

1 **Policy:** **Medical Necessity Decision Assist Guideline for Musculoskeletal**  
 2 **Conditions and Somatic / Neuropathic Pain Disorders Involving**  
 3 **Occupational Injuries**

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 5 **Date of Implementation:** **October 26, 2006**

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 7 **Product:** **Specialty**  
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 10 **OVERVIEW**

11 American Specialty Health – Specialty (ASH) is charged as a utilization review agent to ensure that  
 12 practitioners comply with professionally recognized standards of practice, state adopted or mandated  
 13 practice guidelines, and established diagnostic and treatment planning practices acceptable to ASH’s  
 14 clinical committees. ASH monitors and evaluates treatment/services provided by contracted  
 15 practitioners. Clinical services evaluation decisions impact care. Every clinical treatment/service  
 16 submitted to diagnose or treat an injured worker must be supported by clinical rationale that is  
 17 supported by scientific evidence. ASH provides peer review evaluation of the appropriateness and  
 18 effectiveness of submitted treatment/services, which include visits, examinations, diagnostic tests,  
 19 and diagnostic procedures. State mandates, regulatory requirements, accreditation standards, or  
 20 specific client agreements may influence the standards or guidelines utilized in this evaluation of  
 21 medical necessity.

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 23 The following provides a structured approach to the medical necessity decision-making process for  
 24 musculoskeletal occupational injuries. For more comprehensive information related to specific  
 25 injuries or body parts, ASH relies upon the American College of Occupational and Environmental  
 26 Medicine Occupational Medicine Practice Guidelines (hereafter cited as ACOEM), Official  
 27 Disability Guidelines (hereafter cited as ODG), Medical Treatment Guidelines issued by the State of  
 28 Colorado - Department of Labor and Employment Division of Workers’ Compensation (hereafter  
 29 cited as “Colorado Guidelines”) and/or other evidence-based treatment guidelines that are generally  
 30 recognized by the national medical community and are scientifically based. Clinician review ensures  
 31 that care is consistent with ACOEM, ODG, Colorado Guidelines, and other evidence-based practices,  
 32 and meets current peer-review medical standards and guidelines.

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 34 Treatment/Services for musculoskeletal occupational injuries are *appropriate* when:

- 35 • Necessary to cure or relieve the effects of the injury;
- 36 • Safe or the benefit outweighs any risk;
- 37 • Consistent with the recipient’s work-related symptoms, diagnoses, condition, or injury;
- 38 • Meeting the prevailing standard for medical care, as outlined in the ACOEM, ODG, Colorado  
 39 Guidelines (for acupuncture) or other accepted evidenced-based guidelines, (unless the  
 40 treating physician has presented reasonable information to explain why the particular patient  
 41 does need atypical, unexpected treatment);

- 1 • Likely to provide a clinically meaningful benefit;
- 2 • Likely more effective than more conservative or less costly services;
- 3 • Reasonably expected to diagnose, correct, cure, alleviate or prevent worsening of the accepted
- 4 illnesses or injuries.

5  
6 Additional consideration in deciding the necessity and appropriateness of submitted  
7 treatment/services includes:

- 8 • Care is focused on rapid attainment of a defined, objective functional outcome;
- 9 • History and examination result in accurate Musculoskeletal diagnosis to ensure submitted
- 10 treatment/services is/are appropriate;
- 11 • History and examination result in accurate physical assessment for potential contraindications
- 12 to treatment/services submitted which result in appropriate - referral or co-management;
- 13 • Treatment planning and treatment interventions are evidence-based and likely to result in
- 14 reaching the defined functional outcome;
- 15 • Care is for an accepted incident and accepted body part by the worker's compensation
- 16 insurance administrator.

## 17 18 **MEDICAL NECESSITY**

19 ASH clinical quality evaluators evaluate medical necessity of services consistent with the definition  
20 of medical necessity adopted by ASH Quality Oversight Committee.

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22 “Medically Necessary” or “Medical Necessity” shall mean health care services that a Healthcare  
23 Provider, exercising **Prudent Clinical Judgment**, would provide to a patient for the purpose of  
24 evaluating, diagnosing, or treating an illness, injury, disease or its symptoms, and that are (a) in  
25 accordance with **Generally Accepted Standards of Medical Practice**; (b) clinically appropriate in  
26 terms of type, frequency, extent, site, and duration; and **Considered Effective** for the patient's illness,  
27 injury, or disease; and (c) not primarily for the **Convenience of the Patient or Healthcare Provider**,  
28 and not more costly than an alternative service or sequence of services at least as likely to produce  
29 equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness,  
30 injury, or disease. For more information, see policy Medical Necessity Definition – UM 8.

