



CLINICAL GUIDELINES

Massage Therapy

Version 1.0.2019

Effective February 15, 2019





Please note the following:

CPT Copyright 2017 American Medical Association. All rights reserved.

CPT is a registered trademark of the American Medical Association.



Dear Provider,

This document provides detailed descriptions of eviCore's basic criteria for musculoskeletal management services. They have been carefully researched and are continually updated in order to be consistent with the most current evidence-based guidelines and recommendations for the provision of musculoskeletal management services from national and international medical societies and evidence-based medicine research centers. In addition, the criteria are supplemented by information published in peer reviewed literature.

Our health plan clients review the development and application of these criteria. Every eviCore health plan client develops a unique list of CPT codes or diagnoses that are part of their musculoskeletal management program. Health Plan medical policy supersedes the eviCore criteria when there is conflict with the eviCore criteria and the health plan medical policy. If you are unsure of whether or not a specific health plan has made modifications to these basic criteria in their medical policy for musculoskeletal management services, please contact the plan or access the plan's website for additional information.

eviCore healthcare works hard to make your clinical review experience a pleasant one. For that reason, we have peer reviewers available to assist you should you have specific questions about a procedure.

For your convenience, eviCore's Customer Service support is available from 7 a.m. to 7 p.m. Our toll free number is (800) 918-8924.

Gregg P. Allen, M.D. FAAFP

EVP and Chief Medical Officer

Massage Therapy Guidelines

MT-1.0: Covered Services and Exclusions	5
MT-2.0: Neck Pain.....	7
MT-3.0: Upper/Mid-Back Pain	13
MT-4.0: Low Back Pain.....	18
MT-5.0: Shoulder Pain.....	24
MT-6.0: Upper Arm Pain	29
MT-7.0: Forearm Pain	34
MT-8.0: Pain in the Hand/Wrist.....	39
MT-9.0: Hip Pain.....	44
MT-10.0: Upper Leg Pain.....	49
MT-11.0: Lower Leg Pain.....	55
MT-12.0: Ankle/Foot Pain	61
MT-13.0: Fibromyalgia.....	66
MT-14.0: Diagnosis Codes	72

MT-1.0: Covered Services and Exclusions

Massage Therapy Covered Services

Massage Therapy for injury or illness for which massage has a therapeutic effect. Coverage is provided for up to a 60 minute session per visit when rendered by a participating massage therapist. Covered Services include but are not limited to acupressure, deep tissue massage, or as allowed by the massage therapist's license.

Massage Therapy is considered medically necessary when all of the following circumstances have been met:

- The clinical documentation must establish the individual's current condition and medical need for services.
- Significant lasting therapeutic benefits lead towards a resolution of the member's subjective complaints
- Functional limitations have improved significantly as a result of massage therapy treatment. Treatment is safe and effective and is not replacing or delaying other necessary medical care
- Patient should have at least one (1) Functional Limitation as follows:
 - ☒ Sitting
 - ☒ Standing
 - ☒ Walking
 - ☒ Stair climbing
 - ☒ Lifting
 - ☒ Working
 - ☒ Personal care (washing, dressing, etc.)
 - ☒ Driving
 - ☒ Sleeping
- Patient should have at least one Subjective Complaint, as follows:
 - ☒ Neck pain
 - ☒ Shoulder pain
 - ☒ Upper arm pain
 - ☒ Forearm pain
 - ☒ Wrist/hand pain
 - ☒ Upper/mid back pain
 - ☒ Low back pain
 - ☒ Hip pain
 - ☒ Upper leg pain
 - ☒ Lower leg pain
 - ☒ Ankle/foot pain

Massage Therapy Coverage Exclusions

Any manipulative techniques or procedures which are not generally accepted in a majority of states' Massage Therapy licensing boards. Massage therapy supplies including but not limited to lotions.

The following are not covered under the plan:

- Services provided by a non-participating practitioner, except for emergencies, or as authorized by eviCore healthcare
- Services provided outside of the health plan's service area, except for emergencies
- Services that are not pre-authorized, except for initial visits or emergencies
- Services incurred prior to the beginning or after the end of coverage
- Services that exceed the combined maximum covered visits for the benefit year
- Charges incurred for missed appointments
- Educational programs
- Services for conditions arising out of employment, including self-employment or covered under any workers' compensation act or law
- Services for any bodily injury arising from or sustained in an automobile accident that is covered under an automobile insurance policy
- Charges for which the member is not legally required to pay
- Services rendered by a person who ordinarily resides in the member's home or who is related to the member by marriage or blood

Specific Services that are Limited or Excluded

- Services for preventive, maintenance, or wellness care
- Experimental or investigational services
- Services not medically necessary as determined by eviCore healthcare
- Vocational, stroke, or long-term rehabilitation
- Hypnotherapy, behavior training, sleep therapy, or biofeedback
- Treatment primarily for purposes of convenience
- Thermography, hair analysis, heavy metal screening, or mineral studies
- Transportation costs, including ambulance charges
- Inpatient services
- Advanced diagnostic services, such as MRI, CT, EMG, SEMG, and NCV
- Drugs, vitamins, nutritional supplements, or herbs
- X-rays of any kind
- Services related to menstrual cramps
- Services related to addiction, including smoking cessation
- Services related to the treatment of infertility
- Services for any condition with minimal pain levels and/or functional deficits that can be self-managed.

MT-2.0: Neck Pain

Synonyms

- None

Definition

Neck pain is a non-specific complaint that may involve any area from the base of the skull to the top of the shoulders. Pain may be due to overuse or injury of the muscles, tendons, ligaments, and/or vertebrae or discs, or may be a symptom of an underlying condition. Pain may be acute or chronic. Neck pain may also be exacerbated by emotional stress.

History

Specific Aspects of Neck Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture	Immediate referral to emergency department
Direct trauma to the head with loss of consciousness (LOC)	Subdural hematoma; epidural hematoma; fracture	Immediate referral to emergency department
Severe pain when bending the head forward, accompanied by involuntary flexing of the hips and knees	Subarachnoid hemorrhage; meningitis	Immediate referral to emergency department
Bladder dysfunction associated with onset of neck pain	Myelopathy; spinal cord injury	Immediate referral to emergency department
Difficulty in speaking	Cerebrovascular accident	Immediate referral to emergency department
Associated cranial nerve or central nervous system (CNS) signs/symptoms	Tumor; intracranial hematoma	Immediate referral to emergency department
Onset of a new headache	Tumor; infection; vascular cause (older patients, also consider temporal arteritis; glaucoma)	Prompt referral to Primary Care Provider
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Alcoholism, drug abuse	Side effect or withdrawal phenomenon	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

Pain may arise gradually through repetitive stress or suddenly due to injury or trauma. Location of pain may involve any area from the base of the skull to the shoulders. Client may complain of a dull ache, stabbing pain, stiffness, or numbness.

Subjective Findings

- Pain and stiffness in neck; pain worse with motion
- Pain should be documented as a numeric pain scale 0-10
- Headaches may accompany the neck pain
- Headache frequency, duration and numeric pain scale should be documented
- Essentially constant awareness of some level of neck discomfort or limitations in motion

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Cervical Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Cervical Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint.

Results if Neck Pain

- Limited active cervical range of motion
- Neck pain
- Tenderness on palpation

Massage Therapy Management

Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.

- Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
- When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
- Use of self-directed home therapy will facilitate the fading of treatment frequency.
- As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
- eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
- Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
- In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
- Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
- The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
- Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
- If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	◆ Some reduction of pain severity and frequency ◆ Some reduction of muscle spasm
2-4	◆ 50% decrease in pain severity and frequency ◆ 50% improvement in ability to perform activities of daily living
5-8	◆ 75% decrease in pain severity and frequency ◆ 75% improvement in ability to perform activities of daily living
9-12	◆ Gradual improvement leading toward resolution ◆ Reinforce self-management techniques ◆ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

Refer patient when:

- No benefit is attained from treatment
- Treatment provides only temporary relief, without leading to a resolution of the condition
- Improvement with massage therapy has reached a plateau but residual symptoms still exist
- If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc.)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy
(Listed in alphabetical order)

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Bussi res AE, Stewart G, Al-Zoubi F, Decina P, Descarreaux M, Hayden J, Hendrickson B, Hincapi  C, Pag  I, Passmore S, Srbely J, Stupar M, Weisberg J, Ornelas J. The Treatment of Neck Pain-Associated Disorders and Whiplash-Associated Disorders: A Clinical Practice Guideline. *J Manipulative Physiol Ther*. 2016 Oct;39(8):523-564.e27. doi: 10.1016/j.jmpt.2016.08.007. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/27836071>.
3. Chaibi A, Russell MB. Manual therapies for primary chronic headaches: a systematic review of randomized controlled trials. *J Headache Pain*. 2014 Oct 2;15:67. doi: 10.1186/1129-2377-15-67. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/25278005>.
4. Cohen Steven P, Hooten W Michael. Advances in the diagnosis and management of neck pain *BMJ* 2017; 358 :j3221. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/28807894>.
5. Cook, Andrea J., Robert D. Wellman, Daniel C. Cherkin, Janet R. Kahn, and Karen J. Sherman. "Randomized Clinical Trial Assessing Whether Additional Massage Treatments for Chronic Neck Pain Improve 12- and 26-week Outcomes." *The Spine Journal* 15.10 (2015): 2206-215. Web. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4596391/>.
6. Ferragut-Garc as A, Plaza-Manzano G, Rodr guez-Blanco C, Velasco-Rold n O, Pecos-Mart n D, Oliva-Pascual-Vaca J, Llabr s-Bennasar B, Oliva-Pascual-Vaca  . Effectiveness of a Treatment Involving Soft Tissue Techniques and/or Neural Mobilization Techniques in the Management of Tension-Type Headache: A Randomized Controlled Trial. *Arch Phys Med Rehabil*. 2017 Feb;98(2):211-219.e2. doi: 10.1016/j.apmr.2016.08.466. Epub 2016 Sep 10. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/27623523>.
7. Field T, Diego M, Gonzalez G, Funk CG. Neck arthritis pain is reduced and range of motion is increased by massage therapy. *Complement Ther Clin Pract*. 2014 Nov;20(4):219-23. doi: 10.1016/j.ctcp.2014.09.001. Epub 2014 Sep 28. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/25444416>.
8. Furlan AD, Yazdi F, Tsertsvadze A, Gross A, Van Tulder M, Santaguida L, Gagnier J, Ammendolia C, Dryden T, Doucette S, Skidmore B, Daniel R, Ostermann T, Tsouros S: A systematic review and meta-analysis of efficacy, cost-effectiveness, and safety of selected complementary and alternative medicine for neck and low-back pain. *Evidence-Based Complementary and Alternative Medicine*. 2012, doc ID 953139. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22203884>.
9. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
10. Kong LJ, Zhan HS, Cheng YW, Yuan WA, Chen B, and Fang M: Massage therapy for neck and shoulder pain: a systemic review and meta-analysis. *Evid Based Complementary and Alternative Medicine*. 2013;2013:613279. doi: 10.1155/2013/613279. Epub 2013 Feb 28. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3600270/>.
11. Nelson NL, Churilla JR. Massage Therapy for Pain and Function in Patients with Arthritis: A Systematic Review of Randomized Control Trials. *Am J Phys Med Rehabil*. 2017 Sep;96(9):665-672. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/28177937>.
12. Patel KC, Gross A, Graham N, Goldsmith CH, Ezzo J, Morien A, Peloso PMJ: Massage for mechanical neck disorders (Review). *Cochrane Database* 2012, Issue 9. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22972078>.
13. Sefton JM, Yarar C, Berry JW, and Pascoe DD: Therapeutic massage of the neck and shoulders produces changes in peripheral blood flow when assessed with dynamic infrared thermography. *Journal of Alternative and Complementary Medicine*. 2010 Jul; 16(7):723-32. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20590481>.

14. Sherman KJ, Cherkin DC, Hawkes RJ, Miglioretti DL, and Deyo RA: Randomized trial of therapeutic massage for chronic neck pain. *The Clinical Journal of Pain*. 2009 Mar-Apr; 25(3):233-8. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/19333174>.
15. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
16. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
17. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-3.0: Upper/Mid-Back Pain

Synonyms

None

Definition

Upper or mid-back pain is a non-specific complaint that may involve any area from the base of the neck to the low back. Pain may be due to overuse or injury of the muscles, tendons, ligaments, and/or vertebrae or discs, or may be a symptom of an underlying condition. Pain may be acute or chronic. Back pain may also be exacerbated by emotional stress.

History

Specific Aspects of Upper or Mid-Back Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture	Immediate referral to emergency department
Onset following minor fall or heavy lifting in elderly or osteoporotic patient	Fracture or disc injury	Immediate referral to emergency department
Direct blow to the back	Fracture	Immediate referral to emergency department
Excruciating pain with no history of physical injury	Possible internal organ disorders including kidney infection, gallstones, pancreatitis, etc	Immediate referral to emergency department
Pain that extends down limb	Spine or disc involvement	Prompt referral to Primary Care Provider
Prolonged steroid use, or thin older person	Osteoporosis	Prompt referral to Primary Care Provider
Fever or recent bacterial infection	Infection	Prompt referral to Primary Care Provider
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Pain that is worse when lying down, or worse at night	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

Pain may arise gradually through repetitive stress or suddenly due to injury or trauma. Location of pain may involve any area from the base of the neck to the low back. Client may complain of a dull ache, stabbing pain, stiffness, or numbness.

Subjective Findings

- Pain and stiffness in upper or mid-back
- Pain should be documented as a numeric pain scale 0-10
- Pain may be worse with motion.
- Essentially constant awareness of some level of back discomfort or limitations in motion

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Upper or Mid-Back Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Upper or Mid-Back Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint.

Results if Upper or Mid-Back Pain

- Limited range of motion
- Back pain
- Tenderness on palpation

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
- Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
- When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.

- Use of self-directed home therapy will facilitate the fading of treatment frequency.
- As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
- eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
- Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
- In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
- Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
- The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
- Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
- If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy (Listed in alphabetical order)

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Furlan AD, Giraldo M, Baskwill A, Irvin E, Imamura M. Massage for low-back pain. *Cochrane Database of Systematic Reviews* 2015, Issue 9. Art. No.: CD001929. DOI: 10.1002/14651858.CD001929.pub3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/26329399>.
3. Furlan AD, Yazdi F, Tsertsvadze A, Gross A, Van Tulder M, Santaguida L, Gagnier J, Ammendolia C, Dryden T, Doucette S, Skidmore B, Daniel R, Ostermann T, Tsouros S: A systematic review and meta-analysis of efficacy, cost-effectiveness, and safety of selected complementary and alternative medicine for neck and low-back pain. *Evidence-Based Complementary and Alternative Medicine*. 2012, doc ID 953139. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22203884>.
4. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
5. Kong LJ, Zhan HS, Cheng YW, Yuan WA, Chen B, and Fang M: Massage therapy for neck and shoulder pain: a systemic review and meta-analysis. *Evid Based Complementary and Alternative Medicine*. 2013;2013:613279. doi: 10.1155/2013/613279. Epub 2013 Feb 28. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3600270/>.
6. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
7. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
8. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-4.0: Low Back Pain

Synonyms

- Lumbago
- Backache

Definition

Low back pain is a non-specific complaint that may involve any area in the low back or glutes. Pain may be due to overuse or injury of the muscles, tendons, ligaments, and/or vertebrae, discs, or joints, or it may be a symptom of an underlying condition. Pain may be acute or chronic. Low back pain may also be exacerbated by emotional stress.

