Outpatient and Community Physiotherapy Services (OCPS)

Guide to AHS Standardized Services and Approaches

For Contracted Physiotherapy Providers

Alberta Health Services

Allied Health Professions

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This clinical guide has been created by Allied Health Professions in collaboration with AHS physiotherapists.

This guide will be reviewed and updated every five years or as required based on substantial changes in accepted practices.

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Purpose

This document is intended to support physiotherapists with the implementation of the AHS Outpatient and Community Physiotherapy Service model.

Definitions

Standardized Service - A *Standardized Service* provides common, evidence informed, expectations for how a service is delivered for defined health conditions or populations. A Standardized Service may be part of a clinical care pathway and may be reinforced by practice support documents.

Clinical Guide – A clinical guide is a document designed to assist health care professionals in making evidence-informed decisions about appropriate care for a specific medical condition or patient population.

Background

Since 2021, Alberta Health Service (AHS) has been working towards standardizing Outpatient & Community Physiotherapy Services through the implementation of a provincial service model. As part of this work, the following Standardized Services have been developed:

- Physiotherapy for General Musculoskeletal Conditions
- Physiotherapy Post Fracture / Post Orthopedic Surgery
- Community Physiotherapy for Post Operative Hip and Knee Arthroplasty
- Physiotherapy for Urinary Incontinence & Pelvic Organ Prolapse

Implementing standardized services within AHS:

- Increases consistency in access to services and how they are provided
- Integrates evidence into professional practice
- Facilitates access, wayfinding, transitions and service integration
- Outlines goals, clinical activities and recommended outcome measures
- Aligns practices with AHS values, vision and foundational strategies

The overall goal of this work is that Albertans accessing outpatient & community physiotherapy services will have a positive experience, improved health outcomes, and will demonstrate an improved ability to manage their health condition(s).

Allied Health/Rehabilitation Standardized Service

Physiotherapy for General Musculoskeletal Conditions

Information for Operational Leaders, Practice Leaders and Community and Contracted Physiotherapy Providers

Purpose	• Ensure that clients who receive AHS funded PT service for general / non-surgical musculoskeletal (MSK) conditions, receive appropriate care that is supported by evidence, is an effective use of resources, and meets accepted AHS service standards. • Physiotherapy services targeted to the patient's level of need have proven to result in improved functional outcomes, decreased utilization of other health services, and improved pain management.
Service Goals	• MSK conditions are prevalent, and many can resolve with early adoption of appropriate self-management strategies and education. If left unresolved, a patient can suffer from disabling pain, loss of function, lost time from work, and unnecessary use of prescription medication and high utilization of specialty health services including diagnostic imaging. • The goal of these minimum standards is to optimize function and reduce disability for Albertans with general MSK concerns and to focus on abilities and facilitate patient resourcefulness, self-care and continued participation in daily activities. • This standard does not provide condition specific management advice.
Access Wayfinding & Transitions	**Inclusion Criteria** Albertans with general non-surgical MSK conditions who meet low-income qualification criteria and have: • Ligament sprains and muscle or tendon strains; MSK symptoms including pain related to mechanical dysfunction or an inflammatory state related to an acute or chronic injury/condition of a soft tissue (cartilage, ligaments, tendons, tendon sheaths, bursa and muscles). **Exclusion Criteria** • Injuries that qualify under the Fracture / Orthopedic Surgery Standard; injuries resulting from a motor vehicle accident; work related compensable injury; specialty physiotherapy areas including but not limited to specialized children's services, vestibular rehabilitation, pelvic health rehabilitation, concussion management; neurological conditions. **Triage and Risk Stratification** • The Rehabilitation Advice Line (RAL) will triage callers who are requesting AHS funded community physiotherapy visits. A PT or OT will provide a telecare assessment and complete the STarT Back or STarT MSK questionnaires. Risk stratification tools such as STarT Back and STarT MSK enable clinicians to identify prognostic factors and triage clients to high, medium or low risk of poor outcome/persistent pain. This information along with clinical judgement informs practitioner decisions on appropriate personalized care for the patient. **Episode of Care** • Assessment including a comprehensive pain history including administration of Pain Catastrophizing Scale (recommended) • Interventions provided in follow-up visits will align with the risk stratification score and the clinical judgement of the assessor. The episode of care should not exceed the recommended number of visits. • The final follow-up visit should include a review of the patient's self-management plan, a patient specific home exercise program, and recommendations to continue exercise in a supported environment appropriate to the patient.

<table>
<tr><td></td><td colspan="3">Transitions
Clients, families and providers partner to create a transition plan when funded visits conclude to support return to home, work and leisure activities. Successful transitions for clients can be facilitated by:
Knowledge of how to self-manage ongoing symptoms
Knowledge of safe progression of exercise and activity utilizing their home exercise program
Education on community options to support additional physical activity and rehabilitation, public and accessible transportation options, and return to work or volunteer opportunities
Support creation of new goal(s).
Communication with the client’s primary care physician if appropriate
Clients may call the Rehabilitation Advice Line (1-833-379-0563) for advice and assistance with transition from community physiotherapy to community self-management activities.</td></tr>
<tr><td>Partnership & Collaboration</td><td colspan="3">Physiotherapists contracted to provide client care on behalf of AHS are seen to be in partnership with the clients they serve, the client’s primary care physician or specialist physician and the AHS community physiotherapy program leadership.
Providers actively seek feedback from clients, family and caregivers to improve group and individual programming.</td></tr>
<tr><td>Client Participation</td><td colspan="3">Client will actively participate in collaborative goal setting and transition planning.
Client will be advised that an AHS funded episode of care is not for recurrent / persistent symptom management.
Client may opt out of an AHS funded episode of care and choose to private pay or utilize private insurance.</td></tr>
<tr><td>Core Clinical Activities</td><td colspan="3">Visits will include but are not limited to:
Assessment
Collaborative goal setting
Self-efficacy, self-management education
Exercise prescription
Equipment prescription as required
Instruction in a home program and progression of that home program as appropriate
Advice on transition from physiotherapy services to appropriate community activities</td></tr>
<tr><td></td><td>Clients at Low Risk of Poor Outcome

Telecare assessment and call back from the Rehabilitation Advice line if appropriate
Telecare assessment to include review of red flag questions appropriate to client history.
Clients receive advice to support self-management, educate on injury and healing timelines, acute symptom management and joint protection as well as an exercise program as appropriate</td><td>Patient at Medium Risk for Poor Outcome

1 assessment and up to 3 visits
Aim to reduce symptoms and disability and promote self-management with development of a treatment plan that addresses the patient’s functional goals through evidence based therapeutic interventions and self-management strategies including exercise.
Exercise prescribed should be functional in nature focused on individual patient’s activities of daily living.</td><td>Patient at High Risk for Poor Outcome

1 assessment and up to 4 enhanced visits
Treatment as per Medium Risk group of clients as well as provision of education using a cognitive behavioral approach focused on building rapport with the patient and explaining their pain experience.
Advice on pacing and graded activities and support for return to work and function should be included
Visits must be least 30 minutes in length with a focus on one-to-one time with the physiotherapist</td></tr>
</table>