## 31 32 **Core Clinical Review Elements Critical to Utilization Review of Musculoskeletal Occupational** 33 **Injuries**

34 It is important to note that critical peer-evaluation of medical necessity of services, especially within  
35 the diagnosis groups representing musculoskeletal disorders, requires the practitioner to approach the  
36 clinical data and scientific evidence from a global perspective synthesizing the various elements into  
37 a congruent clinical picture. The following is provided to assist the clinical evaluation cognitive  
38 process.

### 39 40 **Historical Elements:**

- 41 • Onset mechanism and date of onset are appropriate for musculoskeletal etiology;

- 1 • The condition is musculoskeletal and work related (arose out of employment or occurred in
- 2 the course of that employment);
- 3 • Past history of pertinent related and unrelated medical conditions and response to care does
- 4 not present contraindication(s) to submitted treatment/services;
- 5 • Chief complaint has a musculoskeletal component amenable to submitted treatment/services;
- 6 • Disability and impairment related to past history or chief complaint (e.g., performance of
- 7 Activities of Daily Living (ADLs));
- 8 • Functionally based patient self-assessment tools (e.g., Oswestry, Neck Disability Index) and
- 9 outcome measurement goals are implemented to establish a baseline and progress is taken
- 10 into consideration during treatment planning;
- 11 • There is historical and diagnostic evidence that the condition(s) being treated is/are work
- 12 related.

### 13 **Examination Elements:**

- 14 • Examination procedures and intensity are appropriate for the accepted chief complaint and
- 15 historical findings;
- 16 • Objective assessment of functional limitations and palpatory, orthopedic, neurologic, range
- 17 of motion assessment in degrees and other physical examination findings are appropriately
- 18 documented including the nature, extent, severity, character, and significance of the finding
- 19 in relation to the accepted chief complaint, the diagnosis, and treatment planning;
- 20 • Examination findings provide a reasonable and reliable basis for the stated diagnosis and
- 21 treatment planning taking into account variables such as age, sex, physical conditioning,
- 22 occupational and recreational activities, co-morbid conditions, etc.

### 23 **Radiographic or Special Study Elements (e.g., MRI, CT, Videofluoroscopy and Diagnostic**

### 24 **Ultrasound):**

25 ASH relies upon ACOEM, ODG, Colorado Guidelines, and/or other valid evidence-based treatment

26 guidelines that are generally recognized by the national medical community and are scientifically

27 based in guiding medical necessity decisions.

- 28 • Laboratory tests are performed only when necessary to improve diagnostic accuracy and
- 29 treatment planning. Abnormal values are interpreted as they related to the musculoskeletal
- 30 chief complaint or to unrelated co-morbid conditions that may or may not be contraindications
- 31 to submitted treatment/services. Laboratory testing in the management of musculoskeletal
- 32 occupational injuries is not generally necessary and requires specific documentation of the
- 33 rationale for ordering.
- 34 • X-ray procedures are performed only when necessary to improve diagnostic accuracy and
- 35 treatment planning. Indicators from history and physical examination supporting the need for
- 36 X-ray procedures are described in the *X-Ray Guidelines (CPG 1 – S)* ASH clinical practice
- 37 guideline and in ACOEM Guidelines. In the absence of recognized red-flags, plain film
- 38 radiography is generally not necessary in order to initiate a trial of care.
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- 1 • The use of x-ray or advanced imaging should be carefully considered. Reliance solely on  
2 imaging studies to evaluate the source of pain in the injured part carries a significant risk of  
3 diagnostic confusion (false positive test results) because of the possibility of identifying a  
4 preexisting condition that has no association with the presenting area of injury. Advanced  
5 imaging findings, when medically necessary and/or available, are evaluated for structural  
6 integrity and to rule out osseous or related soft tissue pathology.
- 7 • Electro-diagnostic studies, when medically necessary and/or available, are evaluated for  
8 objective neural deficit. Electro-diagnostic studies are not considered medically necessary in  
9 the absence of clinical indicators of neurologic deficit on physical examination. For more  
10 information, see the *Electrodiagnostic Testing (CPG 129 – S)* clinical practice guideline.