History

Specific Aspects of Low Back Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture or disc injury	Immediate referral to emergency department
Onset following minor fall or heavy lifting in elderly or osteoporotic patient	Fracture or disc injury	Immediate referral to emergency department
Direct blow to the back	Fracture	Immediate referral to emergency department
Severe or progressive neurologic complaints	Cauda equina syndrome	Immediate referral to emergency department
Global or progressive motor weakness in the lower extremities	Cauda equina syndrome	Immediate referral to emergency department
Recent onset of bowel dysfunction or acute onset of bladder dysfunction; in association with low back pain	Cauda equina syndrome	Immediate referral to emergency department
Pain that is worse when lying down, or worse at night	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Prolonged steroid use, or thin, older person	Osteoporosis	Prompt referral to Primary Care Provider

Red Flag	Possible Consequence or Cause	Action Required
Pain that extends down leg	Spine or disc involvement	Prompt referral to Primary Care Provider
Pain that does not change with change in position	Kidney disease	Immediate referral to emergency department
Fever or recent bacterial infection	Infection	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

Pain may arise gradually through repetitive stress or suddenly due to injury or trauma. Location of pain may involve any area from the middle back to the glutes. Client may complain of a dull ache, stabbing pain, stiffness, or numbness.

Subjective Findings

- Pain may be worse with motion
- Pain should be documented as a numeric pain scale 0-10
- Stiffness upon arising from a seated position
- May report history of occasional sciatica, but lower back symptoms predominate
- Essentially constant awareness of some level of back discomfort or limitations in motion
- Pain and stiffness in lower back

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Lumbar Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Lumbar Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint.

Results if Low Back Pain

- May be tenderness on palpation at the lumbar spine and sacroiliac joints
- May demonstrate ROM restrictions in the lumbar spine tenderness on palpation

Massage Therapy Management

- Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
- When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
- Use of self-directed home therapy will facilitate the fading of treatment frequency.
- As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
- eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
- Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
- In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
- Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
- The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
- Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
- If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy **(Listed in alphabetical order)**

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bredow J, Bloess K, Oppermann J, Boese CK, Löhner L, Eysel P. [Conservative treatment of nonspecific, chronic low back pain : Evidence of the efficacy - a systematic literature review]. *Orthopade*. 2016 Jul;45(7):573-8. doi: 10.1007/s00132-016-3248-7. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/27075679>.
2. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
3. Brosseau-Ottawa-Panel-Recommendations-MT-for-low-back-2012.pdf Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/23036876>.
4. Cherkin DC, Sherman KJ, Kahn J, Wellman R, Cook AJ, Johnson E, Erro J, Delaney K, Deyo RA. A comparison of the effects of 2 types of massage and usual care on chronic low back pain: a randomized, controlled trial. *Ann Intern Med*. 2011 Jul 5;155(1):1-9. doi: 10.7326/0003-4819-155-1-201107050-00002. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/21727288>.
5. Chou R, Deyo R, Friedly J, Skelly A, Hashimoto R, Weimer M, Fu R, Dana T, Kraegel P, Griffin J, Grusing S, Brodt E. Noninvasive Treatments for Low Back Pain [Internet]. AHRQ Comparative Effectiveness Reviews. Rockville (MD): Agency for Healthcare Research and Quality (US); 2016 Feb. Report No.: 16-EHC004-EF. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/26985522>.
6. Chou R, Deyo R, Friedly J, Skelly A, Hashimoto R, Weimer M, et al. Nonpharmacologic Therapies for Low Back Pain: A Systematic Review for an American College of Physicians Clinical Practice Guideline. *Ann Intern Med*. 2017;166:493–505. doi: 10.7326/M16-2459. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/28192793>.
7. Ernst E: Massage therapy for low back pain: a systematic review. *Journal of Pain and Symptom Management*. 1999 Jan; 17(1):65-9. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/9919867>.
8. Furlan AD, Giraldo M, Baskwill A, Irvin E, Imamura M. Massage for low-back pain. *Cochrane Database of Systematic Reviews* 2015, Issue 9. Art. No.: CD001929. DOI: 10.1002/14651858.CD001929.pub3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/26329399>.
9. Furlan AD, Imamura M, Dryden T, Irvin E: Massage for low-back pain. *Cochrane Database of Systematic Reviews*. 2008 Oct 8;(4):CD001929. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/18843627>.
10. Furlan AD, Imamura M, Dryden T, and Irvin E: Massage for low back pain: an updated systematic review within the framework of the Cochrane Back Review Group. *Spine (Phila Pa 1976)*. 2009 Jul 15; 34(16):1669-84. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/19561560>.

11. Furlan AD, Yazdi F, Tsertsvadze A, Gross A, Van Tulder M, Santaguida L, Gagnier J, Ammendolia C, Dryden T, Doucette S, Skidmore B, Daniel R, Ostermann T, Tsouros S: A systematic review and meta-analysis of efficacy, cost-effectiveness, and safety of selected complementary and alternative medicine for neck and low-back pain. Evidence-Based Complementary and Alternative Medicine. 2012, doc ID 953139. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22203884>.
12. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. J Orthop Sports Phys Ther. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
13. Imamura M, Furlan AD, Dryden T, and Irvin E: Evidence-informed management of chronic low back pain with massage. Spine J. 2008 Jan-Feb; 8(1):121-33. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/18164460>.
14. Kalauokalani D, Cherkin DC, Sherman KJ, Koepsell TD, and Deyo RA: Lessons from a trial of acupuncture and massage for low back pain: patient expectations and treatment effects. Spine (Phila Pa 1976). 2001 Jul 1; 26(13):1418-24. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/11458142>.
15. Melancon B, and Miller LH: Massage therapy versus traditional therapy for low back pain relief: implications for holistic nursing practice. Holistic Nursing Practice. 2005 May-Jun; 19(3):116-21. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/15923937>.
16. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. Evidence-based Complementary and Alternative Medicine. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
17. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. Journal of Alternative and Complementary Medicine. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
18. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. Journal of Athletic Training. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-5.0: Shoulder Pain

Synonyms

None

Definition

Shoulder pain is a non-specific complaint that may involve any area from the lower neck to the upper arm. Pain may be due to overuse or injury of the muscles, tendons, ligaments, bursae, and/or joints, or may be a symptom of an underlying condition. Pain may be acute or chronic. Shoulder pain may also be exacerbated by emotional stress.

History

Specific Aspects of Shoulder Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture, rotator cuff tear	Immediate referral to emergency department
Pain on exertion, with history of cardiac diagnosis	Cardiac pain can radiate to the shoulder	Immediate referral to emergency department
Constant, relieved/worse with meals, positional, associated with fatty meals	Gastrointestinal diseases including cholelithiasis	Immediate referral to emergency department
Pleuritic, shortness of breath, associated with cough	Pulmonary diseases	Prompt referral to Primary Care Provider
Multiple joint involvement	Rheumatology diseases (Gout)	Prompt referral to Primary Care Provider
Fever, severe pain	Possible infection	Immediate referral to emergency department
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Unilateral edema	Upper extremity deep vein thrombosis	Immediate referral to emergency department
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

May be of gradual onset, due to repetitive use, or may begin suddenly after an accident or injury. The nature and location of the pain will vary according to the specifics of the patient's injury.

Subjective Findings

- Pain may be worse with motion
- Pain may be worse at specific times of the day
- Pain and stiffness in all or part of the shoulder area
- Pain should be documented as a numeric pain scale 0-10

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Shoulder Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Shoulder Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint.

Results if Shoulder Pain

- May be tenderness on palpation of muscle groups, bursae, tendons, or other tissues.
- May or may not involve limited range of motion
- Joints may or may not feel warm to the touch
- Swelling may or may not be present

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
 - ◆ Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement. When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
 - ◆ Use of self-directed home therapy will facilitate the fading of treatment frequency.
 - ◆ As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.

