

Occupational Therapy TOOLKIT

Arthritis

Osteoarthritis (OA), rheumatoid arthritis (RA), psoriatic arthritis (PsA)

Impairments and Functional Limitations

ADL, IADL, productivity, and leisure impairment

Functional mobility impairment

Limited activity tolerance and endurance

Limited ROM

Impaired hand function

Impaired strength

Joint pain, swelling, and stiffness

Joint deformity and instability

Postural changes

Impaired balance

Sleep problems

Co-occurring conditions may include RA - joint deformities (swan neck, boutonniere, hitchhikers thumb, ulnar drift), nerve compression, surgery (joint replacement, joint fusion, synovectomy, tendon repair), cardiovascular disease, lung fibrosis, osteoporosis. OA - CMC arthritis, joint replacement. PsA - psoriasis, diabetes, cardiovascular disease.

Outcome Measure

Rheumatoid Arthritis Disease Activity Index (RADAI-5)

Arthritis Hand Function Test (AHFT)

Occupational Therapy Intervention

ADL, IADL, productivity and leisure training

- Train in the use of joint protection and adaptive equipment to improve grasp (built-ups), improve ease of performance (electric can opener), compensate for ROM loss (dress stick), compensate for weak/absent muscle (universal cuff, jar opener), prevent stress on joints (lever door handle), prevent prolonged grasp (book holder, Dycem), prevent accidents (bath seat, nonskid rugs).
- Instruct in body mechanics and good posture.

Train in safe and efficient functional mobility (sit-to-stand, bed mobility skills, transfers, standing, ambulation, and wheelchair mobility) during ADL and IADL tasks.

- Adaptive mobility equipment - hospital beds, lift chairs, standard/electric wheelchairs, transfer boards, hydraulic patient lifts, leg lifter, bed rails.

Provide orthotics to maintain/correct joint alignment, improve function, correct or minimize deformities/contractures, and support weak or painful joints.

Examples for RA include resting hand splint, wrist cock-up splint, ulnar drift splint, anti-swan neck deformity splints (oval 8), anti-boutonniere splint.

Examples for OA include CMC orthosis, thumb spica splint, DIP/PIP orthosis.

Occupational Therapy TOOLKIT

Arthritis

Occupational Therapy Intervention

Teach strategies to self-manage fatigue and conserve energy.

- Assess using the Modified Fatigue Impact Scale.
- Teach pacing and energy conservation strategies.
- Instruct in balancing self-care, productivity, play, and rest.
- Instruct in good sleep habits.
- Encourage use of a fatigue journal.
- Problem-solve ways to self-manage fatigue.

Provide an individualized exercise program that includes low-impact, low-intensity endurance, strengthening, flexibility, and balance activities. Modify exercises (use yoga blocks, wrap foam around weights, weight lifting gloves to improve grip).

- Acute flare-ups - instruct in performing gentle passive or active ROM exercises 3-4 times daily followed by icing for 15 minutes.
- Non-acute joints - instruct in the use of superficial heat, passive or active ROM and isometric strengthening in pain free range.
- Encourage participation in community programs. (Tai Chi, Active Living Every Day, Arthritis Foundation Aquatic Program, Arthritis Foundation Exercise Program, Enhance Fitness, Fit and Strong, Walk with Ease).

Provide pain management.

- Modalities (heat, cold, ultrasound, fluidotherapy, paraffin).
- Manual therapy techniques (massage, soft tissue mobilization).

Instruct in pain self-management strategies.

- Coordinate medication peak with exercise and activity.
- Superficial heat, cool/cold water, contrast baths.
- Self-massage techniques (foam rollers, tennis ball, rolling massage stick).
- Breathing techniques, mindful meditation or other relaxation methods.
- Positioning devices (seat cushions, back supports, pillows, splints).
- Encourage use of a pain journal.
- Problem-solve ways to self-manage pain.

Complete a comprehensive, performance-based home and/or work assessment. Recommend and/or provide modifications, accommodations, adaptive equipment, and/or assistive technology.

Provide education about fall risk and prevention strategies.

Occupational Therapy TOOLKIT

Arthritis

Occupational Therapy Intervention

Teach strategies to incorporate wellness and health management routines into daily activities.