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12 All diagnostic studies and services must be consistent with the injured worker's accepted area(s) of  
13 injury. Only injuries arising out of and/or in the course of employment shall be compensable under  
14 the Workers' Compensation system. All services rendered for non-industrial injuries or illnesses are  
15 solely the responsibility of the patient. If there are inconsistencies with the injured worker's  
16 description of their injury or illness, the inconsistencies must be explained in detail.

#### 17 **Treatment Planning Elements:**

- 18 • Dosage (frequency and duration of care) is appropriately correlated with clinical findings and  
19 clinical evidence and represents a reasonable clinical trial of care consistent with anticipated  
20 intermediate care thresholds that signify the need to evaluate progress.
- 21 • Therapeutic goals are functionally based, realistic, measurable and evidence-based.
- 22 • Treatment/therapy type and relationship to condition and functional goals is appropriate.
- 23 • Determining *clinically significant progress* is important in order to determine the need for  
24 continued care, the appropriate frequency, estimated date of release from care, and whether a  
25 change in the treatment plan or a referral to another appropriate health care provider is  
26 indicated. Clinically significant progress is defined as the statistically minimal significant  
27 change noted on a reliable and valid outcome tool. Actual significance requires correlation  
28 with the overall clinical presentation, including updated subjective and objective examination  
29 findings.
- 30 • Home exercise programs, self-care, and active-care instructions are documented within  
31 medical records.
- 32 • Durable Medical Equipment (DME), Supplies, and Supports are provided only when  
33 medically necessary for treatment of the work related condition and appropriately correlated  
34 with clinical findings and clinical evidence.

#### 35 Approval of Treatment/Services is Considered if:

- 36 • Services are for an accepted work-related condition;
- 37 • Services are within scope of practice of the practitioner;
- 38 • Condition is reasonably expected to be amenable to treatment/services submitted;
- 39 • No evidence of contraindication to submitted treatment/services;

- Documentation supports practitioner’s diagnosis and treatment plan;
- Clinically significant progress is evident through submitted records;
- Documentation supports progression toward active home/self-care and discharge.

**Denial or Modification of Submitted Treatment/Services is Considered if:**

- Treatment is not in scope of license for that practitioner;
- The documentation fails to support the diagnosis;
- They are determined to be inappropriate or unrelated to accepted industrial injury;
- Red flags present through history and physical examination and/or response to care requiring urgent attention, further testing, and/or possible specialist referral;
- Initial trial of care is unsuccessful;
- Treatment/services are preventive or maintenance/elective care;
- Inconsistent chief complaints between the treating practitioners and patients;
- Outdated exam findings;
- Frequent flare ups;
- Clinically significant therapeutic progress is not evident through assessment of the records submitted, indicating maximum therapeutic benefit or maximum medical improvement has been reached and patient should have an MMI (Permanent and Stationary) examination;
- Patient has returned to pre-injury status with no residuals;
- Evidence is present of treatment dependency and/or presence of yellow flags (subjective risk factors with a psychosocial predominance associated with chronic pain and disability).

**Clinical Decision-Making Elements**

The following tables provide some of the clinical elements that should be considered by the clinical quality evaluator when determining the severity of the condition(s) submitted by a treating practitioner.

A single symptom or clinical finding, in isolation, generally will not define the appropriate approval or denial of services. The entire clinical picture must be taken into account. Specific contraindications to proposed interventions may result in denial of care.

**Table A: Guidelines for Determining Condition Severity**

<b>Criteria</b>	<b>Mild Conditions</b>	<b>Moderate Conditions</b>	<b>Severe Conditions</b>
<b>Severity of Pain (1–10 scale)</b>	1–4	5–7	8–10

Criteria	Mild Conditions	Moderate Conditions	Severe Conditions
<b>Activities of Daily Living (ADLs)</b>	Minimal or no effect on ADLs	May have some effect on ADLs	Considerable effect on ADLs
<b>Exam Findings:</b> <b>1) Range of Motion</b> <b>2) Palpatory Tenderness</b> <b>3) Neurologic Findings</b> <b>4) Orthopedic Testing</b>	Consistent with mild severity:  1) Mild or no loss 2) Mild to moderate 3) None 4) Variable	Consistent with moderate severity:  1) Mild to moderate loss 2) Moderate to marked 3) None 4) Variable	Consistent with severe conditions:  1) Considerable or excessive loss 2) Marked or severe 3) May be present 4) Positive findings with pain