- ◆ eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
- ◆ Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
- ◆ In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
- ◆ Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
- ◆ The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
- ◆ Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
- ◆ If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy

(Listed in alphabetical order)

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
3. Kong LJ, Zhan HS, Cheng YW, Yuan WA, Chen B, and Fang M: Massage therapy for neck and shoulder pain: a systemic review and meta-analysis. *Evid Based Complementary and Alternative Medicine*. 2013;2013:613279. doi: 10.1155/2013/613279. Epub 2013 Feb 28. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3600270/>.
4. Nelson NL, Churilla JR. Massage Therapy for Pain and Function in Patients with Arthritis: A Systematic Review of Randomized Control Trials. *Am J Phys Med Rehabil*. 2017 Sep;96(9):665-672. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/28177937>.
5. Sefton JM, Yarar C, Berry JW, and Pascoe DD: Therapeutic massage of the neck and shoulders produces changes in peripheral blood flow when assessed with dynamic infrared thermography. *Journal of Alternative and Complementary Medicine*. 2010 Jul; 16(7):723-32. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20590481>.
6. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
7. van den Dolder PA, Ferreira PH, and Refshauge KM: Effectiveness of soft tissue massage and exercise for the treatment of non-specific shoulder pain: a systematic review with meta-analysis. *British Journal of Sports Medicine*. 2012 Jul 26. [Epub ahead of print]. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22844035>.
8. Walach H, G  thlin C, and K  nig M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
9. Yang JL, Chen SY, Hsieh CL, and Lin JJ: Effects and predictors of shoulder muscle massage for patients with posterior shoulder tightness. *BMC Musculoskeletal Disorders*. 2012 Mar 27; 13:46. Date last accessed 02/02/18. <https://bmcmusculoskeletdisord.biomedcentral.com/articles/10.1186/1471-2474-13-46>.
10. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-6.0: Upper Arm Pain

Synonyms

None

Definition

Upper arm pain is a non-specific complaint that may involve any area from the shoulders to the elbow. Pain may be due to overuse or injury of the muscles, tendons, ligaments, bursae, and/or joints, or may be a symptom of an underlying condition. Pain may be acute or chronic. Pain may also be exacerbated by emotional stress.

History

Specific Aspects of Upper Arm Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture, ligament/meniscus tear	Immediate referral to emergency department
Fever, severe pain	Infection	Immediate referral to emergency department
Diabetes	Neuropathy	Prompt referral to Primary Care Provider
Multiple joint involvement	Rheumatologic diseases	Prompt referral to Primary Care Provider
Unilateral edema	Deep vein thrombosis	Immediate referral to emergency department
Discoloration of hand or arm	Arterial occlusion	Immediate referral to emergency department
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

May be of gradual onset, due to repetitive use, or may begin suddenly after an accident or injury. The nature and location of the pain will vary according to the specifics of the patient's injury.

Subjective Findings

- Pain may be worse with motion
- Pain may be worse at specific times of the day
- Pain and stiffness in all or part of the upper arm
- Pain should be documented as a numeric pain scale 0-10

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Musculoskeletal Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Upper Arm Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint. Gather information that assists in identifying the tissues involved, and the selection of appropriate techniques.

Results if Upper Arm Pain

- May be tenderness on palpation of muscle groups, bursae, tendons, or other tissues.
- May or may not involve limited range of motion
- Joints may or may not feel warm to the touch
- Swelling may or may not be present

Differential Diagnoses

- Any of the following diagnoses may result in upper arm pain:
 - ◆ Referred pain from cardiac, pulmonary, or gastrointestinal pathology
 - ◆ Inflammatory diseases
 - ◆ Infection
 - ◆ Fracture
 - ◆ Arthritis
 - ◆ Rheumatoid arthritis
 - ◆ Osteoarthritis
 - ◆ Ligamentous injury
 - ◆ Tendonitis
 - ◆ Bursitis

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
 - ◆ Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
 - ◆ When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
 - ◆ Use of self-directed home therapy will facilitate the fading of treatment frequency.
 - ◆ As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
 - ◆ eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
 - ◆ Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
 - ◆ In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
 - ◆ Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
 - ◆ The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
 - ◆ Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
 - ◆ If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state
- Self-Management Techniques
- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy **(Listed in alphabetical order)**

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
3. Moraska A, Chandler C, Edmiston-Schaetzel A, Franklin G, Calenda EL, and Enebo B: Comparison of a targeted and general massage protocol on strength, function, and symptoms associated with carpal tunnel syndrome: a randomized pilot study. *Journal of Alternative and Complementary Medicine*. 2008 Apr; 14(3):259-67. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/18370581>.
4. Nelson NL, Churilla JR. Massage Therapy for Pain and Function in Patients with Arthritis: A Systematic Review of Randomized Control Trials. *Am J Phys Med Rehabil*. 2017 Sep;96(9):665-672. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/28177937>.
5. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
6. Verhagen AP, Karelis C, Bierma-Zeinstra SM, Feleus A, Dahaghin S, Burdorf A, De Vet HC, and Koes BW: Ergonomic and physiotherapeutic interventions for treating work-related complaints of the arm, neck or shoulder in adults. A Cochrane systematic review. *Eura Medicophys*. 2007 Sep; 43(3):391-405. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/17921965>.
7. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
8. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-7.0: Forearm Pain

Synonyms

None

Definition

Forearm pain is a non-specific complaint that may involve any area from the elbow to the wrist. Pain may be due to overuse or injury of the muscles, tendons, ligaments, bursae, and/or joints, or may be a symptom of an underlying condition. Pain may be acute or chronic. Pain may also be exacerbated by emotional stress.

History

Specific Aspects of Forearm Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture, tendon or ligament tear	Immediate referral to emergency department
Fever, severe pain	Infection	Immediate referral to emergency department
Diabetes	Neuropathy	Prompt referral to Primary Care Provider
Multiple joint involvement	Rheumatologic diseases	Prompt referral to Primary Care Provider
Unilateral edema	Deep vein thrombosis	Immediate referral to emergency department
Discoloration of hand or arm	Arterial occlusion	Immediate referral to emergency department
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

May be of gradual onset, due to repetitive use, or may begin suddenly after an accident or injury. The nature and location of the pain will vary according to the specifics of the patient's injury.

Subjective Findings

- Pain may be worse with motion
- Pain may be worse at specific times of the day
- Pain and stiffness in all or part of the forearm
- Pain should be documented as a numeric pain scale 0-10

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Musculoskeletal Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Forearm Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint. Gather information that assists in identifying the tissues involved, and the selection of appropriate techniques.

Results if Forearm Pain

- May be tenderness on palpation of muscle groups, bursae, tendons, or other tissues.
- May or may not involve limited range of motion
- Joints may or may not feel warm to the touch
- Swelling may or may not be present

Differential Diagnoses

- Any of the following diagnoses may result in forearm pain:
 - ◆ Inflammatory diseases
 - ◆ Infection
 - ◆ Fracture
 - ◆ Arthritis
 - ◆ Rheumatoid arthritis
 - ◆ Osteoarthritis
 - ◆ Ligamentous injury
 - ◆ Tendonitis
 - ◆ Bursitis

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
 - ◆ Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
 - ◆ When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
 - ◆ Use of self-directed home therapy will facilitate the fading of treatment frequency.
 - ◆ As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
 - ◆ eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
 - ◆ Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
 - ◆ In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
 - ◆ Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
 - ◆ The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
 - ◆ Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
 - ◆ If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- ◆ Manual massage work
- ◆ Massage tools as extension of hands
- ◆ Vibrating massage tools
- ◆ Stretching and instruction in same
- ◆ Application of external lotions and salves
- ◆ Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy **(Listed in alphabetical order)**

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
3. Moraska A, Chandler C, Edmiston-Schaetzel A, Franklin G, Calenda EL, and Enebo B: Comparison of a targeted and general massage protocol on strength, function, and symptoms associated with carpal tunnel syndrome: a randomized pilot study. *Journal of Alternative and Complementary Medicine*. 2008 Apr; 14(3):259-67. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/18370581>.
4. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
5. Verhagen AP, Karelis C, Bierma-Zeinstra SM, Feleus A, Dahaghin S, Burdorf A, De Vet HC, and Koes BW: Ergonomic and physiotherapeutic interventions for treating work-related complaints of the arm, neck or shoulder in adults. A Cochrane systematic review. *Eura Medicophys*. 2007 Sep; 43(3):391-405. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/17921965>.
6. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
7. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-8.0: Pain in the Hand/Wrist

Synonyms

None

Definition

Wrist and/or hand pain is a non-specific complaint that may involve any area from the wrist to the fingers. Pain may be due to overuse or injury of the muscles, tendons, ligaments, bursae, and/or joints, or may be a symptom of an underlying condition. Pain may be acute or chronic. Pain may also be exacerbated by emotional stress.