<table>
<tr><td></td><td></td><td>• Return to Work advice should be provided if appropriate to the patient circumstance.
• Treatment options for those at medium risk should include traditional physiotherapy interventions specific to supporting self-management and the functional goals of the patient.</td><td></td></tr>
<tr><td rowspan="2">Clinical Resources and Requirements</td><td>Clients at Low Risk of Poor Outcome
• Transition supports to community activity options
• Home exercise program software</td><td>Patient at Medium Risk for Poor Outcome
• Collaborative goal setting practice support
• Home exercise program software
• Transition supports to community activity options</td><td>Patient at High Risk for Poor Outcome
• Patient education material to support cognitive behavioral approach</td></tr>
<tr><td colspan="3">Competencies & Learning Needs
• Motivational interviewing and MSK assessment skills
• Interpretation and training in the use of risk stratification tools
• Understanding of behavior change principles
• Collaborative goal setting/shared decision making
• Understanding of pacing and graded activities
• Understanding of return-to-work support.
Required Resources & Supports for Implementation
The following resources are available to assist with clinical practice:
• Physiotherapy for General MSK Conditions: Practice Guide
• Online Training for STarT Back tool: https://startback.hfac.keele.ac.uk/training/resources/
• Progressive Goal Attainment Pain Program (virtual sessions)
• Identification of appropriate AHS or community resources including online resources (MY Health Alberta resources or Inform Alberta).
• AHS offered training resources</td></tr>
<tr><td>Outcome Measures</td><td colspan="3">The following outcome measures will be completed upon assessment and end of episode of care:
• Patient Specific Functional Scale (PSFS)
• Condition Specific Patient Reported Outcomes (PROM’s) – see Practice Guide for details</td></tr>
</table>

Triage & Risk Stratification

1. Completed remotely by Rehabilitation Advice Line (RAL) staff
2. History of current injury/concern
3. Screen for red flags and make recommendations to emergency or primary care if indicated
4. Pain history
5. Administration of the STarT Back or STarT MSK tool
6. Determine risk stratification score and categorize client into low, medium, or high risk of poor outcome / persistent disability

    a) **Low Risk:** inform client of low risk for developing persistent pain and that in person attendance is not indicated. Condition should resolve with client adoption of self-management strategies to be described below. Client will be advised to call back within 2 weeks if symptoms have not started to resolve or have worsened.

    b) **Medium Risk:** inform client that they may benefit from a physiotherapy assessment and treatment plan (up to 3 visits). This may be funded for the client if they demonstrate qualification to meet low-income criteria (describe same and provide locations of contracted clinics). If client is not likely to meet low-income criteria, provide wayfinding information to PT Alberta Find a Physio. Provide client with self-management information (as per low-risk group).

    c) **High Risk:** inform client that they will benefit from a physiotherapy assessment and treatment plan (up to 4 visits). This may be funded for the client if they demonstrate qualification to meet low-income criteria (describe same and provide locations of contracted clinics). If client is not likely to meet low-income criteria, provide wayfinding information to PT Alberta Find a Physio. Provide client with self-management information but depending on the client situation, recommend that consultation with either a physiotherapist or primary care physician is indicated. If there are obvious mental health concerns provide Addictions and Mental Health helpline number.

Physiotherapy Assessment & Treatment

An episode of care is based on the risk stratification score and identified risk level for a poor outcome including developing persistent symptoms and disabling pain (see tool scoring for details).

Low Risk: Virtual Care

- Reassure clients that with adoption of advice there should be a good chance of recovery to full function.
- **Goals:** reduce symptoms, prevent disability, support return to normal functioning (including work)
- **Components:**
  - Telecare assessment and call back from the Rehabilitation Advice Line if appropriate (as above).
  - Clients receive advice to support self-management, educate on injury and healing timelines, acute symptom management and joint protection as well as a home exercise program as appropriate.

Medium Risk: Assessment and up to 3 treatment visits

- Reassure clients that with adoption of advice there should be a good chance of recovery to full function.
- **Goals:** reduce symptoms, prevent disability, support return to normal functioning (including work)
- **Components:**
  - Low-risk package, but in addition clients receive a short course of 1:1 physiotherapy
  - Treatment should be focused on evidence-based interventions (i.e. manual therapy, education, self-management strategies including exercise)
  - Exercises prescribed should be functional in nature focusing on the client's activities of daily living and goals
  - Instruction in a home exercise program and progression of a home exercise program as appropriate
  - Return to work advice should be provided (if appropriate)
  - Transition from physiotherapy program to appropriate community services

High Risk: Assessment and up to 4 enhanced treatment visits

- Provide clients with hope for improved function but review expectations that symptoms may not resolve completely during the episode of care
- **Goals:**
  - Help clients return to valued activities
  - Help clients determine what those valued activities are (i.e. collaborative goal setting)
  - Reduce disability and pain
  - Enable the client to manage ongoing and/or future episodes
- **Components:**
  - Inclusion of elements of the low and medium packages while also addressing the more complex psychosocial barriers to recovery (i.e. a focus on the cognitive, behavioral, and emotional contributions to pain)
  - Advice on pacing and grading activities and support return to work and function should be included
  - Treatment is time limited (i.e. 4 visits over 3 months)
  - Visits must be at least 30 minutes in length with a focus on one-to-one time with the physiotherapist
  - Consider referral to a health care professional for low mood, anxiety, and/or depression if appropriate

Outcome Measurement

Clinicians are required to complete the Patient Specific Functional Scale **and** at least one recommended outcome measure that best meets the client's presentation (see Appendix A). Outcome measures should be documented at assessment and discharge.

Collaborative Goal Setting

- It is important that functional and meaningful goals are established in collaboration with each client. Goals may change or evolve for clients as they work through the program.
- Goals should be documented in the client's words in the chart **and** in the Health First Strata System (for contracted providers).
- It is important to describe how visits will be spaced and what clients will be expected to do on their own between visits.
- The goal setting process should take place at the initial assessment. Some participants will require additional attention and assistance with appropriate goal setting.

Transitions

- Clients should be provided with information regarding community programs that are available and appropriate to support their rehabilitation such as aquatic therapy, local fitness facilities and AHS community programs.
- Each clinic should create their own resource list for local community exercise options. Contact information and location address is helpful for clients to investigate options for upcoming classes.
- To facilitate a community transition, it can also be helpful to provide the client with a discharge note detailing the level of activity permitted, any restrictions the client may have, and advice on the type of classes to attend.

Resources

The resources below are intended to support implementation.

Resource Name	Source	Type	Description	Link
Keele STarT Back Tool	Keele University	Outcome Measure	Online copy of the STarT Back tool	STarTBacK Online
Keele STarT Back Training	Keele University	Provider education	Free online training for the STarT Back tool.	STarT Back – Training
Keele STarT MSK Tool	My Health Alberta	Outcome Measure	Providers information about the STarT MSK tool and has a link to download a copy of the tool.	STarT MSK
CORE Back Tool Ontario	Center for Effective Practice	Provider resource	Outlines red flags for low back pain	CEP_CORE_Back
CORD Neck & Headache Tool	Center for Effective Practice	Provider resource	Provides practice recommendations for managing clients with neck pain or headaches	CEP_HeadandNeck
Canadian C-Spine Rules	Physiopedia	Provider resource	Decision support tools used to determine when radiography is warranted	Canadian C-Spine Rule
Ottawa Ankle Rules	Physiopedia	Provider resource		Ottawa Ankle Rules
Ottawa Knee Rules	Physiopedia	Provider resource		Ottawa Knee Rules

Allied Health/Rehabilitation Standardized Service

Physiotherapy Post Fracture / Post Orthopedic Surgery	Information for Operational Leaders, Practice Leaders and Community and Contracted Physiotherapy Providers