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 2 **Factors that influence ASH medical necessity decisions for musculoskeletal occupational**  
 3 **injuries are summarized in the following tables:**

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 5 Spinal Injuries:

- 6     • Approval of new treatment plan  
 7     • Approval of continuing treatment plan  
 8     • Denial of new or continuing treatment plan  
 9     • Cases that require referral or coordination of care

10  
 11 Extremity Injuries:

- 12     • Approval of new treatment plan  
 13     • Approval of continuing treatment plan  
 14     • Denial of new or continuing treatment plan  
 15     • Cases that require referral or coordination of care

16  
 17 **Occupational Spinal Injuries**

18 **(Examples include but are not limited to: strains/sprains of spine, sacroiliac sprain, spinal**  
 19 **pain with or without progressive neurological deficit, spinal segmental dysfunction)**

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 21 **Approve appropriate dosage of care under first treatment plan for the present episode.**

History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<b>Onset</b> may be rapid or insidious and may be due to	Clinical findings that may support the initiation of a trial	Ascertain that requested care is for the accepted injury, if not,

History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<p>specific traumatic, overuse, or be a flare-up of previous episode.  <b>Mechanism</b> must be consistent with work causation (e.g., lifting under load/significant force, twisting, turning, bending, fall, direct blow)  <b>Pain</b> that is mild, moderate, or severe  <b>Functional deficit</b> reported that is amenable to care  <b>Red Flag conditions:</b>                      Absence of signs or symptoms suggesting red flag conditions (e.g., symptoms and/or signs of infection, metastatic disease, acute progressive neurological deficit, cauda equina syndrome, vertebral basilar artery insufficiency)  <b>Yellow Flags conditions:</b>                      Absence of yellow flags (subjective risk factors with a psychosocial predominance associated with chronic pain and disability)  <b>Activities of Daily Living (ADLs):</b> May have restrictions</p>	<p>of care should include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Positive orthopedic tests, include testing for lumbosacral nerve root tension</li> <li>• The presence of non-progressive neurological signs. If neurological signs are present then examination should demonstrate correlation of nerve root level with sensory, pain and motor findings</li> <li>• Tenderness to palpation</li> <li>• Muscle spasm/hypertonicity</li> <li>• Inflammation</li> <li>• Abnormal posture and/or gait</li> <li>• Functional limitations</li> <li>• Limited ranges of motion (ROM)</li> <li>• Coherence between history, examination findings, diagnosis and treatment plan</li> </ul> <p>Absence of clinical findings that may contraindicate the initiation of a trial of care:</p> <ul style="list-style-type: none"> <li>• Findings suggestive of infection, fracture, saddle anesthesia, or organic pathology</li> <li>• Non-physiologic responses (e.g., axial loading simulation, fixed pelvic rotation, exaggerated pain response, distraction</li> </ul>	<p>contact practitioner and/or workers' compensation administrator for clarification and correction.</p> <p>Approve trial of care or the level of care necessary for pain/symptom relief and functional improvement as indicated by:</p> <ul style="list-style-type: none"> <li>• Age</li> <li>• Severity</li> <li>• Functional limitations</li> <li>• All submitted pertinent clinical evidence (diagnostic evidence and/or therapeutic functional outcome evidence determined to be valid and reliable)</li> <li>• Previous history and potential co-morbidities</li> <li>• Review work restrictions/ work place modifications, if any, for appropriateness</li> </ul> <p>Clinical quality evaluators are trained to identify variations in clinical presentation that may influence the approval of a treatment plan.</p> <p>Contact practitioner by phone for:</p> <ul style="list-style-type: none"> <li>• Clarification of red flag findings/conditions</li> <li>• Requiring referral for co-treatment (e.g., pain medication.)</li> </ul>

**CPG 78 Revision 12 - S**

Medical Necessity Decision-Assist Guideline for Musculoskeletal Conditions and Somatic / Neuropathic Pain Disorders Involving Occupational Injuries