History

Specific Aspects of Wrist or Hand Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture, tendon or ligament tear	Immediate referral to emergency department
Fever, severe pain	Infection	Immediate referral to emergency department
Diabetes	Neuropathy	Prompt referral to Primary Care Provider
Multiple joint involvement	Rheumatologic diseases	Prompt referral to Primary Care Provider
Unilateral edema	Deep vein thrombosis	Immediate referral to emergency department
Discoloration of hand or arm	Arterial occlusion	Immediate referral to emergency department
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

May be of gradual onset, due to repetitive use, or may begin suddenly after an accident or injury. The nature and location of the pain will vary according to the specifics of the patient's injury.

Subjective Findings

- Pain may be worse with motion
- Pain may be worse at specific times of the day
- Pain and stiffness in all or part of the wrist and hand
- Pain should be documented as a numeric pain scale 0-10

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Musculoskeletal Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Wrist or Hand Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint. Gather information that assists in identifying the tissues involved, and the selection of appropriate techniques.

Results if Wrist or Hand Pain

- May be tenderness on palpation of muscle groups, bursae, tendons, or other tissues.
- May or may not involve limited range of motion
- Joints may or may not feel warm to the touch
- Swelling may or may not be present

Differential Diagnoses

- Any of the following diagnoses may result in wrist or hand pain:
 - ◆ Inflammatory diseases
 - ◆ Infection
 - ◆ Fracture
 - ◆ Arthritis
 - ◆ Rheumatoid arthritis
 - ◆ Osteoarthritis
 - ◆ Ligamentous injury
 - ◆ Tendonitis
 - ◆ Bursitis
 - ◆ Carpal tunnel syndrome

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
 - ◆ Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
 - ◆ When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
 - ◆ Use of self-directed home therapy will facilitate the fading of treatment frequency.
 - ◆ As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
 - ◆ eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
 - ◆ Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
 - ◆ In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
 - ◆ Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
 - ◆ The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
 - ◆ Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
 - ◆ If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy (Listed in alphabetical order)

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
3. Moraska A, Chandler C, Edmiston-Schaetzel A, Franklin G, Calenda EL, and Enebo B: Comparison of a targeted and general massage protocol on strength, function, and symptoms associated with carpal tunnel syndrome: a randomized pilot study. *Journal of Alternative and Complementary Medicine*. 2008 Apr; 14(3):259-67. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/18370581>.
4. Nelson NL, Churilla JR. Massage Therapy for Pain and Function in Patients with Arthritis: A Systematic Review of Randomized Control Trials. *Am J Phys Med Rehabil*. 2017 Sep;96(9):665-672. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/28177937>.
5. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
6. Verhagen AP, Karelis C, Bierma-Zeinstra SM, Feleus A, Dahaghin S, Burdorf A, De Vet HC, and Koes BW: Ergonomic and physiotherapeutic interventions for treating work-related complaints of the arm, neck or shoulder in adults. A Cochrane systematic review. *Eura Medicophys*. 2007 Sep; 43(3):391-405. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/17921965>.
7. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
8. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-9.0: Hip Pain

Synonyms

None

Definition

Hip pain is a non-specific complaint that may involve any area surrounding the pelvis and hip joints. Pain may be due to overuse, injury, or degeneration of the muscles, tendons, ligaments, bursae, and/or joints, or may be a symptom of an underlying condition. Pain may be acute or chronic. Pain may also be exacerbated by emotional stress.

History

Specific Aspects of Hip Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture, ligament/cartilage tear	Immediate referral to emergency department
Fever, severe pain	Infection	Immediate referral to emergency department
Diabetes	Neuropathy	Prompt referral to Primary Care Provider
Multiple joint involvement	Rheumatologic diseases	Prompt referral to Primary Care Provider
Unilateral edema	Deep vein thrombosis	Immediate referral to emergency department
Discoloration of leg or foot	Arterial occlusion	Immediate referral to emergency department
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

May be of gradual onset, due to repetitive use, or may begin suddenly after an accident or injury. The nature and location of the pain will vary according to the specifics of the patient's injury.

Subjective Findings

- Pain may be worse with motion
- Pain may be worse at specific times of the day
- Pain and stiffness in one or both hips
- Pain should be documented as a numeric pain scale 0-10

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Musculoskeletal Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Hip Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint. Gather information that assists in identifying the tissues involved, and the selection of appropriate techniques.

Results if Hip Pain

- May be tenderness on palpation of muscle groups, bursae, tendons, or other tissues.
- May or may not involve limited range of motion
- Joints may or may not feel warm to the touch
- Swelling may or may not be present

Differential Diagnoses

- Any of the following diagnoses may result in hip pain:
 - ◆ Referred pain from cardiac, pulmonary, or gastrointestinal pathology
 - ◆ Inflammatory diseases
 - ◆ Infection
 - ◆ Fracture
 - ◆ Arthritis
 - ◆ Rheumatoid arthritis
 - ◆ Osteoarthritis
 - ◆ Ligamentous injury
 - ◆ Tendonitis
 - ◆ Bursitis

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
 - ◆ Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
 - ◆ When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
 - ◆ Use of self-directed home therapy will facilitate the fading of treatment frequency.
 - ◆ As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
 - ◆ eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
 - ◆ Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
 - ◆ In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
 - ◆ Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
 - ◆ The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
 - ◆ Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
 - ◆ If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy **(Listed in alphabetical order)**

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Coban A, and Sirin A: Effect of foot massage to decrease physiological lower leg edema in late pregnancy: a randomized controlled trial in Turkey. *International Journal of Nursing Practice*. 2010 Oct; 16(5):454-60. doi: 10.1111/j.1440-172X.2010.01869.x. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20854342>.
3. Hopper D, Deacon S, Das S, Jain A, Riddell D, Hall T, and Briffa K: Dynamic soft tissue mobilisation increases hamstring flexibility in healthy male subjects. *British Journal of Sports Medicine*. 2005 Sep; 39(9):594-8; discussion 598. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1725327/>.
4. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
5. Nelson NL, Churilla JR. Massage Therapy for Pain and Function in Patients with Arthritis: A Systematic Review of Randomized Control Trials. *Am J Phys Med Rehabil*. 2017 Sep;96(9):665-672. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/28177937>.
6. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
7. Walach H, G  thlin C, and K  nig M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
8. Wiktorsson-M  ller M, Oberg B, Ekstrand J, and Gillquist J: Effects of warming up, massage, and stretching on range of motion and muscle strength in the lower extremity. *The American Journal of Sports Medicine*. 1983 Jul-Aug; 11(4):249-52. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/6614296>.
9. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-10.0: Upper Leg Pain

Synonyms

- Thigh pain

Definition

Upper leg pain is a non-specific complaint that may involve any area between the pelvis and the knee. Pain may be due to overuse, injury, or degeneration of the muscles, tendons, ligaments, bursae, and/or joints, or may be a symptom of an underlying condition. Pain may be acute or chronic. Pain may also be exacerbated by emotional stress.

History

Specific Aspects of Upper Leg Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Unilateral warmth and swelling in one lower leg, sometimes with red color	Possible blood clot (Do not massage a client with suspected blood clot.)	Immediate referral to emergency department
Severe trauma	Fracture, ligament/cartilage tear	Immediate referral to emergency department
Fever, severe pain	Infection	Immediate referral to emergency department
Diabetes	Neuropathy	Prompt referral to Primary Care Provider
Multiple joint involvement	Rheumatologic diseases	Prompt referral to Primary Care Provider
Unilateral edema	Deep vein thrombosis	Immediate referral to emergency department
Discoloration of leg or foot	Arterial occlusion	Immediate referral to emergency department
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

May be of gradual onset, due to repetitive use, or may begin suddenly after an accident or injury. The nature and location of the pain will vary according to the specifics of the patient's injury.