Purpose	• Outlines Alberta Health Services' minimum expectations when providing physiotherapy services for adult and pediatric clients post fracture and post orthopedic surgery. • Provides guidance for consistent application of the AHS Community Physiotherapy Service Model.
Service Goals	• Supports recovery from orthopedic surgery or fracture within an episode of care with the realization that the episode of care may not return the client to full recovery within available time frames. • Client will understand their condition and how to self-manage their pain and symptoms. • Client will have improved capacity to participate in activities which are important to them.
Access, Wayfinding & Transitions	**Inclusion Criteria** • Albertans who have been diagnosed with a fracture or who have undergone orthopedic surgery in the past 12 weeks, who have a functional concern and wish to access AHS funded physiotherapy service. **Episodes of Care** Fracture: • Basic Episode of Care: 1 assessment and **up to** 3 treatment attendances Complex Fracture: • **Up to** 3 additional treatment attendances may be approved (see Practice Guide for details) Orthopedic Surgery: • Basic Episode of Care: 1 assessment and **up to** 4 treatment attendances • Up to 2 additional treatment attendances if complicating factors present (see Practice Guide for details) **Transitions** • Clients, families and providers partner to create a transition plan when funded visits conclude to support return to home, work and leisure activities. Successful transitions can be facilitated by: ○ Knowledge of how to self-manage ongoing symptoms ○ Knowledge of safe progression of exercise and activity utilizing their home exercise program ○ Education on community options to support additional physical activity and rehabilitation, public and accessible transportation options, and return to work or volunteer opportunities ○ Supporting the creation of new functional goal(s). ○ Communication with the client's primary care physician if appropriate
Partnership & Collaboration	• Physiotherapists contracted to provide client care on behalf of AHS are seen to be in partnership with the clients they serve, the client's primary care physician or specialist physician and the AHS community physiotherapy services leadership. • Providers actively seek feedback from clients, family and caregivers to improve group and individual programming.
Client Participation	• Client will actively participate in collaborative goal setting and transition planning. • Client will be advised that an AHS funded episode of care is not for recurrent / persistent symptom management. • Client may opt out of an AHS funded episode of care and choose to private pay or utilize private insurance.

Core Clinical Activities	**Visits will include but are not limited to:** • Goal setting • Self-management education • Exercise prescription • Equipment prescription as required • Instruction in a home program and progression of that home program as appropriate • Transition from physiotherapy services to appropriate community activities Visit focus should **not** be on the provision of acupuncture/IMS, thermal agents or electro physical modalities.
Outcome Measures	Choose **at least one** outcome measure that best meets the client's age range and presentation. Document at assessment and discharge. Recommended outcome measures include: • Lower Extremity Functional Scale (LEFS) • Neck Disability Index (NDI) • Patient Specific Functional Scale (PSFS) • Roland-Morris Low Back Pain & Disability Questionnaire • Upper Extremity Functional Index (UEFI)
Clinical Resources and Requirements	The following resources are available to assist with clinical practice: • Physiotherapy Post Fracture / Post Orthopedic Surgery: Practice Guide • AHS provided training on the standardized service

Practice Guide: Physiotherapy Post Fracture / Post Orthopedic Surgery

Episode of Care

A **Basic Episode of Care (BEC)** starts with an assessment and includes an associated number of treatment attendances. Prior to assessment, explain AHS funded episode of care parameters, client responsibilities and expectations. Clients may opt out of an AHS funded episode of care and choose to pay privately or utilize private insurance. Please document this choice.

- **Fracture BEC:** 1 assessment and **up to** 3 treatment attendances
  - Physiotherapy to begin within 12 weeks post fracture. Requests outside this time frame must be approved by a physiotherapy consultant or alternate.
- **Complex Fracture*:** Up to 3 additional treatment attendances may be approved.
- **Orthopedic Surgery BEC:** 1 assessment and **up to** 4 treatment attendances
  - Physiotherapy to begin within 12 weeks post fracture. Requests outside this time frame must be approved by a physiotherapy consultant or alternate.
  - Up to 2 additional treatment attendances may be offered based on complicating factors* impacting rehabilitation.

*Clients who may qualify for additional treatment attendances	
A	Completed comparison outcome measures score (on re-assessment) showing significant functional gain with physical therapy; **and**
B	Evidence of **one or more** of the following: • Complex facture (comminuted, intra-articular fracture or growth plate involvement) • Surgeries with prolonged protocols (e.g., rotator cuff repairs, total shoulder replacement, ACL with meniscal repairs) • Multiple/bilateral surgeries or areas of injury/trauma • Post operative / post fracture complications (e.g., infection, CRPS, heterotopic phone growth) • Prolonged hospitalization or periods of prolonged immobilization • Comorbidities which may impact client's ability to participate in therapy or delay healing process (e.g., significant OA in adjacent joints, rheumatological condition flare, underlying neurological condition that affects the body area) • Significant difficulty following directions or visual impairment • Complex psychosocial situations

Note: In the pediatric population, complex developmental, medical or neurological factors impacting the ability to actively participate in therapy may warrant referral to specialized rehabilitation services.

Physiotherapy Assessment & Treatment

A comprehensive 1:1 assessment will be completed by a physiotherapist. The assessing clinician should determine the client's ability to participate in exercise, education, self-management and collaborative goal setting.

At a minimum, the first appointment should include:

- Screening of related areas, including but not limited to:
  - Medical conditions and current health status
  - Current medications and their potential impact on presenting concerns
  - Current functional status and participation levels
  - Pain
  - Potential risk factors contributing to falls, such as home and environment, continence, nutrition
  - Cognition, including executive functioning
  - Communication
  - Psychosocial factors
- Completion of the recommended outcome measures (see Appendix A)
- Collaborative goal setting

Physiotherapy visits will include but are not limited to:

- Self-management education
- Exercise prescription
- Instruction in a home exercise program with progressions of that program as appropriate
- Equipment prescription (as required)
- Transition from physiotherapy to appropriate community resources

Note: Visit focus should **not** be on the provision of acupuncture/IMS, thermal agents or electrophysical modalities.

Outcome Measurement

Clinicians are required to complete at least one recommended outcome measure that best meets the client's presentation (see Appendix A). Outcome measures should be documented at assessment and discharge.

Collaborative Goal Setting

- It is important that functional and meaningful goals are established in collaboration with each client. Goals may change or evolve for clients as they work through the program.
- Goals should be documented in the client's words in the chart **and** in the Health First Strata System (for contracted providers).
- It is important to describe how visits will be spaced and what clients will be expected to do on their own between visits.
- The goal setting process should take place at the initial assessment. Some participants will require additional attention and assistance with appropriate goal setting.

Transitions

- Clients should be provided with information regarding community programs that are available and appropriate to support their rehabilitation such as aquatic therapy, local fitness facilities and AHS community programs.
- Each clinic should create their own resource list for local community exercise options. Contact information and location address is helpful for clients to investigate options for upcoming classes.
- To facilitate a community transition, it can also be helpful to provide the client with a discharge note detailing the level of activity permitted, any restrictions the client may have, and advice on the type of classes to attend.

Resources

The resources below are intended to support implementation.