**Revised – February 21, 2019**

To CQT for review 01/15/19

CQT reviewed 01/15/19

To QIC for review and approval 02/05/19

QIC reviewed and approved 02/05/19

To QOC for review and approval 02/21/19

QOC reviewed and approved 02/21/19

History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
	simulation testing, non-specific symptoms, and observations of the patient outside of therapy examination room) <ul style="list-style-type: none"> <li>• Physical exam findings and/or test results suggestive of severe or progressive neurologic compromise that correlates with the medical history may indicate a need for immediate consultation.</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion of work restrictions/job modifications</li> <li>• Discussion of inappropriate treatment or diagnostics</li> <li>• To recommend additional treatment/diagnostic interventions</li> </ul>

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2 Clinical decisions are based on clinical quality evaluator experience guided by the above and as  
3 generally indicated by ACOEM guidelines, ODG guidelines, Colorado Guidelines, and/or other valid  
4 evidence-based treatment guidelines that are evidence-based and generally recognized by the national  
5 healthcare community; and:

- 6 • An understanding that similar case presentations should be handled in similar fashion in order  
7 to produce reasonably consistent results;
- 8 • Consideration that, for a given diagnosis, the effect of variability in general health status  
9 (age, gender, past medical history, psychosocial factors, and presence of co-morbid  
10 conditions) may influence the appropriate dosage of care;
- 11 • More than 80% of injured workers with symptoms of lumbar nerve root irritation due to  
12 herniated discs eventually recover without surgery.

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14 Workers' compensation regulation requires periodic reporting by the primary treating physician  
15 (PTP) or when there is a significant change in the injured worker's condition.

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17 Each state has specific requirements or rules that apply to administration of worker's compensation  
18 for that jurisdiction. The rules and regulations which pertain to a particular jurisdiction are available  
19 from that state's labor code and/or code of regulations or law.

20  
21 For management of acute spinal pain, acupuncture may be considered as reasonable for palliative  
22 therapy on a trial basis with emphasis on functional restoration of the injured worker towards normal  
23 ADLs and work activities. Acupuncture shows promise in treatment of chronic neck and back pain.  
24 Treatments should demonstrate some clinical benefit after 3-6 treatments to justify its continued use.



1 Chiropractic or physical therapy for various spinal injuries usually involves spinal  
 2 manipulation/mobilization, physical modalities, as well as exercise programs. Recommendations for  
 3 spinal manipulative therapy in spinal injury vary from recommended to optional. It may be combined  
 4 with exercise. It is reasonable to incorporate spinal manipulative therapy in context of functional  
 5 restoration rather than pain relief alone. Emphasis is placed on a trial of one month of care followed  
 6 by reevaluation of its efficacy. Treatment past one month should be monitored for risk of “physician  
 7 dependence.” Manipulation under anesthesia (MUA) of the spine is not recommended. If MUA is  
 8 contemplated, additional documentation may be required to verify the medical necessity of the  
 9 procedure.

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 11 There is no high grade evidence for use of passive modalities. They may be used for palliative therapy  
 12 on a trial basis with emphasis on functional restoration of the injured worker towards normal ADLs  
 13 and work activities. Use of passive modalities should be carefully monitored. Home applications of  
 14 heat and cold may be as effective as those by therapists.

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 16 Neck collars and back supports have not demonstrated efficacy beyond the acute phase of symptom  
 17 relief.

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 19 As a general principle, injured workers should modify activities that precipitate symptoms and general  
 20 activities and motion should be continued. Only the most severe cases of spinal injury (primarily those  
 21 with radicular pain) require temporary bed rest. Prolonged bed rest (more than two days) has potential  
 22 debilitating effects, and its efficacy in treating acute spinal pain is unproved. Therapeutic exercise should  
 23 start as soon as it can be done without aggravating symptoms. Instruction in proper exercise technique  
 24 is important, and a few visits to a qualified health care practitioner may serve to educate the injured  
 25 worker about an effective home exercise program.

26  
 27 X-ray procedures are performed only when necessary to improve diagnostic accuracy and treatment  
 28 planning. Indicators from history and physical examination supporting the need for X-ray procedures  
 29 are described in the *X-Ray Guidelines (CPG 1 – S)* clinical practice guideline and in ACOEM Guidelines.  
 30 In the absence of recognized red-flags, plain film radiography is generally not necessary in order to  
 31 initiate a trial of care.