Educate patient and caregivers about arthritis, the availability of community resources and support groups.

Patient and Caregiver Handouts

Body Mechanics - Good Posture

Exercise Tips for Arthritis

Finger and Thumb Stretches and Active Range of Motion

Forearm and Wrist Active Range of Motion

Forearm and Wrist Stretches

Joint Protection for Arthritis

Pain Journal

Putty Exercises

Shoulder Isometric Exercises - Seated

Splint/Brace Instructions

Stress Management

Tendon Glides

Tips to Conserve Energy

Upper Body Active Range of Motion

Using Cold for Pain Relief

Using Heat for Pain Relief

Additional Treatment Guides

Ankylosing Spondylitis

Carpal Tunnel Syndrome

Cubital Tunnel Syndrome

Health Management

Joint Contractures

Lupus (Systemic Lupus Erythematosus)

Rest and Sleep

Scleroderma (Systemic Sclerosis)

Sexual Expression and Activity

Total Hip Replacement (Arthroplasty)

Total Knee Replacement (Arthroplasty)

Total Shoulder Arthroplasty and Hemiarthroplasty

Work and Industry

Occupational Therapy TOOLKIT

Breast Cancer Pre and Postoperative Management

Impairments and Functional Limitations

ADL, IADL, productivity, and leisure impairment

Impaired ROM and strength of trunk and upper extremity

Postoperative pain and edema

Potential secondary complications may include nerve damage, lymphedema

Assessments

Disabilities of the Arm, Shoulder, and Hand Questionnaire

Functional Assessment of Cancer Therapy - Breast

Occupational Therapy Preoperative Intervention

- Baseline measurements (ROM, strength, sensation, limb volume measurements, functional outcome measure such as DASH).
- Provide education about postoperative activity limitations, precautions, and exercise.
- Instruct in good posture during activities.
- Educate about lymphedema prevention or risk factor reduction.
- Teach strategies to incorporate wellness and health management routines into daily activities.
- Educate about breast cancer and the availability of community resources. Encourage participation in support groups.

Occupational Therapy Postoperative Intervention

ADL, IADL, productivity, and leisure training.

- Treat underlying limitations to safety and independence.
- Recommend and/or provide adaptive equipment as needed. Train in lower body ADL equipment following reconstructive surgery involving abdominal muscles.
- Instruct in good posture during activities.
- Instruct to elevate arm several times a day to self-manage postoperative edema.
- Instruct in protective use of affected arm for the first 2 weeks. *Unless otherwise instructed by surgeon.*
 - Avoid overuse.
 - Avoid sleeping on the same side as the surgery.
 - Avoid lifting more than 5 lbs./2.25 kg.
 - Keep tasks below 90° of shoulder motion.

Train in safe and efficient functional mobility (sit-to-stand, bed mobility skills, transfers, ambulation, and wheelchair mobility) during ADL and IADL tasks.

Occupational Therapy TOOLKIT

Breast Cancer Pre and Postoperative Management

Occupational Therapy Postoperative Intervention

Pain self-management.

- Coordinate medication peak with exercise and activity.
- Teach stress management and relaxation techniques.
- Use pillows to help the arm and shoulder relax while sitting and lying down.
- Instruct in good posture during activities.

Provide UE activities and exercises. *Follow the referring surgeon's specific guidelines for ROM and progression of exercises.*

- AROM exercises within restricted ranges according to surgical intervention. Progress exercises until full ROM restored. Begin strengthening 4-6 weeks after surgery.
- Instruct in deep (diaphragmatic) breathing exercises and lateral expansion.
- Instruct in a walking program.

Provide surgical scar management. Treat axillary web syndrome if present.

Educate about lymphedema prevention or risk factor reduction. Manage lymphedema using Complete Decongestive Therapy (CDT) (performed by a certified lymphedema therapist).