Resource Name	Source	Type	Description	Link
Alberta Bone & Joint Institute Hip Fracture Care Pathway Toolkit	Bone & Joint Strategic Clinical Network	Provider resource	Prevention, evidence-informed acute surgical and restorative care pathways, forms and checklists, tools and resources for providers, and client education resources (multiple languages).	Hip Fracture Care Pathway Toolkit
Osteoarthritis Toolkit	AB Bone and Joint Strategic Clinical Network	Client and provider resource	Live your best life with osteoarthritis	Osteoarthritis Toolkit
Hip Fracture Guide	My Health Alberta	Client resource	Resources for clients following hip fracture	Your guide after a hip fracture (alberta.ca)
University of Alberta Shoulder Rehabilitation Guidelines	University of Alberta	Provider resource	Standardized, consensus and evidence derived post-operative shoulder rehabilitation guidelines for clients following various shoulder surgeries.	Shoulder Rehabilitation Guidelines | Faculty of Rehabilitation Medicine (ualberta.ca)

Allied Health/Rehabilitation Standardized Service

Community Physiotherapy for Post Operative Hip and Knee Arthroplasty	Information for Operational Leaders, Practice Leaders and Community and Contracted Physiotherapy Providers

Purpose	• Outlines Alberta Health Services' minimum expectations when providing physiotherapy services for clients following hip or knee arthroplasty surgery in Outpatient & Community Physiotherapy settings. • Provides guidance for consistent application of the AHS Community Physiotherapy Service Model.
Service Goals	• Clients who have undergone hip or knee arthroplasty surgery will progress towards a return to functional activities in accordance with the AHS Hip / Knee care pathway. • Clients will have improved understanding and ability to manage their post-operative rehabilitation, including active engagement in personalized exercise during, between and following completion of scheduled sessions. • To optimize post-operative outcomes and minimize post-operative complications.

Access, Wayfinding & Transitions	**Inclusion Criteria**
	• Albertans who:
	  ○ Have undergone hip or knee arthroplasty within the last 12 weeks.
	  ○ Have a functional concern and wish to access AHS-funded rehabilitation services.
	
	Episode of Care
	• Clients may choose to receive their physiotherapy in a group setting OR in one-to-one (1:1) sessions for their episode of care.
	• All assessments will be completed 1:1 by a physiotherapist prior to active participation in either group or 1:1 physiotherapy treatment visits
	
	<u>Group:</u>
	• Clients who opt into a group intervention will be funded for 6 group visits following their assessment.
	• Groups may be provided in person or virtually.
	
	<u>1:1 Hip Arthroplasty</u>
	• Clients who opt for 1:1 physiotherapy will be funded for up to 4 visits following their assessment.
	• Up to 2 additional visits may be approved by a PT consultant if they meet complexity criteria.
	• Complexity criteria include but are not limited to:
	  ○ Osteomyelitis, intra-operative fractures, bone graft reconstruction, significant edema in the surgical leg (e.g. pitting causing reduced leg ROM), Hip ROM < 45° flexion, <15° abduction.
	
	<u>1:1 Knee Arthroplasty</u>
	• Clients who opt for 1:1 treatment visits will be funded for up to 6 visits following their assessment
	• Clients are encouraged to start their physiotherapy within 2-3 weeks post-surgery to facilitate early functional knee range of motion.
	
	Transitions
	• Clients, families, and providers partner to create a transition plan when funded visits conclude to support return to home, work and leisure activities. Successful transitions can be facilitated by:
	  ○ Knowledge of how to self-manage ongoing symptoms.
	  ○ Knowledge of safe progression of exercise and activity utilizing their home exercise program.
	  ○ Education on community options to support additional physical activity and rehabilitation, public and accessible transportation options, and return to work or volunteer opportunities.
	  ○ Supporting the creation of new functional goal(s).
	  ○ Communication with the client's primary care physician if appropriate.

Partnership & Collaboration	• Physiotherapists contracted to provide client care on behalf of AHS are seen to be in partnership with the clients they serve, the client's primary care physician or specialist physician and the AHS community physiotherapy services leadership. • Providers actively seek feedback from clients, family, and caregivers to improve group and individual programming.
Client Participation	• Client will actively participate in collaborative goal setting, home programs, and transition planning. • Client may opt out of an AHS funded episode of care and choose to private pay or utilize private insurance.
Program Components	**Assessment** • A 1:1 assessment will be completed by a physiotherapist prior to active participation in either group or 1:1 physiotherapy. **Treatment Interventions – Individual and Group** **Note:** For all treatment scenarios, specific precautions provided by surgeons will be followed. **Individual sessions:** <u>Knee Arthroplasty:</u> • Sessions should include exercise prescription to improve range of motion and strength, manual therapy when necessary, and interventions to reduce knee swelling. • Advice regarding the need for gait aids and/or progression from one gait aid to another should be considered. • Sessions may be scheduled as required to ensure functional knee range of motion is achieved within the first 6 weeks post-surgery. • Most of the patient's recovery will take place in the community. Throughout the program the patient needs to be provided with instruction and ongoing education regarding exercise and functional activities to be completed at home. <u>Hip Arthroplasty:</u> • Sessions should include exercise prescription and education, as well as exercise progression based on the clients' surgical restrictions. • Advice regarding the need for gait aids and/or progression from one gait aid to another should be considered. • Sessions may be scheduled as required to align with the client's needs, goals, and their presentation at assessment. • Most of the patient's recovery will take place in the community. Throughout the program the patient needs to be provided with instruction and ongoing education regarding exercise and functional activities to be completed at home. **Group sessions:** • Should be 60 minutes each and include education and exercise at each session. • Groups will consist of a minimum of 2 clients and up to a maximum of 8 clients for in person groups or 5 clients for virtual groups. • Maximum and ratio of staff to participants is determined based on physical space, staff complement and functional status of participants. • Clients are expected to complete a personalized home exercise program between sessions. • Group sessions are offered once per week. • Clients attend weekly, consecutively. • As with all physiotherapy visits, during group sessions clients should be re-evaluated, their responses to interventions should be monitored, and their program should be adjusted as required. • Once assessed, a client can join the group at any point i.e. intake clients as they are referred, not in cohorts.

	Providers • Programming is provided by a registered physiotherapist. • Other disciplines may assist in program delivery (therapy assistants, kinesiologists). • **AHS funded arthroplasty rehabilitation groups are a physiotherapy visit and as such should be facilitated by a physiotherapist.** Physiotherapists, in accordance with the CPTA Supervision Standard of Practice, can assign supervision of client exercise programs to therapy assistants once the physiotherapist has established that the therapy assistant is competent to perform supervision of exercise programs. Physiotherapists are responsible for determining whether direct or indirect supervision of therapy assistants is appropriate in the context of the group sessions. Client safety must be maintained, and client needs must be considered when determining the level of supervision required.
Core Clinical Activities	**Visits will include but are not limited to:** • Assessment • Goal setting • Self-efficacy and self-management education • Exercise prescription to facilitate mobility and physical performance. This includes provision of a home program. • Equipment prescription to facilitate safety and function. • Encourage participation in physical activity to support ongoing recovery.

Outcome Measures	• Each of the following outcome measures will be completed and documented pre- and post-intervention:
	  ○ Lower Extremity Functional Scale (LEFS)
	  ○ Timed Up and Go (TUG) Test (may be replaced with 30sec. sit to stand)
	• Providers may choose to utilize additional clinical outcome measures.