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 33 **Approve appropriate dosage of care for continuation of a care for an ongoing episode.**

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
Clinically significant improvement reported (but not to pre-clinical status) in domains such as: <ul style="list-style-type: none"> <li>• Pain</li> <li>• Frequency of symptoms</li> </ul>	Clinical findings that support the continuation of care for an ongoing episode include the following: <ul style="list-style-type: none"> <li>• Improved orthopedic and/or neurological findings</li> </ul>	Approve the level of care necessary for pain/symptom relief and functional improvement if: <ul style="list-style-type: none"> <li>• The injured worker has made reasonable progress toward</li> </ul>

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<ul style="list-style-type: none"> <li>• Reduction of work restrictions or return to work</li> <li>• Functional deficit as compared to baseline</li> <li>• Centralization<sup>1</sup> of referred and/or radiating pain if symptoms were originally present</li> <li>• Absence of red flags (e.g., symptoms and/or signs of infection, metastatic disease, acute progressive neurological deficit, cauda equina syndrome, vertebral basilar artery insufficiency)</li> </ul> <p>Additionally:</p> <ul style="list-style-type: none"> <li>• Care is transitioning from passive to active care</li> <li>• Documented appropriate coordination of other appropriate health care services, if necessary</li> <li>• Absence of yellow flags or treatment dependency</li> <li>• Injured worker complying with treatment plan (e.g., willingness to make necessary lifestyle changes to help reduce frequency and intensity of symptoms)</li> </ul>	<ul style="list-style-type: none"> <li>• Decreased tenderness</li> <li>• Decreased hypertonicity</li> <li>• Improved ROM at area of complaint including decreased pain and/or increased range.</li> <li>• Functional improvement</li> <li>• Absent non-physiologic responses (e.g., axial loading simulation, fixed pelvic rotation, exaggerated pain response, distraction simulation testing, non-specific symptoms, and observations of the injured worker outside of therapy/examination room)</li> <li>• Increased ability to perform work and/or ADLs</li> <li>• No evidence that a treatment dependency is developing</li> <li>• Coherence between the injured worker’s response to care and the new treatment proposal</li> </ul> <p>Absence of clinical findings that may contraindicate continuation of care:</p> <ul style="list-style-type: none"> <li>• Infection, fracture, organic pathology, or non-physiologic signs</li> </ul>	<p>pre-clinical status or functional outcomes under the initial treatment/services</p> <ul style="list-style-type: none"> <li>• Additional significant improvement can be reasonably expected by continued treatment</li> <li>• The injured worker has not reached maximum therapeutic benefit (MTB) or maximum medical improvement (MMI)</li> <li>• There is no indication that immediate care/evaluation is required by other health care professionals.</li> <li>• High probability that the ability to function will continue to improve and/or resolve with additional treatment.</li> </ul> <p>Clinical quality evaluators are trained to identify variations in clinical presentation that may influence the approval of a treatment plan</p>

<sup>1</sup> Centralization means pain moves up the extremity and toward the center of the spine. Even if the pain becomes more intense, as long as it moves up the extremity and toward the center of the spine it is centralizing. Reduction of a disk derangement is accompanied by centralization, and worsening of a disk derangement is accompanied by peripheralization. Therefore, centralization is generally thought to be desirable, and peripheralization is not.

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<ul style="list-style-type: none"> <li>No indication that the need for additional care is due to new complicating factors or misdiagnosis</li> </ul>		

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Uncomplicated musculoskeletal conditions do not typically require care beyond the initial treatment plan. Ongoing care for an acute episode of spinal somatic pain is typically approved in 30 - 45 day increments. Frequency of care generally decreases as symptoms and clinical findings improve. Prolonged reliance on passive care, including acupuncture and manipulation, is not supported by the clinical literature. Appropriate transition from passive to active treatment modalities should be considered in the determination of medical/clinical necessity of ongoing care.