Patient and Caregiver Handouts

Arm Measurement

Body Mechanics - Good Posture

Deep (Diaphragmatic) Breathing

Edema (Swelling) Control of the Arm(s)

Mastectomy Exercises

Median Nerve Glides

Radial Nerve Glides

Scar Massage

Tips to Prevent Upper Body Lymphedema

Ulnar Nerve Glides

Walking Guidelines

Additional Treatment Guides

Cancer

Health Management

Lymphedema

Occupational Therapy TOOLKIT

Dressing

Dressing includes selecting appropriate clothing for the time of day, weather, and occasion. Obtaining clothing from closets and drawers. Dressing and undressing using open-front garments (shirt/blouse, robe, sweater, jacket, winter coat), pullover garments (sweatshirt, t-shirt, sweater), bra, pants, skirts, suspenders, necktie, scarf, gloves, underwear, socks, pantyhose, nylons, shoes, boots, slippers, support and anti-embolism stockings. Opening and closing fasteners, (snaps, buttons, hooks, zippers, Velcro). Managing personal medical devices (hearing aids, eyeglasses, contacts, AFO, hand splint, back brace, slings, and prosthetics).

Occupational Therapy Intervention

Apply different approaches for solving difficulties with dressing.

- Remediate underlying limitations to safety and independence. Physical (e.g. muscle weakness, limited ROM, fatigue), sensory (e.g. impaired sensation, low vision, pain), behavioral (e.g. anxiety, depression, impulsivity), cognitive (e.g. impaired attention, memory, language and communication, or executive functions), perceptual (e.g. unilateral neglect, impaired figure ground).
- Train in compensatory techniques (safety techniques, one-handed techniques, pacing, energy conservation, joint protection, body mechanics, breathing techniques, low vision techniques, cognitive/perceptual compensation, step-by-step instructions, task segmentation, task sequencing, backward chaining, verbal and physical cueing, hand-over-hand guiding).
- Train in the use of adaptive equipment and assistive devices (buttonhook, Velcro closures on shoes, elastic shoelaces, long handled shoehorn, dressing stick, reacher, sock aid, zipper pull, loops on pants, loops on socks, labeling system for identifying clothes, and specialized clothing).
- Provide environmental modifications and adaptations (avoid storing items on the floor, lower closet poles, organize clothes within easy reach, and label drawers using picture or words).
- Instruct in activity modification.
 - Change the task (place the weaker extremity into the garment first, dress in a supine position).
 - Eliminate part or all of the task (choose garments that are easy to put on and remove such as: elastic waist pants, loose fitting tops, pullover tops, suspenders instead of a belt, Velcro shoes, slip on shoes, front hook bra, sports bra, camisole).
 - Have someone else do part or the entire task.

Train in safe and efficient functional mobility (sit-to-stand, bed mobility skills, transfers, standing, ambulation, and wheelchair mobility) during dressing tasks.

Provide caregiver/family education and training.