Subjective Findings

- Pain may be worse with motion
- Pain may be worse at specific times of the day
- Pain and stiffness in one or both legs
- Pain should be documented as a numeric pain scale 0-10

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Musculoskeletal Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Upper Leg Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint. Gather information that assists in identifying the tissues involved, and the selection of appropriate techniques.

Results if Upper Leg Pain

- May be tenderness on palpation of muscle groups, bursae, tendons, or other tissues.
- May or may not involve limited range of motion
- Joints may or may not feel warm to the touch
- Swelling may or may not be present

Differential Diagnoses

- Any of the following diagnoses may result in upper leg pain:
 - ◆ Referred pain from cardiac, pulmonary, or gastrointestinal pathology
 - ◆ Inflammatory diseases
 - ◆ Infection
 - ◆ Fracture
 - ◆ Arthritis
 - ◆ Rheumatoid arthritis
 - ◆ Osteoarthritis
 - ◆ Ligamentous injury
 - ◆ Tendonitis
 - ◆ Bursitis
 - ◆ Blood clots in the leg, particularly if the person has been relatively immobile for long periods, smokes, is pregnant, has cancer or immune disease, has had a recent injury to the leg, is obese, or has a personal or family history of blood clots. Do not massage a client if you suspect a blood clot.

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
 - ◆ Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
 - ◆ When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
 - ◆ Use of self-directed home therapy will facilitate the fading of treatment frequency.
 - ◆ As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
 - ◆ eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
 - ◆ Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
 - ◆ In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
 - ◆ Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
 - ◆ The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.

- ◆ Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
- ◆ If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy

(Listed in alphabetical order)

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Castro-Sánchez AM, Moreno-Lorenzo C, Matarán-Peñarocha GA, Feriche-Fernández-Castanys B, Granados-Gámez G, and Quesada-Rubio JM: Connective tissue reflex massage for type 2 diabetic patients with peripheral arterial disease: randomized controlled trial. *Evidence-based Complementary and Alternative Medicine*. 2011; 2011:804321. Epub 2011 Mar 13. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/19933770>.
3. Coban A, and Sirin A: Effect of foot massage to decrease physiological lower leg edema in late pregnancy: a randomized controlled trial in Turkey. *International Journal of Nursing Practice*. 2010 Oct; 16(5):454-60. doi: 10.1111/j.1440-172X.2010.01869.x. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20854342>.
4. Field T. Knee osteoarthritis pain in the elderly can be reduced by massage therapy, yoga and tai chi: A review. *Complement Ther Clin Pract*. 2016 Feb;22:87-92. doi: 10.1016/j.ctcp.2016.01.001. Epub 2016 Jan 14. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/26850812>.
5. Hopper D, Deacon S, Das S, Jain A, Riddell D, Hall T, and Briffa K: Dynamic soft tissue mobilisation increases hamstring flexibility in healthy male subjects. *British Journal of Sports Medicine*. 2005 Sep; 39(9):594-8; discussion 598. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1725327/>.
6. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
7. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.

8. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
9. Wiktorsson-Möller M, Oberg B, Ekstrand J, and Gillquist J: Effects of warming up, massage, and stretching on range of motion and muscle strength in the lower extremity. *The American Journal of Sports Medicine*. 1983 Jul-Aug; 11(4):249-52. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/6614296>.
10. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-11.0: Lower Leg Pain

Synonyms

- Calf pain
- Shin pain

Definition

Lower leg pain is a non-specific complaint that may involve any area between the knee and the ankle. Pain may be due to overuse, injury, or degeneration of the muscles, tendons, ligaments, bursae, and/or joints, or may be a symptom of an underlying condition. Pain may be acute or chronic. Pain may also be exacerbated by emotional stress.

History

Specific Aspects of Lower Leg Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Unilateral warmth and swelling in one lower leg, sometimes with red color	Possible blood clot (Do not massage a client with suspected blood clot.)	Immediate referral to emergency department
Severe trauma	Fracture, ligament/cartilage tear	Immediate referral to emergency department
Fever, severe pain	Infection	Immediate referral to emergency department
Diabetes	Neuropathy	Prompt referral to Primary Care Provider
Multiple joint involvement	Rheumatologic diseases	Prompt referral to Primary Care Provider
Unilateral edema	Deep vein thrombosis	Immediate referral to emergency department
Discoloration of leg or foot	Arterial occlusion	Immediate referral to emergency department
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

May be of gradual onset, due to repetitive use, or may begin suddenly after an accident or injury. The nature and location of the pain will vary according to the specifics of the patient's injury.

Subjective Findings

- Pain may be worse with motion
- Pain may be worse at specific times of the day
- Pain and stiffness in one or both legs
- Pain should be documented as a numeric pain scale 0-10

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Musculoskeletal Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion

Inquiry about pain levels and functional abilities Specific Aspects of Lower Leg Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint. Gather information that assists in identifying the tissues involved, and the selection of appropriate techniques.

Results if Lower Leg Pain

- May be tenderness on palpation of muscle groups, bursae, tendons, or other tissues.
- May or may not involve limited range of motion
- Joints may or may not feel warm to the touch
- Swelling may or may not be present

Differential Diagnoses

- Any of the following diagnoses may result in lower leg pain:
 - ◆ Referred pain from cardiac, pulmonary, or gastrointestinal pathology
 - ◆ Inflammatory diseases
 - ◆ Infection
 - ◆ Fracture
 - ◆ Arthritis
 - ◆ Rheumatoid arthritis
 - ◆ Osteoarthritis
 - ◆ Ligamentous injury
 - ◆ Tendonitis
 - ◆ Bursitis
 - ◆ Blood clots in the leg, particularly if the person has been relatively immobile for long periods, smokes, is pregnant, has cancer or immune disease, has had a recent injury to the leg, is obese, or has a personal or family history of blood clots. Do not massage a client if you suspect a blood clot.

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
 - ◆ Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
 - ◆ When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
 - ◆ Use of self-directed home therapy will facilitate the fading of treatment frequency.
 - ◆ As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
 - ◆ eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
 - ◆ Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
 - ◆ In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
 - ◆ Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
 - ◆ The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.

- ◆ Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
- ◆ If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy

(Listed in alphabetical order)

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Castro-Sánchez AM, Moreno-Lorenzo C, Matarán-Peñarocha GA, Feriche-Fernández-Castanys B, Granados-Gámez G, and Quesada-Rubio JM: Connective tissue reflex massage for type 2 diabetic patients with peripheral arterial disease: randomized controlled trial. *Evidence-based Complementary and Alternative Medicine*. 2011; 2011:804321. Epub 2011 Mar 13. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/19933770>.
3. Coban A, and Sirin A: Effect of foot massage to decrease physiological lower leg edema in late pregnancy: a randomized controlled trial in Turkey. *International Journal of Nursing Practice*. 2010 Oct; 16(5):454-60. doi: 10.1111/j.1440-172X.2010.01869.x. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20854342>.
4. Field T. Knee osteoarthritis pain in the elderly can be reduced by massage therapy, yoga and tai chi: A review. *Complement Ther Clin Pract*. 2016 Feb;22:87-92. doi: 10.1016/j.ctcp.2016.01.001. Epub 2016 Jan 14. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/26850812>.
5. Hopper D, Deacon S, Das S, Jain A, Riddell D, Hall T, and Briffa K: Dynamic soft tissue mobilisation increases hamstring flexibility in healthy male subjects. *British Journal of Sports Medicine*. 2005 Sep; 39(9):594-8; discussion 598. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1725327/>.
6. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
7. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.

8. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
9. Wiktorsson-Möller M, Oberg B, Ekstrand J, and Gillquist J: Effects of warming up, massage, and stretching on range of motion and muscle strength in the lower extremity. *The American Journal of Sports Medicine*. 1983 Jul-Aug; 11(4):249-52. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/6614296>.
10. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-12.0: Ankle/Foot Pain

Synonyms

None

Definition

Ankle or foot pain is a non-specific complaint that may involve any area between the lower calf and the toes. Pain may be due to overuse, injury, or degeneration of the muscles, tendons, ligaments, bursae, and/or joints, or may be a symptom of an underlying condition. Pain may be acute or chronic. Pain may also be exacerbated by emotional stress.

History

Specific Aspects of Ankle or Foot Pain History

- Rule out red flags (require medical management).
- Determine if trauma-related; determine nature and extent of traumatic event.
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture, ligament/cartilage tear	Immediate referral to emergency department
Fever, severe pain	Infection	Immediate referral to emergency department
Diabetes	Neuropathy	Prompt referral to Primary Care Provider
Multiple joint involvement	Rheumatologic diseases	Prompt referral to Primary Care Provider
Unilateral edema	Deep vein thrombosis	Immediate referral to emergency department
Discoloration of leg or foot	Arterial occlusion	Immediate referral to emergency department
Unexplained weight loss, fatigue, night sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider

Presentation

May be of gradual onset, due to repetitive use, or may begin suddenly after an accident or injury. The nature and location of the pain will vary according to the specifics of the patient's injury.

- Subjective Findings
- Pain may be worse with motion
- Pain may be worse at specific times of the day
- Pain and stiffness in one or both ankles or feet
- Pain should be documented as a numeric pain scale 0-10

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Musculoskeletal Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Ankle or Foot Examination

Examine the musculoskeletal system for possible causes or contributing factors to the complaint. Gather information that assists in identifying the tissues involved, and the selection of appropriate techniques.

Results if Ankle or Foot Pain

- May be tenderness on palpation of muscle groups, bursae, tendons, or other tissues.
- May or may not involve limited range of motion
- Joints may or may not feel warm to the touch
- Swelling may or may not be present

Differential Diagnoses

- Any of the following diagnoses may result in ankle or foot pain:
 - ◆ Inflammatory diseases
 - ◆ Infection
 - ◆ Fracture
 - ◆ Arthritis
 - ◆ Rheumatoid arthritis
 - ◆ Osteoarthritis
 - ◆ Ligamentous injury
 - ◆ Tendonitis
 - ◆ Bursitis
 - ◆ Ankle sprain or strain
 - ◆ Achilles tendon sprain or strain
 - ◆ Plantar fasciitis
 - ◆ Poor footwear, including high heels, narrow pointed shoes, and shoes with improper construction or support

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
 - ◆ Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
 - ◆ When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
 - ◆ Use of self-directed home therapy will facilitate the fading of treatment frequency.
 - ◆ As treatment progresses, one should see an increase in the active regimen of care, a decrease in the passive regimen of care, and a fading of treatment frequency.
 - ◆ eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
 - ◆ Adequate and legible patient progress information that contains subjective complaints and objective findings for each treatment is required to determine medical necessity.
 - ◆ In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
 - ◆ Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
 - ◆ The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
 - ◆ Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.
 - ◆ If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy

(Listed in alphabetical order)

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Castro-Sánchez AM, Moreno-Lorenzo C, Matarán-Peñarrocha GA, Feriche-Fernández-Castanys B, Granados-Gámez G, and Quesada-Rubio JM: Connective tissue reflex massage for type 2 diabetic patients with peripheral arterial disease: randomized controlled trial. *Evidence-based Complementary and Alternative Medicine*. 2011; 2011:804321. Epub 2011 Mar 13. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/19933770>.
3. Coban A, and Sirin A: Effect of foot massage to decrease physiological lower leg edema in late pregnancy: a randomized controlled trial in Turkey. *International Journal of Nursing Practice*. 2010 Oct; 16(5):454-60. doi: 10.1111/j.1440-172X.2010.01869.x. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20854342>.
4. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
5. Saban B, Deutscher D, Ziv T. Deep massage to posterior calf muscles in combination with neural mobilization exercises as a treatment for heel pain: a pilot randomized clinical trial. *Man Ther*. 2014 Apr;19(2):102-8. doi: 10.1016/j.math.2013.08.001. Epub 2013 Sep 3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/24090993>.
6. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. *Evidence-based Complementary and Alternative Medicine*. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
7. Vaillant J, Rouland A, Martigné P, Braujou R, Nissen MJ, Caillat-Miosse JL, Vuillerme N, Nougier V, and Juvin R: Massage and mobilization of the feet and ankles in elderly adults: effect on clinical balance performance. *Manual Therapy*. 2009 Dec; 14(6):661-4. Epub 2009 May 8. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/19427810>.
8. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. *Journal of Alternative and Complementary Medicine*. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
9. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. *Journal of Athletic Training*. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-13.0: Fibromyalgia

Synonyms

None

Definition

Fibromyalgia is a chronic syndrome characterized by widespread generalized pain, joint rigidity, intense fatigue, sleep alterations, headache, spastic colon, craniomandibular dysfunction, anxiety, and depression.

History

Specific Aspects of Fibromyalgia History

- Complex pain syndrome with multiple and variable tender points.
- Complaints are primarily para spinal and located in the bilateral extremities.
- Tender points may be present in musculature but rarely cause radicular symptoms
- Often associated with sleep disruption and/or extreme fatigue
- Rule out red flags (require medical management)
- Identify comorbidities requiring medical management, and those that affect application of massage therapy.

Red Flag	Possible Consequence or Cause	Action Required
Severe trauma	Fracture	Immediate referral to emergency department
Severe pain when bending the head forward, accompanied by involuntary flexing of the hips and knees	Subarachnoid hemorrhage; meningitis	Immediate referral to emergency department
Bladder dysfunction associated with onset of neck pain	Myelopathy; spinal cord injury	Immediate referral to emergency department
Difficulty in speaking	Cerebrovascular accident	Immediate referral to emergency department
Associated cranial nerve or central nervous system (CNS) signs/symptoms	Tumor; intracranial hematoma	Immediate referral to emergency department
Onset of a new headache	Tumor; infection; vascular cause (older patients, also consider temporal arteritis; glaucoma)	Prompt referral to Primary Care Provider
Unexplained weight loss, fatigue, night Sweats	Possible cancer or other serious illness	Prompt referral to Primary Care Provider

Red Flag	Possible Consequence or Cause	Action Required
Alcoholism, drug abuse	Side effect or withdrawal phenomenon	Prompt referral to Primary Care Provider
Immune-compromised state	Infection	Prompt referral to Primary Care Provider
Radicular pain	Neurologic	Prompt referral to Primary Care Provider
Chronic pain	Infection, rheumatoid arthritis, lupus, Lyme Disease, and others	Prompt referral to Primary Care Provider
Depression	May be a symptom of fibromyalgia, or a response to the chronic illness. Can be life threatening in severe cases.	Prompt referral to Primary Care Provider
Chest pain	May be symptom of fibromyalgia, or a sign of cardiac disease.	Immediate referral to emergency department

Presentation

Pain may arise gradually with no precipitating event, or suddenly due to physical or psychological trauma. Chronic widespread pain is the hallmark symptom of fibromyalgia. The pain may be described as widespread and exhausting, a bruised feeling, tingling, deep aching, throbbing, shooting, stabbing, sharp or burning. Fibromyalgia patients also have a lower pain threshold than healthy people. There is a high incidence of clinical depression among fibromyalgia patients.