**Deny initial or continuing treatment plan for present episode.**

History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<p><b>Initial Treatment Plan:</b></p> <ul style="list-style-type: none"> <li>Injury is not work related</li> <li>Care is to a non-accepted body region</li> <li>Presence of red flags (e.g., symptoms and/or signs of infection, metastatic disease, acute progressive neurological deficit, cauda equina syndrome, vertebral basilar artery insufficiency)</li> <li>Numeric Pain Rating Scale (NPRS) ≤1</li> <li>No functional deficit reported</li> <li>Preventive or maintenance/elective care</li> <li>Evidence of treatment dependency and/or presence of yellow flags</li> </ul>	<p>Essentially normal exam to include but not limited to:</p> <ul style="list-style-type: none"> <li>Normal orthopedic and/or neurological exam</li> <li>+0 to +1 Tenderness</li> <li>+0 to +1 muscle tonicity</li> <li>Normal regional ROMs</li> </ul> <p>Additionally:</p> <ul style="list-style-type: none"> <li>Signs of active cerebrovascular or vertebrobasilar involvement</li> <li>Signs of cauda equina involvement</li> <li>Signs of neurological compromise</li> <li>Poor coherence between history, work relatedness, examination findings, diagnosis and treatment plan</li> <li>Non-physiologic responses (e.g., axial loading simulation, fixed pelvic rotation,</li> </ul>	<p>Deny or modify the level of care requested by practitioner as indicated by:</p> <ul style="list-style-type: none"> <li>Unremarkable patient history</li> <li>Minimal or no clinical findings</li> <li>Incomplete physical examination; or</li> </ul> <p>Care is preventive or maintenance/elective care; Care is provided for non - work related condition.</p> <p>Indications of red or yellow flag conditions may need to be investigated and addressed in cases of delayed recovery or prolonged time off work</p> <p>Referral may be an option.</p>

History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
	<p>exaggerated pain response, distraction simulation testing, nondermatomal/myotomal symptoms, and observations of the injured worker outside of therapy examination room)</p>	
<p><b>Ongoing Care:</b></p> <ul style="list-style-type: none"> <li>• Care is to a non-accepted body region</li> <li>• Insufficient response to initial trial of care/lack of clinically significant progress.</li> <li>• Injured worker has returned to pre-injury status.</li> <li>• The injured worker reached maximum therapeutic benefit (MTB) or maximum medical improvement (MMI).</li> <li>• Additional care is preventive or maintenance/elective care and therefore not work related.</li> <li>• Presence of red flags (e.g., symptoms and/or signs of infection, metastatic disease, acute progressive neurological deficit, cauda equina syndrome, vertebral basilar artery insufficiency)</li> </ul>	<p>Same factors as with initial treatment plan in addition to:</p> <ul style="list-style-type: none"> <li>• Examination findings have returned to pre-injury status.</li> <li>• Improvement in physical findings is not clinically significant following two successive treatment trials.</li> </ul>	<p>Deny or modify the level of care requested by practitioner as indicated by:</p> <ul style="list-style-type: none"> <li>• Injured worker has returned to pre-injury status</li> <li>• The injured worker has reached maximum therapeutic benefit (MTB) or maximum medical improvement (MMI)</li> <li>• If continuing care, minimal to no improvement in physical findings present following two successive re-examinations</li> <li>• No probability that the condition will continue to improve and/or resolve with additional treatment</li> <li>• Referral may be an option</li> <li>• May need to coordinate with Claims Administrator for an MMI (Permanent and Stationary) evaluation.</li> <li>• Possible yellow flag conditions (e.g., psychosocial, workplace or socioeconomic problems) may need to be investigated and addressed in cases of</li> </ul>

History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<ul style="list-style-type: none"> <li>Evidence of treatment dependency and/or presence of yellow flags</li> <li>Care is ineffective</li> </ul>		delayed recovery or prolonged time off work.

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Once the injured worker reaches MMI (Permanent and Stationary Status) coordination should occur between the practitioner and the primary treating physician (PTP) (if the practitioner is acting as the secondary physician) or between the practitioner as PTP and the Claims administrator and UR agent for consideration of an MMI (Permanent and Stationary) Report.