Occupational Therapy TOOLKIT

Dressing

Patient and Caregiver Handouts

Adaptive Equipment for Dressing

Dressing Tips

Tips to Conserve Energy with Self-Care Tasks

Dressing Techniques - Lower Body

Put On and Take Off an Ankle-Foot Brace - Method 1 - Left Leg

Put On and Take Off an Ankle-Foot Brace - Method 1 - Right Leg

Put On and Take Off an Ankle-Foot Brace - Method 2 - Left Leg

Put On and Take Off an Ankle-Foot Brace - Method 2 - Right Leg

Put On and Take Off Pants - Method 1

Put On and Take Off Pants - Method 2

Put On and Take Off Pants, Socks, and Shoes Lying Down

Put On and Take Off Pants, Socks, and Shoes Using a Stool

Put On and Take Off Pants Using a Dressing Stick or Reacher

Put On and Take Off Socks and Shoes Using Dressing Tools

Put On and Take Off Support Stockings

Dressing Techniques - One Handed

Put On a T-shirt with One Hand - Left Side Weakness

Put On a T-shirt with One Hand - Right Side Weakness

Put On an Open Front Shirt with One Hand - Left Side Weakness

Put On an Open Front Shirt with One Hand - Right Side Weakness

Put On and Take Off a Bra with One Hand - Left Side Weakness

Put On and Take Off a Bra with One Hand - Right Side Weakness

Put On Pants with One Hand - Left Side Weakness

Put On Pants with One Hand - Right Side Weakness

Put On Socks and Shoes with One Hand - Left Side Weakness

Put On Socks and Shoes with One Hand - Right Side Weakness

Take Off a T-shirt with One Hand - Left Side Weakness

Take Off a T-shirt with One Hand - Right Side Weakness

Take Off an Open Front Shirt One Hand - Left Side Weakness

Take Off an Open Front Shirt One Hand - Right Side Weakness

Take Off Pants with One Hand - Left Side Weakness

Take Off Pants with One Hand - Right Side Weakness

Tie Shoes with One Hand

Dressing Techniques - Upper Body

Put On and Take Off a T-shirt - Arm-Head-Arm

Put On and Take Off a T-shirt - Head-Arm-Arm

Put On and Take Off a T-shirt Using a Dressing Stick

Put On and Take Off an Open Front Shirt - One Shoulder Drape

Put On and Take Off an Open Front Shirt - Two Shoulder Drape

Put On and Take Off an Open Front Shirt Using a Dressing Stick

Using a Buttonhook

Occupational Therapy TOOLKIT

Frailty and Debility

Impairments and Functional Limitations

ADL, IADL, productivity, and leisure impairment

Functional mobility impairment

Slow walking speed

Muscle weakness

Limited activity tolerance and endurance

Impaired balance

Impaired vision and hearing

Chronic pain

At high risk for major adverse health outcomes including institutionalization, disability, falls, hospitalization, and mortality

Co-occurring conditions may include functional decline, fear of falling, delirium, dementia, depression, incontinence, sleep disorders, malnutrition, dehydration, pressure ulcers, sarcopenia, hypothermia, hyperthermia

Assessments

Edmonton Frail Scale

FRAIL (Fatigue, Resistance, Aerobic capacity, Illnesses, Loss of weight) Scale

Groningen Frailty Index

Johns Hopkins Frailty Assessment Calculator

SHARE-FI (Survey of Health, Ageing and Retirement in Europe Frailty Index)

Occupational Therapy Intervention

ADL, IADL, productivity, and leisure training

- Treat underlying limitations to safety and independence - physical (strength, hand function, ROM, coordination, balance, endurance, abnormal tone), sensory (tactile, vision, hearing, vestibular, pain), behavioral, cognition, and/or perceptual.
- Address nutrition - oral health, ability to feed self, ability to shop, access kitchen, prepare nutritious meals and get adequate hydration. Encourage to eat with others.
- Address ability to drive safely. Provide referral to driving rehab specialist and/or explore alternative transportation options.

Train in safe and efficient functional mobility (sit-to-stand, bed mobility skills, transfers, standing, ambulation, and wheelchair mobility) during ADL and IADL tasks.

- Train in the safe and correct use of assistive devices and adaptive equipment (walkers, canes, transfer boards, bed transfer handles, leg lifters, wheelchairs) as appropriate.

Occupational Therapy TOOLKIT

Frailty and Debility

Occupational Therapy Intervention

Provide an individualized exercise program that includes progressive endurance, strengthening, and flexibility activities.

Recommend the use of an activity tracker.

Instruct patient and caregiver in a written home exercise program.

Provide functional balance activities to increase balance confidence with ADL tasks.

Provide pain management.

Provide a fall prevention program that includes balance, coordination, and agility training, and education about fall risk and prevention strategies. Provide functional balance activities to increase balance confidence with ADL tasks.

Complete a comprehensive, performance-based home assessment. Recommend and/or provide modifications, accommodations, adaptive equipment, and/or assistive technology.

Educate about the negative effects of prolonged sitting and bed rest. Educate regarding hypothermia and hyperthermia prevention.

Patient and Caregiver Handouts

Balance Exercise

Hip and Knee Exercises - Seated

Putty Exercises

Resistance Band Exercises - Arms

Resistance Band Exercises - Legs

Upper Body Exercises - Dumbbells

Walking Guidelines

Additional Treatment Guides

Balance

Chronic Pain Syndrome

Fall Prevention and Fall Risk Reduction

Functional Mobility

Health Management

Home Safety and Modification

Pressure Ulcers

Rest and Sleep

Urinary Incontinence

Occupational Therapy TOOLKIT

Stroke

Impairments and Functional Limitations

ADL, IADL, productivity, and leisure impairment

Impaired functional mobility

Hemiparesis or hemiplegia of the upper and lower extremities

Spasticity

Impaired postural control and balance

Impaired coordination

Limited activity tolerance and endurance

Impaired sensation

Central post-stroke pain

Language disorders (aphasia, dysarthria, dyspraxia)