Clinical Resources and Requirements	**Clinical Resources** The following resources are required for clinical practice: ○ Community Physiotherapy for Post Operative Hip and Knee Arthroplasty: Practice Guide ○ AHS Outpatient & Community Physiotherapy Services - Process Manual for Contracted Providers ○ Knowledge of how to facilitate collaborative goal setting with clients ○ Home exercise program software ○ List of community activity options to support transition to discharge **Clinical Requirements** • Knowledge of hip and knee arthroplasty procedures and the typical uncomplicated, recovery. • Ability to recognize clients who are not following a typical recovery or experiencing post-operative complications with subsequent modification to the intervention plan • Ability to expand on, limit or modify exercises in the Alberta Bone and Joint Institute's post-operative protocols to meet each client's unique needs and capability. • Therapy assistants working under assignment would meet these competencies by working within the parameters set by the therapist and by therapists modifying the treatment plan. • Incorporate behavior change strategies • Group facilitation skills • Familiar with relevant community resources and maintains relationships with a variety of community partners to facilitate client transitions and group education opportunities. • Ability to engage in wellness conversations and collaborative goal setting with clients

Practice Guide: Community Physiotherapy for Post Operative Hip and Knee Arthroplasty

Episode of Care

A **Basic Episode of Care (BEC)** starts with an assessment and includes an associated number of treatment attendances. Prior to assessment, explain AHS funded episode of care parameters, client responsibilities and expectations. Clients may opt out of an AHS funded episode of care and choose to pay privately or utilize private insurance. Please document this choice.

Physiotherapy is expected to start within 12 weeks post-surgery. Ideally, knee replacements will initiate their physiotherapy 2-3 weeks post-surgery to facilitate early range of motion. Clients with either knee or hip replacements should receive instructions in their 2-week post-operative visit about when to access physiotherapy.

Requests outside of the 12-week time frame must be approved by a physiotherapy consultant or alternate.

Clients may choose to receive their physiotherapy in a group setting OR in one-to-one (1:1) sessions.

- **Group BEC:** 1 assessment and **up to** 6 group treatment attendances
  - Groups may be provided in person or virtually

- **1:1 Hip Arthroplasty BEC:** 1 assessment and **up to** 4 treatment attendances
  - Up to 2 additional visits may be approved if the client meets complexity criteria which includes, but is not limited to:
    - Osteomyelitis, intra-operative fractures, bone graft reconstruction, significant edema in the surgical leg (e.g., pitting causing limited leg ROM), poor hip ROM < 45° flexion, <15° abduction

- **1:1 Knee Arthroplasty BEC:** 1 assessment and **up to** 6 treatment attendances
  - Clients are encouraged to start physiotherapy within 2-3 weeks to facilitate early knee range of motion

Physiotherapy Assessment & Treatment

A 1:1 assessment will be completed by a physiotherapist prior to active participation in either group or 1:1 physiotherapy. The assessing clinician should determine the client's ability to participate in exercise, education, self-management and collaborative goal setting.

At a minimum, the first appointment should include:

- Completion of the recommended outcome measures (see Appendix A)
- Collaborative goal setting
- Review the exercise program provided upon discharge from the most recent health service (e.g. acute care)
- Review of mobility aids as applicable
- Measure ranges of motion:
    - Hip Arthroplasty
        - Bilateral active hip and knee Range of Motion (ROM)
        - Measurement of passive ROM is encouraged (but in first 6-12 weeks post-op, therapists / surgeons may urge caution with the healing capsule and avoid PROM to minimize risk for capsular injury or joint dislocation)
    - Knee Arthroplasty
        - Bilateral active knee and hip ROM AND bilateral passive knee ROM

- Screening of related areas, including but not limited to:
    - Medical conditions and current health status
    - Current medications and their potential impact on presenting concerns
    - Current functional status and participation levels
    - Pain
    - Potential risk factors contributing to falls, such as home and environment, continence, nutrition
    - Cognition, including executive functioning
    - Communication
    - Psychosocial factors

- Discuss expectations: Providers are encouraged to discuss the format and content of group programming with clients and families to help them know what to expect for those attending groups. The assessment appointment should

include an initial discussion of hurt vs. harm concepts, information about the exercise level that the client should start and any recommendations on exercise modifications required for that client. Review appropriate footwear and clothing for visits.

Virtual Assessment

In this context, ongoing assessment will be based on observation of active range of motion, functional transfers, movements / activities, gait, and transitions between activities or positions. The physiotherapist may also employ outcome measures based on the observation of completed repetitions or timed activities.

Outcome Measurement

Clinicians are required to complete and document **each** of the recommended outcome measures at assessment and discharge.

- Lower Extremity Functional Scale (LEFS)
- Timed Up and Go (TUG) Test – may be replaced with the 30 second sit to stand

See Appendix A for details on the recommended outcome measures.

Collaborative Goal Setting

- It is important that functional and meaningful goals are established in collaboration with each client. Goals may change or evolve for clients as they work through the program.
- Goals should be documented in the client's words in the chart **and** in the Health First Strata System (for contracted providers).
- It is important to describe how visits will be spaced and what clients will be expected to do on their own between visits.
- The goal setting process should take place at the initial assessment. Some participants will require additional attention and assistance with appropriate goal setting.

Requirements for Group Sessions

Space to accommodate circuit type training (exercise stations that allow independent simultaneous exercise) for a minimum of 2 clients and up to 8 clients. Infection prevention and control measures must also be considered to ensure adequate cleaning / disinfection of equipment and exercise spaces between uses by different clients.

Equipment Requirements for Groups

- Chairs
- Two plinths
- Quads rolls
- Straps
- Theraband
- Balance Discs / pads
- Wobble Board
- Cones (to mark walk)
- Exercise Ball
- Ankle weights- a variety of sizes
- Exercise equipment for warm up i.e. stationary bicycle
- Exercise mats

Requirements for Virtual Sessions

- Providers and clients will require internet capable devices that are able to transmit and receive both video and audio content. Devices requirements may vary depending on the virtual platform / program being used
- Providers will require a virtual platform to facilitate online interaction with their clients. The program will need to support multiple participants simultaneously.
- The virtual platform must meet Physiotherapy Alberta-College and AHS standards for virtual service delivery, ensuring privacy and security of all transmitted images and information
- Providers will require the clinical space and equipment necessary to demonstrate all exercises to their clients, from various angles / perspectives
- Clients will require adequate space to perform the assigned exercises and freely transition between exercises within the view of their camera to ensure adequate supervision from the Provider
- Equipment requirements will depend on the exercises that are assigned. The Provider must ensure exercise selection is based on the equipment and space that the client has access to.
- Providers can discuss with their clients how to obtain equipment such as resistance bands, exercise balls, etc.
- The consent process for virtual visits must include obtaining informed consent to use of the virtual platform and the secure, online transmission of the interaction.

Group Set-up

Groups can be offered for hip or knee arthroplasty alone. Precautions and considerations related to ROM and mobility must be emphasized for both hip and knee arthroplasty clients, if the groups are mixed.

Experienced providers have reported that persons with total hip arthroplasty and total knee arthroplasty can participate in the same group with a continuous intake. It is recognized that implementing continuous intake and having persons with two different surgeries in the same group at the same time are group facilitation competencies that may require time and supports to fully implement. If offering group physiotherapy for the first time, it may be reasonable to begin by admitting fewer participants with less frequency.

Maximum Participants: Virtual – 5 participants; in person – 8 participants

Group Scheduling

- The group exercise session schedule must be available a minimum of 2 weeks in advance. This allows the client to arrange for transportation or assisting caregivers to attend the sessions as required.
- Group sessions should be at least 60 minutes long
- Options must be available for group exercise sessions at different times of day and different days of the week. This allows for clients who may not be available for a particular time or day of week to be accommodated on other days.
- A client must be permitted to space out the attending sessions to support them to make gains in between group visits. This should allow clients to make improvements in strength, range of motion and balance, enabling clients to progress their exercises within circuit stations.