Subjective Findings

- Pain and stiffness in one or more regions; pain worse with motion or applied pressure
- Pain should be documented as a numeric pain scale 0-10
- Tender points and/or tender muscles in multiple areas, typically widespread symptoms
- Poor sleep and/or chronic fatigue
- High incidence of clinical depression

Functional Assessment

- Documentation of a patient's level of function is an important aspect of patient care. This documentation is required in order to establish the medical necessity of ongoing massage therapy treatment. The Patient Specific Functional Scale (PSFS) is a patient reported outcome assessment that is easy and appropriate for massage therapists to use. The PSFS has been studied in peer-reviewed scientific literature, and it has been proven to be a valid, reliable, and responsive measure for a variety of pain syndromes (neck, back, knee, etc.).

Scope of Fibromyalgia Examination

- Inspection
- Palpation of bony and soft tissue
- Range of motion
- Inquiry about pain levels and functional abilities

Specific Aspects of Fibromyalgia Examination

- Pain with light palpation of tender points, located along joint lines and/or muscles
- Examine the musculoskeletal system for possible causes or contributing factors to the complaint.

Findings for Fibromyalgia

- Elevated pain response to light palpation
- Multiple regions of pain

Massage Therapy Management

- Massage therapy management goals are to resolve pain, restore the highest level of function possible, and educate patient to prevent recurrent symptoms. To be considered medically necessary, patient's symptoms must be the direct result of a primary neuromusculoskeletal injury or illness.
 - ◆ Treatment frequency should be commensurate with severity of the chief complaint, natural history of the condition, and expectation for functional improvement.
 - ◆ When significant improvements in patient's subjective findings and objective findings are demonstrated continued treatment with decreased frequency is appropriate.
 - ◆ Use of self-directed home therapy will facilitate the fading of treatment frequency.
 - ◆ As treatment progresses, one should see an increase in the active regimen of care, a decrease in the
 - ◆ Passive regimen of care, and a fading of treatment frequency.
 - ◆ eviCore's criteria for continued massage therapy depend on information submitted regarding patient's progress.
 - ◆ Adequate and legible patient progress information that contains subjective complaints and objective
 - ◆ Findings for each treatment is required to determine medical necessity.
 - ◆ In addition to improvements in the table below, significant progress may also be documented by increases in functional capacity and increasingly longer durations of pain relief.
 - ◆ Discharge occurs when reasonable functional goals and expected outcomes have been achieved.
 - ◆ The patient is discharged when the patient/caregiver can continue management of symptoms with an independent home program.
 - ◆ Therapy is discontinued when the patient is unable to progress towards outcomes because of medical complications, psychosocial factors or other personal circumstances.

- ◆ If the member has been non-compliant with therapy as is evidenced by the clinical documentation, and/or the lack of demonstrated progress, therapy will be deemed to be not medically necessary and the member should be discharged from therapy.

Week	Progress
0-1	➤ Some reduction of pain severity and frequency ➤ Some reduction of muscle spasm
2-4	➤ 50% decrease in pain severity and frequency ➤ 50% improvement in ability to perform activities of daily living
5-8	➤ 75% decrease in pain severity and frequency ➤ 75% improvement in ability to perform activities of daily living
9-12	➤ Gradual improvement leading toward resolution ➤ Reinforce self-management techniques ➤ Discharge patient to elective care, or to their primary care provider for alternative treatment options when a plateau is reached, or by week 12, whichever occurs first

Referral Guidelines

- Refer patient when:
 - ◆ No benefit is attained from treatment
 - ◆ Treatment provides only temporary relief, without leading to a resolution of the condition
 - ◆ Improvement with massage therapy has reached a plateau but residual symptoms still exist
 - ◆ If the condition has not progressed towards resolution, refer the patient to an appropriate health care provider to explore other treatment alternatives.
 - ◆ Symptoms consistent with clinical depression are present

Appropriate Procedures/ Modalities

- Manual massage work
- Massage tools as extension of hands
- Vibrating massage tools
- Stretching and instruction in same
- Application of external lotions and salves
- Application of hot or cold packs

Inappropriate Procedures/Modalities

- TENS or other devices which apply an electrical current
- Dispensing or sale of supplements for internal use (such as vitamins, herbs, etc)
- Any techniques outside the scope of practice in your state

Self-Management Techniques

- Rest and reduce strenuous activities
- Ergonomics
- Appropriate exercises/stretching
- Stress management
- Joint protection
- Weight loss
- Self-massage
- Hot packs/cold packs, if needed, to relieve discomfort

Alternatives/Adjuncts to Massage Therapy

(Listed in alphabetical order)

- Acupuncture
- Chiropractic
- Dietary/Nutritional medicine counseling
- Medication
- Injection therapy/Pain management
- Occupational therapy
- Osteopathic manipulation
- Physical therapy
- Psychological counseling

References

1. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat*. 2010 Feb 25;18:3. doi: 10.1186/1746-1340-18-3. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/20184717>.
2. Chinn, S., Caldwell, W. & Gritsenko, K. Fibromyalgia Pathogenesis and Treatment Options Update. *Curr Pain Headache Rep* (2016) 20: 25. <https://doi.org/10.1007/s11916-016-0556-x>. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/26922414>.
3. Häuser, Winfried, Kati Thieme, and Dennis C. Turk. "Guidelines on the Management of Fibromyalgia Syndrome - A Systematic Review." *European Journal of Pain* 14.1 (2010): 5-10. Web. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/19264521>.
4. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct 25. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/22031594>.
5. Macfarlane GJ, Kronisch C, Dean LE et al. EULAR revised recommendations for the management of fibromyalgia. *Ann Rheum Dis*. 2016 Jul 4. pii: annrheumdis-2016-209724. doi: 10.1136/annrheumdis-2016-209724. Date last accessed 02/02/18. <http://ard.bmj.com/content/early/2016/07/04/annrheumdis-2016-209724>.
6. Rooks, Daniel S. "Fibromyalgia Treatment Update." *Current Opinion in Internal Medicine* 6.3 (2007): 328-34. Web. Date last accessed 02/02/18. https://www.medscape.com/viewarticle/551891_1.
7. Rossy, Lynn A., Susan P. Buckelew, Nancy Dorr, Kristofer J. Hagglund, Julian F. Thayer, Matthew J. McIntosh, John E. Hewett, and Jane C. Johnson. "A Meta-analysis of Fibromyalgia Treatment Interventions." *Annals of Behavioral Medicine Ann. Behav. Med*. 21.2 (1999): 180-91. Web. Date last accessed 02/02/18. <https://link.springer.com/article/10.1007/BF02908299>.
8. Sumpton JE and Moulin DE. Fibromyalgia: Presentation and management with a focus on pharmacological treatment. *Pain Res Manag*. 2008 Nov-Dec; 13(6): 477–483. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/19225604>.

9. Tsao JC: Effectiveness of massage therapy for chronic, non-malignant pain: a review. Evidence-based Complementary and Alternative Medicine. 2007 Jun; 4(2):165-79. Epub 2007 Feb 5. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876616/>.
10. Walach H, Güthlin C, and König M: Efficacy of massage therapy in chronic pain: a pragmatic randomized trial. Journal of Alternative and Complementary Medicine. 2003 Dec; 9(6):837-46. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/14736355>.
11. Zainuddin Z, Newton M, Sacco P, and Nosaka K: Effects of massage on delayed-onset muscle soreness, swelling, and recovery of muscle function. Journal of Athletic Training. 2005 Jul-Sep; 40(3):174-80. Date last accessed 02/02/18. <https://www.ncbi.nlm.nih.gov/pubmed/16284637>.

MT-14.0: Diagnosis Codes

	ICD-10 Codes
Neck Pain	M54.2
Upper/Mid-Back Pain	M54.6
Mid Back Pain	M54.5
Shoulder Pain	M25.511, M25.512
Upper Arm Pain	M79.621, M79.622
Forearm Pain	M79.631, M79.632
Pain in the Hand/Wrist	M25.531, M25.532, M79.641, M79.642
Hip Pain	M25.551, M25.552
Upper Leg Pain	M79.651, M79.652
Lower Leg Pain	M79.661, M79.662
Ankle/Foot Pain	M25.571, M25.572, M79.671, M79.672
Fibromyalgia	M79.7