Dysphasia

Visual and perceptual impairment

Cognitive impairment

Behavioral disorders (depression, lability, low frustration tolerance, impulsivity)

Bladder and bowel dysfunction

Potential secondary complications may include biomechanical shoulder pain (biceps tendonitis, rotator cuff pathology, adhesive capsulitis, complex regional pain syndrome), edema (upper and lower extremity), pressure ulcers, joint contractures, depression, DVT's, aspiration pneumonia, seizures, fall risk

Assessments

Assessment of Motor and Process Skills

Chedoke-McMaster Stroke Assessment Scale

Modified Ashworth Scale of Spasticity

Stroke Impact Scale

Occupational Therapy Intervention

ADL, IADL, productivity, and leisure training.

- Safely incorporate affected extremity with all activities.
- Use compensatory techniques (task modification, one-handed techniques, hand-over-hand guiding, task segmentation, backward chaining).
- Recommend and/or provide adaptive equipment. Rocker knife, inner lip plates, holders for books or playing cards, stabilizing devices for activities that traditionally require two-handed performance (cutting vegetables, cleaning dentures), and keyboards adapted for one-handed computer use.
- Instruct in pacing and energy conservation strategies.

Train in safe and efficient functional mobility (sit-to-stand, bed mobility skills, transfers, standing, ambulation, and wheelchair mobility) during ADL and IADL tasks.

Occupational Therapy TOOLKIT

Stroke

Occupational Therapy Intervention

Provide functional posture and balance activities.

- Focus on stability, weight shifting, body awareness, trunk rotation & elongation.
- Have patient turn toward affected side when reaching.
- Set up room so the patient must physically move to their affected side.
- Provide reach-grasp-hold-release activities, in standing and sitting, with and without support.

Provide activities and exercises to uninvolved side to prevent loss of ROM and strength.

Restore function of the upper extremity. Use a variety of remedial approaches according to the needs of the patient.

- Provide early mobilization and positioning.
- Incorporate task-oriented/task specific training.
- Provide opportunities to use and move the arm throughout the day (use of mobile arm support, overhead suspension sling, functional splinting such as wrist cock-up, and dynamic finger extension splints).
- Provide modified constraint-induced movement therapy or constraint-induced movement therapy.
- Instruct in an arm and hand strengthening exercise program.
- Cyclic NMES during functional movements and activity.
- Instruct in a functional dynamic orthoses (SaeboFlex, SaeboReach).
- Use cognitive strategies (mirror therapy, mental imagery/practice, action observation).
- Provide sensory re-education intervention.
 - Avoid increasing spasticity.
 - Encourage use of extremity in functional tasks.
 - Provide weight-bearing activities.
 - Provide sensory stimulation activities.
 - Teach compensatory techniques and safety measures for sensory deficits. Use vision to compensate for sensory loss. Test bath/dish water temperature using the intact extremity or a thermometer. Use a thermal regulation valve to lower water temperature. Avoid using heating pads on impaired extremities. Wear gloves to prevent frostbite. Avoid going barefoot. Wear sunscreen to prevent sunburn. Avoid cuts and burns in kitchen. Use intact hand to handle sharp kitchen utensils. Perform skin checks.

Occupational Therapy TOOLKIT

Stroke

Occupational Therapy Intervention

Restore function of the upper extremity. Use a variety of remedial approaches according to the needs of the patient (continued).