Group Facilitation Strategies

- Open the group with introductions and a short Icebreaker exercise
- Set the Scene & Explain the role of therapist and therapy assistant as appropriate
- Review details such as is water allowed, when/where to rest, whom to go to for help, ability to interrupt to clarify, encouragement of socialization
- Ask open ended questions to identify what clients may want to learn and then offer information as appropriate

- Assist the group to identify knowledge gaps and strengths.
- Build on what they know as adult learners may retain less when approached with a passive learning approach
- Engage your audience in simple non-technical language
- Provide demonstration of activities
- Build rapport with clients to ensure success and engagement during group sessions.
- Reinforce client's accountability to continue with exercise and activity between sessions.

Virtual Exercise Program Tips

- The participant is 2-3 feet away from their electronic device.
- The participant has adequate space around them in all directions equal to 3-5 step length.
- Tablets are propped up at a 90° angle to increase viewable area (e.g. by putting a large book behind it).
- Perform a virtual safety check of client's surrounding area prior to start of each session
- Virtual backgrounds are disabled, as they affect the ability to view the complete environment.
- The leader alternates between spotlighting their video for demonstration and moving to gallery view to see all the participants.
- Some exercises be demonstrated in profile view rather than always face to face, to support body positioning.
- The equipment (e.g. TheraBand) ideally contrasts in color with any clothing for easier visibility.

Educational Topics

Client education is an expected component of each session. Over the course of the group sessions, the following must be covered:

- Joint structure and basic movement mechanics
- Post-surgical pain management
- General mobility and joint protection
- Physical activity and fitness recommendations including activity pacing
- Posture and positioning
- Use of and progression of various walking aids

- Navigating stairs and uneven ground
- Wellness (rest/sleep, activity, energy conservation)
- Service options in the community (Alberta Healthy Living Programs, local fitness facilities, recreational group programs)
- Basic exercise physiology (cardiovascular vs. strength training) and exercise parameters (duration, frequency, intensity)
- Applicable post-op protocols and progressions

Clinicians should provide education that addresses the dynamics of the group and the needs of the participants. Education topics can be delivered to the group as a whole or can be delivered individually at a station in the exercise circuit.

Provide an opportunity for clients to ask questions before or after the group by having the physiotherapist available for a few minutes.

Note: Clinicians may support their education component with appropriate resources of their choosing or may select references on the education topics noted above and provide handouts or links to specific web-based resources.

Exercise Programming

Appropriate exercise is important for achieving goals set by the client and physiotherapist. Early post-op timeframe:

Phase One - Focuses on restoring range of motion to the surgical joint. Upon achieving mobility goals, the program is progressed to Phase 2.

Phase Two – Focuses on adding resistance and incorporating functional exercises.

Progression typically happens around the six-week post-op mark. This allows for sufficient healing of the soft tissues and muscles, which leads to improved tolerance of increased resistance activities. Exercise will be dosed appropriately to allow the client to manage swelling and pain. Tolerance to the exercise progression will be confirmed prior to further progression.

The Exercises listed below are to service as a guide for group service delivery and can be modified as clinically appropriate.

Early Rehab (Phase 1) Knee Exercises	
Supine	Active hip/knee flexion ROM (progression to heels on ball – self-assisted knee flexion) Quads setting, straight leg raise Isometric gluts Quads over roll, over ball Heel on roll – active knee extension Supine or long sitting - self-assisted knee flexion (using strap/ other leg)
Prone	Knee flexion - self-assisted (using other leg or belt) At edge of bed, passive knee extension
Sitting	Active knee flexion Self-assisted knee flexion (using other leg or sliding forward on chair) Active knee extension, progress to sitting on disc or ball Gravity-assisted knee extension (with heel on chair of the same height) Sitting at edge of chair with heel on ground - self-assisted knee extension, gentle hamstring/calf stretch with strap
Standing	Equal weight bilateral stance- shift weight toward single leg stance (isometric gluts/quads) Partial squats Hamstring curl Hip/knee flexion AROM Calf raises Walking sideways / backwards holding onto rail
Stationary bike self-assisted stretch-progression to revolutions as tolerated.	

Progressions (Phase 2) Knee Exercises	
Sitting	Theraband quads Theraband hamstrings Progress from chair to sitting on ball
Supine	Bridging Clamshell/side lying abduction Prone on ball- hamstring curls

Standing	Squat- to chair, against wall with ball Step up/step down/ lateral step – with balance support as needed Lunge/stride- forward/back/sideways Calf stretch at wall, knee extension end-range stretch Single leg balance- floor, uneven surface/wobble board- progression to small range squat
Gait Aid Progression and Gait Re-Education	Walking on uneven ground using soft mat Walking around obstacles- cones/figure 8 Walking backwards

Early Rehab (Phase 1) Hip Exercises	
Supine	Active hip/knee flexion ROM, foot on bed or on ball Active abduction ROM Isometric Gluts Static quads Thomas position – hip flexor stretch Quads over roll
Sitting	Active knee flexion Active knee extension, progress to sitting on disc or ball Hamstring stretch/calf stretch with strap
Prone	Isometric Gluts Active stretch hamstrings (active knee flexion)
Standing	Hip/knee flexion AROM Hip extension Hip abduction Hamstring curl Partial squat Early balance – double leg stance, moving arms or upper body Walking sideways / backwards holding onto rail

Progressions (Phase 2) Hip Exercises	
Side Lying	Clamshell / reverse clamshell (resistance if needed) Abduction against gravity
Supine	Bridging Thomas position- hip flexor stretch, progress to leg over edge of bed

Prone	Prone position/prone on elbows – hip flexor stretch Prone knee bend – quads stretch (may add short range IR/ER) Prone extension +/- abduction (may be done prone on ball)
Kneeling	4 point kneel – hip extension +/-abduction, opposite arm lift
Sitting	Theraband quads Theraband hamstrings Theraband abduction AROM hip IR/ER (+/- Theraband) AROM hip flex / abduction (can be done sitting on high seat or on ball)
Standing	Theraband hip flexion Theraband hip extension Theraband hip abduction Squat to chair or against wall with ball Step up/step down/lateral step Wobble Board with support
Gait Aid Progression and Gait Re-Education	Walking on uneven ground- using soft mat Walking around obstacles- cones/figure 8 Walking backwards

Transitions

- Clients should be provided with information regarding community programs that are available and appropriate to support their rehabilitation such as aquatic therapy, local fitness facilities and AHS community programs.
- Each clinic should create their own resource list for local community exercise options. Contact information and location address is helpful for clients to investigate options for upcoming classes.
- To facilitate a community transition, it can also be helpful to provide the client with a discharge note detailing the level of activity permitted, any restrictions the client may have, and advice on the type of classes to attend.

Resources

The resources below are intended to support implementation.

