality Ontario; 2013 May. 97
	• Quality Standard: "Patients with hip fracture participate in an interdisciplinary rehabilitation program (in an inpatient setting, a community setting, or a combination of both) with the goal of returning to their pre-fracture functional status."	Healthy Quality Ontario (2017) Hip Fracture Quality Standards

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	• Rehabilitative care programs have been shown to improve patient outcomes, including functional status, leg strength, health status, balance, mobility, instrumental activities of daily living and social functioning. • On discharge from the acute care hospital, all hip fracture patients, including patients with cognitive impairment and those residing in long-term care homes, should have the opportunity to participate in an active interdisciplinary rehabilitation program.	
	• See RCA Rehabilitative Care Best Practice Guidelines Framework for Patients with Hip Fracture for additional specific recommendations pertaining to home and community-based rehabilitative care.	Rehabilitative Care Alliance (2018) Rehabilitative Care Best Practice Guidelines Framework for Patients with for Hip Fracture
Musculoskeletal (MSK)	• MSK conditions include disorders that affect bones, joints or connective tissue. They include arthritis and related conditions. Physiotherapy within a multidisciplinary program improves physical function, reduces disability and contributes to return to work and other activities. • Physiotherapists have been shown to be knowledgeable and effective in the management of simple to complex MSK conditions and can help reduce demand for appointments with primary care physicians.	Canadian Physiotherapy Association.(2012) The Value of Physiotherapy – Musculoskeletal Conditions. Childs, J.D., Whitman, J.M., Sizer, P.S., Pugia, M.L., Flynn, T.W., & Delitto, A. (2005) A description of physical therapists' knowledge in managing musculoskeletal conditions. BMC Musculoskeletal Disorders, 6:32 Downie, F., McRitchie, C., Monteith, W., & Turner, H. (May 2019) Physiotherapist as an alternative to a GP for musculoskeletal conditions a 2-year service evaluation of UK

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
		primary care data. *British Journal of General Practice*, 69(682):e314-e320
Oncology	• Rehabilitation, as an essential core component to cancer care, relies on many rehab professions (e.g., physiotherapy, occupational therapy, dietetics, speech and language therapy, podiatry). • Up to 75% of people with cancer experience cognitive problems during treatment; 35% have issues that continue for months after finishing treatment. These problems vary in severity and often make it hard to complete daily activities. • Cognitive rehabilitation and cognitive training is recommended to help patients improve their cognitive skills and find ways to cope with cognitive problems. • Occupational therapy and vocational rehabilitation is recommended to help people with the activities of daily living and job-related skills. • Physiotherapists manage cancer-related fatigue (CRF) by recommending exercise and teaching energy-conservation techniques. They also recommend and/or use exercise with a variety of cancer populations, across all stages of the disease trajectory, in particular during advanced stages of the disease. • Anxiety and depression, fatigue, physical functioning and quality of life have shown improvement in cancer patients who are prescribed and/or participate in various forms of exercise. Kinesiologists use education, intake	Rankin, J., Robb, K., Murtagh, N., Cooper, J., & Lewis, S. (Eds.) (2008) *Rehabilitation in cancer care.* Wiley-Blackwell. American Society of Clinical Oncology. Attention, Thinking, or Memory Problems. Approved by the Cancer.Net Editorial Board 04/2018 Donnelly, C.M., Lowe-Strong, A., Rankin, J.P., Campbell, A., Allen, J.M., & Gracey, J.H. (2010) Physiotherapy management of cancer-related fatigue: a survey of UK current practice. *Support Care Cancer.* 18:817–825 https://doi.org/10.1007/s00520-009-0715-2. Campbell, K.L., Winters-Stone, K.M., Wiskemann, J., May, A.M., Schwartz, A.L., Courneya, K.S., Zucker, D.S., Matthews, C.E., Ligibel, J.A., Gerber, L.H., Morris. G.S., Patel, A.V., Hue, T.F., Perna, F.M., & Schmitz, K.H.

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	assessments, exercise-based strategies and other considerations to create an individualized care plan that will assist the patient/client in reaching their health and wellness goals.	(2019). Exercise Guidelines for Cancer Survivors: Consensus Statement from International Multidisciplinary Roundtable. *Med Sci Sports Exerc* . Nov; 51(11):2375-2390. DOI: 10.1249/MSS.0000000000002116.
Shoulder arthroplasty	• A supervised outpatient postoperative physiotherapy program, supplemented by home exercise provided by the hospital at discharge, is recommended for patients who have undergone rotator cuff surgery or shoulder arthroplasty.	Health Quality Ontario (2015). Clinical Handbook for Degenerative Disorders of the Shoulder.
	• The optimal location for community rehabilitative care following total and hemi shoulder and reverse arthroplasty is in an outpatient ambulatory setting. • For more information on other considerations, initiation, frequency and duration, see the RCA Best Practice Guidance document on rehabilitative care for patients following shoulder arthroplasty.	Rehabilitative Care Alliance (2019) Rehabilitative Care Best Practice Guidance for Patients Post Shoulder Arthroplasty
Spinal cord injury	• The "ideal" scenario for modern SCI care is thought to be treatment in specialized, integrated centres with an interdisciplinary team of health care professionals providing care as early as possible following injury and throughout the rehabilitation process, including appropriate discharge to the community with ongoing outpatient care and follow-up.	Spinal Cord Injury Research Evidence
Stroke	• People with stroke living in the community who have difficulty with activities of daily living should have access, as appropriate, to therapy services to improve or prevent	Ontario Stroke Evaluation Report 2012 Network: Prescribing System Solutions to Improve Stroke Outcomes

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	deterioration in these activities.	
	• Physiotherapy, occupational therapy and speech-language therapy be should each be provided three times weekly, for a total of nine visits over seven days per week. • Mild Stroke: Patients with an early AlphaFIM™ score of > 80 would typically go to outpatient rehabilitation or home-based rehabilitation. Age, the availability of a caregiver, the severity of cognitive/perceptual needs, the presence of severe aphasia/dysphagia, and profound inattention/neglect are additional factors that should be taken into consideration.	Health Quality Ontario; Ministry of Health and Long-Term Care. Quality-Based Procedures: Clinical Handbook for Stroke (Acute and Post-acute), (December 2016) Toronto: Health Quality Ontario; 2016 December. 132 p
Total joint replacement	• Based on silver-level (level II) evidence, multidisciplinary rehabilitation, following primary hip or knee replacement, can optimize outcomes at the level of activity and participation. Coordinated interprofessional rehabilitative care can be more easily provided in a team-based outpatient setting, than an in-home setting. • For total knee replacement, rehabilitative care should begin within seven days of discharge from acute care. • For total hip replacement, rehabilitative care should begin between two to six weeks from discharge. • See the complete RCA Guidelines or Quick Reference Guides (Ambulatory) (In-Home) on rehabilitative care for patients following hip and knee replacement for additional information on the best practice	Rehabilitative Care Alliance (2019) Rehabilitative Care Best Practice Framework for Patients with Primary Hip and Knee Replacement

Conditions typically requiring rehabilitative care		
Condition	**Additional rehabilitative care considerations**	**Source**
	recommendations for initiation, duration, frequency and clinical considerations.	
	• There are numerous individual factors which can impact a patient's rehab trajectory following total joint replacement. Patients who are appropriate for community-based rehabilitation exclude those who present with a combination of concerns related to poor overall functioning/mobility, pre-operative risk factors or non-modifiable barriers in the home environment.	GTA Rehab Network, (2019) Guideline for Pre-Admission Rehabilitative Care Processes: Primary, elective, unilateral total joint replacement.

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