- Prevent or manage hand edema.
 - Teach active self-range of motion exercises in elevation.
 - Position hand in elevation.
 - Use retrograde massage.
 - Use gentle grade 1-2 mobilizations for the hand and fingers.
 - Provide a compression garment.
- Manage spasticity.
 - Prevent contractures.
 - Provide daily PROM, SROM, and stretching exercises.
 - Instruct in positioning in bed, chair, and during mobility.
 - Select use of splinting to protect hand/wrist. Resting hand splint for flaccid to mild tone, spasticity splint for moderate to high tone. Reassess frequently and discontinue if there is no benefit.
 - Post-Botox injections, provide strengthening/FES to antagonists, stretching, and splinting.
- Prevent or manage shoulder pain.
 - Avoid overaggressive therapy and overhead pulleys.
 - Mobilize and strengthen the scapula.
 - Position arm with cubital fossa facing up, 45° shoulder abduction, and comfortable shoulder external rotation.
 - Provide firm support devices such as lap trays and arm troughs.
 - Range of motion exercises should not move the shoulder beyond 90° of flexion and abduction unless there is upward rotation of the scapula and external rotation of the humeral head.
 - Manage acquired orthopedic conditions (biceps tendonitis, impingement syndrome, adhesive capsulitis, rotator cuff pathologies, CRPS).
 - Use functional electrical stimulation (FES) for shoulder subluxation.

Instruct patient and caregivers in care of the affected extremity.

- Prevent and control of edema.
- Teach passive ROM exercises.
- Teach self-ROM exercises.
- Protect and support the affected arm during bed mobility, transfers and ambulation using slings, a pocket, or handhold, and during wheelchair use by using a hemi tray or arm trough.
- Teach proper positioning in bed, chair, and wheelchair.
- Instruct in care and use of positioning splints.

Occupational Therapy TOOLKIT

Stroke

Occupational Therapy Intervention

Teach compensatory strategies for vision and perceptual deficits.

Provide cognitive retraining and train in the use of compensatory strategies.

Provide education about fall risk and prevention strategies.

Community reintegration

- Complete a comprehensive, performance-based home assessment. Recommend and/or provide modifications, accommodations, adaptive equipment and/or assistive technology.
- Encourage leisure and social participation.
- Address ability to drive safely. Provide referral to driving rehab specialist and/or explore alternative transportation options.
- Recommend vocational rehabilitation strategies to assist with return to work if appropriate.

Teach strategies to incorporate wellness and health management routines into daily activities.

Educate patient and caregivers about stroke, the availability of community resources, and support groups. Provide educational materials about stress management, coping strategies, and occupational balance.

Patient and Caregiver Education Handouts

Edema (Swelling) Control of the Arm(s)

Edema (Swelling) Control of the Leg(s)

In and Out of Bed - Toward Your Weaker Left Side

In and Out of Bed - Toward Your Weaker Right Side

Position in Bed - Left Side Weakness

Position in Bed - Right Side Weakness

Position Your Arm - Left Side Weakness

Position Your Arm - Right Side Weakness

Protect the Arm - Left Side Weakness

Protect the Arm - Right Side Weakness

Splint/Brace Instructions

Stress Management

Tips to Conserve Energy

Using a Front Wheel Walker (2 wheels)

Wheelchair Safety

Occupational Therapy TOOLKIT

Stroke

Patient and Caregiver Exercise Handouts

Balance Exercises - Sitting and Standing

Fine Motor Strengthening and Coordination Activities

Gross Motor Tasks

Level 1 Activities - Help Your Weaker Arm Move

Level 2 Activities - Use Your Weaker Arm to Passively Hold

Level 3 Activities - Use Your Weaker Arm to Actively Move and Hold

Level 4 Activities - Use Your Weaker Arm with Gross Motor

Level 5 Activities - Use Your Weaker Arm with Fine Motor

Passive Range of Motion - One Side Weakness

Posture Exercises

Putty Exercises

Scapular Mobility and Strength Exercises

Self Range of Motion

Upper Body Active Range of Motion

Upper Body Exercises - Dumbbells

Upper Body Exercises - Holding a Ball

Upper Body Strength Activities

Use Your Arm to Actively Move and Hold

Use Your Arm to Hold Passively

Use Your Arm with Assisted Guiding

Use Your Arm with Gross Motor Activities

Use Your Arm with Self-Guiding

Weight Bearing Exercises

Additional Treatment Guides

Activities of Daily Living

Apraxia

Balance

Cognition

Depression

Fall Prevention and Fall Risk Reduction

Functional Mobility

Handwriting

Health Management

Home Safety and Modification

Therapeutic Exercise

Visual Skills

Wheelchair Seating, Positioning, and Mobility