Resource Name	Source	Type	Description	Link
Hip and Knee Surgical Care Path	Alberta Bone and Joint Institute	Provider resource	Provides and overview of the Alberta Hip and Knee Arthroplasty Care Path.	Hip & Knee Care Pathway
Post-operative Booklets	Alberta Hip and Knee Centre	Client resource	Provides post-operative information for arthroplasty clients	Alberta Hip and Knee - Guides
Alberta Bone & Joint Institute Hip Fracture Care Pathway Toolkit	Bone & Joint Strategic Clinical Network	Provider resource	Prevention, evidence-informed acute surgical and restorative care pathways, forms and checklists, tools and resources for providers, and client education resources (multiple languages).	Hip Fracture Care Pathway Toolkit
Osteoarthritis Toolkit	AB Bone and Joint Strategic Clinical Network	Client and provider resource	Live your best life with osteoarthritis	Osteoarthritis Toolkit
AHS Virtual Health	AHS	Provider resource	Tools to support virtual healthcare encounters.	Virtual Health | Alberta Health Services
Telerehabilitation Guide for Physiotherapists	College of Physiotherapists of Alberta	Provider resource	This resource is intended to assist physiotherapists to develop policies and procedures to support quality, effective physiotherapy care using technology.	Telerehabilitation Guide

Appendix A: Outcome Measure Toolkit

This toolkit provides an overview of the recommended outcome measures for Outpatient and Community Physiotherapy Services.

Lower Extremity Functional Scale (LEFS)

Neck Disability Index (NDI)

Patient Specific Functional Scale (PSFS)

Rolland Morris Disability Questionnaire (RMDQ)

Upper Extremity Functional Index (UEFI)

In addition to the LEFS, one of the following outcome measures are required when providing care under the Post Operative Hip and Knee Arthroplasty Standardized Service.

Timed Up and Go (TUG) Test

30 Second Chair – Sit to Stand

Lower Extremity Functional Scale (LEFS)

Objective

- To measure a client's initial function, progress, and outcomes following a lower extremity injury

Intended Population

- Adults with a wide range of lower extremity conditions
- Age ranges include adult 18-64 years, elderly adult 65 years+

Description

- The LEFS is a self-report questionnaire
- Clients select an answer on a scale of 0-4 for 20 different activities listed

Scoring

- The client's score is tallied at the bottom of the page. The maximum score is 80 (very high function). The minimum score is 0 points (very low function).
- The minimum clinically important difference for the LEFS is 9 points (a change of greater than 9 points is considered a clinically meaningful functional change).

Note: The printable copy below has been approved for clinical use by the author.

LOWER EXTREMITY FUNCTIONAL SCALE

We are interested in knowing whether you are having any difficulty at all with the activities listed below because of your lower limb problem for which you are currently seeking attention. Please provide an answer for **each** activity.

Today, do you or would you have any difficulty at all with:

(Circle one number on each line)

ACTIVITIES	Extreme Difficulty or Unable to Perform Activity	Quite a bit of Difficulty	Moderate Difficulty	A Little bit of Difficulty	No Difficulty
a. Any of your usual work, housework or school activities.	0	1	2	3	4
b. Your usual hobbies, recreational or sporting activities.	0	1	2	3	4
c. Getting into or out of the bath.	0	1	2	3	4
d. Walking between rooms.	0	1	2	3	4
e. Putting on your shoes or socks.	0	1	2	3	4
f. Squatting.	0	1	2	3	4
g. Lifting an object, like a bag of groceries from the floor.	0	1	2	3	4
h. Performing light activities around your home.	0	1	2	3	4
I. Performing heavy activities around your home.	0	1	2	3	4
j. Getting into or out of a car.	0	1	2	3	4
k. Walking 2 blocks.	0	1	2	3	4
l. Walking a mile.	0	1	2	3	4
m. Going up or down 10 stairs (about 1 flight of stairs).	0	1	2	3	4
n. Standing for 1 hour.	0	1	2	3	4
o. Sitting for 1 hour.	0	1	2	3	4
p. Running on even ground.	0	1	2	3	4
q. Running on uneven ground.	0	1	2	3	4
r. Making sharp turns while running fast.	0	1	2	3	4
s. Hopping.	0	1	2	3	4
t. Rolling over in bed.	0	1	2	3	4
Column Totals:					

Score: _____ / 80

(699)

Neck Disability Index (NDI)

Objective

- To determine how neck pain affects a client's daily life and to assess self-rated disability due to neck pain

Intended Population

- Clients with neck pain and/or radiculopathy due to acute or chronic conditions
- Age ranges include adult 18-64 years, elderly adult 65 years+

Description

- 10 item functional status questionnaire
- Each section is scored on a scale from 0 (no disability) to 5 (complete disability)

Scoring

- All points are summed to a total score
- The test can be interpreted as a raw score (max score 50), or doubled and expressed as a percentage (max score 100%)
- Due to limitations in Strata to report percentages, please input the raw summed score out of 50
- A higher score indicates more client-rated disability
- Clinically important change = **5 points**

Patient Specific Functional Scale (PSFS)

Objective

- Used to assess functional ability to complete specific activities and measures functional improvement/outcomes for clients with any orthopedic condition

Intended Population

- Adults with any orthopedic condition
- Age ranges include adult 18-64 years
- May be used for pediatric cases in contracted settings

Description

- Focuses on the client's rating of their function
- Requires the therapist to ask the client to list at least 3 activities that are limited by the condition for which they are seeking treatment
- Clients then rate their ability to complete those activities on an 11-point scale, selecting a value that best describes their current level of ability
  - "0" represents "unable to perform"
  - "10" represents "able to perform at prior level"
- Client-specific, thereby addresses issues that are often missed in other outcome measures with set content
- Relies on subjective data, therefore not traditionally used as an absolute measure of disability, but rather as a measure to assess changes over time/ efficacy of treatment

Scoring

- For Strata entry, please submit the **sum** of the scores for all activities instead of the average score
- Please multiply the number of activities by 10 to get the total possible score (denominator) (e.g., 3 activities x 10 = 30)
- Minimum detectable change for any single activity score = **3 points**

Note: The printable copy below has been approved for clinical use by the author.

The Patient-Specific Functional Scale

This useful questionnaire can be used to quantify activity limitation and measure functional outcome for patients with any orthopaedic condition.

Clinician to read and fill in below: Complete at the end of the history and prior to physical examination.

Initial Assessment:

I am going to ask you to identify up to three important activities that you are unable to do or are having difficulty with as a result of your _____ problem. Today, are there any activities that you are unable to do or having difficulty with because of your _____ problem? (Clinician: show scale to patient and have the patient rate each activity).

Follow-up Assessments:

When I assessed you on (state previous assessment date), you told me that you had difficulty with (read all activities from list at a time). Today, do you still have difficulty with: (read and have patient score each item in the list)?

Patient-specific activity scoring scheme (Point to one number):

0 1 2 3 4 5 6 7 8 9 10

Unable to perform activity

Able to perform activity at the same level as before injury or problem

(Date and Score)

Activity	Initial					
1.						
2.						
3.						
4.						
5.						
Additional						
Additional						

Total score = sum of the activity scores/number of activities
Minimum detectable change (90%CI) for average score = 2 points
Minimum detectable change (90%CI) for single activity score = 3 points

PSFS developed by: Stratford, P., Gill, C., Westaway, M., & Binkley, J. (1995). Assessing disability and change on individual patients: a report of a patient specific measure. Physiotherapy Canada, 47, 258-263.

Roland Morris Disability Questionnaire (RMDQ)

Objective

- To assess self-rated physical disability caused by low back pain and follow changes over time

Intended Population

- Most sensitive for clients with mild to moderate disability due to acute, sub-acute, or chronic low back pain
- Age ranges include adolescent 13-17 years, adult 18-64 years, elderly adult 65 years+

Description

- The client is asked to tick a statement if it applies to them on that specific day.

Scoring

- The end score is the sum of the ticked boxes, ranging from 0 (no disability) to 24 (max disability)

Electronic version and scoring guide available at:

Roland Morris Disability Questionnaire (rmdq.org)

The Roland-Morris Disability Questionnaire

When your back hurts, you may find it difficult to do some of the things you normally do.

This list contains sentences that people have used to describe themselves when they have back pain. When you read them, you may find that some stand out because they describe you *today*.

As you read the list, think of yourself *today*. When you read a sentence that describes you today, put a tick against it. If the sentence does not describe you, then leave the space blank and go on to the next one. Remember, only tick the sentence if you are sure it describes you today.

1. I stay at home most of the time because of my back.
2. I change position frequently to try and get my back comfortable.
3. I walk more slowly than usual because of my back.
4. Because of my back I am not doing any of the jobs that I usually do around the house.
5. Because of my back, I use a handrail to get upstairs.
6. Because of my back, I lie down to rest more often.
7. Because of my back, I have to hold on to something to get out of an easy chair.
8. Because of my back, I try to get other people to do things for me.
9. I get dressed more slowly then usual because of my back.
10. I only stand for short periods of time because of my back.
11. Because of my back, I try not to bend or kneel down.
12. I find it difficult to get out of a chair because of my back.

13. My back is painful almost all the time.

14. I find it difficult to turn over in bed because of my back.

15. My appetite is not very good because of my back pain.

16. I have trouble putting on my socks (or stockings) because of the pain in my back.

17. I only walk short distances because of my back.

18. I sleep less well because of my back.

19. Because of my back pain, I get dressed with help from someone else.

20. I sit down for most of the day because of my back.

21. I avoid heavy jobs around the house because of my back.

22. Because of my back pain, I am more irritable and bad tempered with people than usual.

23. Because of my back, I go upstairs more slowly than usual.

24. I stay in bed most of the time because of my back.

Note to users:

This questionnaire is taken from: Roland MO, Morris RW. A study of the natural history of back pain. Part 1: Development of a reliable and sensitive measure of disability in low back pain. Spine 1983; 8: 141-144

The score of the RDQ is the total number of items checked – i.e. from a minimum of 0 to a maximum of 24.

It is acceptable to add boxes to indicate where patients should tick each item.

The questionnaire may be adapted for use on-line or by telephone.

Upper Extremity Functional Index (UEFI)

Objective

- Used to assess functional impairment in individuals with musculoskeletal upper limn dysfunction

Intended Population

- Clients with musculoskeletal disorders or orthopedic conditions of the upper extremity

Description

- Self-administered questionnaire that lists 20 activities
- The client gives a score to each based on the difficulty they have completing that activity

Scoring

- The scores are added to give a score between 0 and 80.
- A lower score indicates that the person is reporting increased difficulty with the activities
- Minimum level of detectable change = **9 points**

Note: The printable copy below has been approved for clinical use by the author.

UPPER EXTREMITY FUNCTIONAL INDEX

We are interested in knowing whether you are having any difficulty at all with the activities listed below because of your upper limb problem for which you are currently seeking attention. Please provide an answer for **each** activity.

Today, do you or would you have any difficulty at all with: (Circle one number on each line)

ACTIVITIES	Extreme Difficulty	Quite a bit of Difficulty	Moderate Difficulty	A Little bit of Difficulty	No Difficulty
a. Any of your usual work, housework or school activities	0	1	2	3	4
b. Your usual hobbies, recreational or sporting activities	0	1	2	3	4
c. Lifting a bag of groceries to waist level	0	1	2	3	4
d. Placing an object onto, or removing it from an overhead shelf	0	1	2	3	4
e. Grooming your hair	0	1	2	3	4
f. Pushing up on your hands (e.g., from bathtub or chair)	0	1	2	3	4
g. Preparing food (e.g., peeling, cutting)	0	1	2	3	4
h. Driving	0	1	2	3	4
I. Vacuuming, sweeping, or raking	0	1	2	3	4
j. Dressing	0	1	2	3	4
k. Doing up buttons	0	1	2	3	4
l. Using tools or appliances	0	1	2	3	4
m. Opening doors	0	1	2	3	4
n. Cleaning	0	1	2	3	4
o. Tying or lacing shoes	0	1	2	3	4
p. Sleeping	0	1	2	3	4
q. Laundering clothes. (e.g., washing, ironing, folding)	0	1	2	3	4
r. Opening a jar	0	1	2	3	4
s. Throwing a ball	0	1	2	3	4
t. Carrying a small suitcase with your affected limb	0	1	2	3	4
Column Totals:					

Score: _____ / 80

(69_)

Timed Up and Go (TUG) Test

Objective

- A performance-based measure that assesses mobility, balance, walking ability and fall risk in older adults.

Intended Population

- Targets the frail elderly, however can also be used with healthy older adults, chronic disease, knee or hip arthroplasty, etc.
- Age ranges include adult 18-64 years, elderly adult 65 years+

Description

- The client sits in a chair with his or her back against the chair back.
- On the command “go,” the client rises from the chair, walks 3 meters at a comfortable and safe pace, turns, walks back to the chair and sits down.
- Timing begins at the instruction “go” and stops when the client is seated.
- The client should have one practice trial that is not included in the score.
- Client must use the same assistive device each time he/she is tested to be able to compare scores.

Scoring

- The total time to rise from the chair, walk 3 meters, and return to sitting (recorded in **seconds rounded to the nearest whole number**)
- The units for this test on the Strata drop down are **seconds**.
- The minimum clinically important difference for the TUG is 1 second (a change of greater than 1 second is considered a clinically meaningful functional change).

30 Second Chair – Sit to Stand

Objective

- A measurement to assess functional lower extremity strength and endurance

Intended Population

- Older adults with lower extremity injury
- Age ranges include adult 18-64 years, elderly adult 65 years+

Description

- The 30 Second Chair Test is administered using a folding chair without arms, with seat height of 17 inches (43.2 cm). The chair, with rubber tips on the legs, is placed against a wall to prevent it from moving.
- The participant is seated in the middle of the chair, back straight, feet approximately shoulder width apart and placed on the floor at an angle slightly back from the knees, with one foot slightly in front of the other to help maintain balance. Arms are crossed at the wrists and held against the chest.
- Demonstrate the task both slowly and quickly.
- Have the client practice a repetition or two before completing the test.
- At the signal “go,” the client rises to a full stand (body erect and straight) and then returns back to the initial seated position.
- The client is encouraged to complete as many full stands as possible within 30 seconds. The client is instructed to fully sit between each stand.

Scoring

- While monitoring the client’s performance to ensure proper form, the tester silently counts the completion of each correct stand. The score is the total number of stands within 30 seconds (more than halfway up at the end of 30 seconds counts as a full stand). Incorrectly executed stands are not counted.
- If a client must use their arms to complete the test they are scored 0.
- The units for this test on the Strata drop down are **repetitions.**
- Minimally clinical improvement: **2.0 repetitions**

Appendix B: Outcome Measure Quick Reference Guide

Outcome	Denominator	Units	Minimal Detectable Change (MID)	Strata Entry Comments
Lower Extremity Functional Scale (LEFS)	80		9	
Neck Disability Index (NDI)	50		5	
Patient Specific Functional Scale (PSFS)	# of activities x 10		3 per activity	Please use the summed score and not the average score
Rolland Morris Questionnaire (RMQ)	24		5	
Upper Extremity Functional Index (UEFI)	80		9	
Timed Up and Go (TUG)	N/A	Seconds	N/A	Round to the nearest whole number
30 Second Chair Sit to Stand	N/A	Repetitions	2	