### Need for referral or coordination of care for new or continuing patient.

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<ul style="list-style-type: none"> <li>Presence of red flags (e.g., symptoms and/or signs of infection, metastatic disease, acute progressive neurological deficit, cauda equina syndrome, vertebral basilar artery insufficiency)</li> <li>Peripheralization<sup>2</sup> of referred or radiating pain or deterioration of neurological findings.</li> <li>Identification of co-morbid conditions (e.g., history of stroke or TIAs, cauda equina syndrome, progressive spondylolithesis, moderate to severe hypertension, inflammatory arthritis, joint hyper-mobility, benign bone tumors,</li> </ul>	<ul style="list-style-type: none"> <li>Rapidly deteriorating Orthopedic and/or Neurological findings</li> <li>Signs of active cerebrovascular or vertebrobasilar involvement</li> <li>Cauda equina findings</li> <li>Rapidly deteriorating orthopedic and/or neurological findings</li> <li>Evidence or suspicion of spinal fracture</li> <li>Clinical findings outside scope of treatment</li> <li>Pain not provoked and/or relieved through physical examination procedures</li> </ul>	<p>Recommend referral of the injured worker to PCP or other appropriate health care practitioner with the measure of urgency as warranted by the history and clinical findings.</p> <p>Appropriately document all communication with attending practitioner.</p> <p>Possible yellow flag conditions (e.g., psychosocial, workplace or socioeconomic problems) may need to be investigated and addressed in cases of delayed recovery or prolonged time off work.</p>

<sup>2</sup> Peripheralization means pain moves laterally away from the center of the spine and/or down the extremity. Reduction of a disk derangement is accompanied by centralization, and worsening of a disk derangement is accompanied by peripheralization. Therefore, centralization is generally thought to be desirable, and peripheralization is not.

#### CPG 78 Revision 12 - S

Medical Necessity Decision-Assist Guideline for Musculoskeletal Conditions and Somatic / Neuropathic Pain Disorders Involving Occupational Injuries

Revised – February 21, 2019

To CQT for review 01/15/19

CQT reviewed 01/15/19

To QIC for review and approval 02/05/19

QIC reviewed and approved 02/05/19

To QOC for review and approval 02/21/19

QOC reviewed and approved 02/21/19

<p>osteopenia, bleeding disorders or anticoagulant therapy) that represent relative contraindications to spinal manipulative care</p> <ul style="list-style-type: none"> <li>• Systemically unwell (e.g., weight loss of greater than 4.5 kg over 6-month period)</li> <li>• Gross neurological deficit</li> <li>• Deterioration of functional capacity</li> <li>• Lack of clinically significant progress despite treatment.</li> <li>• Constant, progressive non-mechanical pain</li> <li>• Gross functional deficit reported</li> </ul>		
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**Occupational Injuries: Extremity Pain/ Dysfunction**

(e.g., sprain/ strain or pain syndromes of the shoulder, elbow, forearm, wrist, hand, hip, thigh, knee, leg ankle or foot)

**Approve appropriate dosage of care under first treatment plan for the present episode.**

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<p><b>Onset</b> may be rapid or insidious and may be due to specific traumatic, overuse, or be a flare-up of previous episode.</p> <p><b>Mechanism</b> must be consistent with work causation (e.g., overuse of the extremity, vibration, acute excess loading, blunt trauma, fall on the extremity, repetitive use of the extremity prolonged weight bearing or</p>	<p>Clinical findings that may support the initiation of a trial of care should include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Positive orthopedic tests</li> <li>• The presence of non-progressive neurological signs. If neurological signs are present then examination should demonstrate correlation of nerve root or peripheral nerve level with</li> </ul>	<p>Ascertain that requested care is for the accepted injury, if not, contact practitioner and/or workers' compensation administrator for clarification and correction.</p> <p>Approve trial of care or the level of care necessary for acute pain/symptom relief and functional improvement as indicated by:</p> <ul style="list-style-type: none"> <li>• Age</li> </ul>

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<p>walking, repetitive motion under load)  <b>Pain</b> that is mild, moderate, or severe  <b>Functional deficit</b> reported that is amenable to care  <b>Red Flag conditions:</b>                      Absence of signs or symptoms suggesting red flag conditions (e.g., infection, fracture, metastatic disease, progressive and/or gross neurological deficit, compartment syndromes, deep vein thrombosis, full tendon rupture, complicated fracture, avascular necrosis) which require medical referral and/or contraindicate manual therapies and acupuncture.</p> <p><b>Yellow Flag conditions:</b>                      Absence of yellow flags (subjective risk factors with a psychosocial predominance associated with chronic pain and disability)  <b>Activities of Daily Living (ADLs):</b> May have restrictions</p>	<p>sensory, pain and motor findings.</p> <ul style="list-style-type: none"> <li>• Tenderness to palpation</li> <li>• Muscle guarding/protective myospasm</li> <li>• Inflammation</li> <li>• Abnormal posture and/or gait</li> <li>• Functional limitations</li> <li>• Limited ranges of motion (ROM)</li> <li>• Coherence between history, examination findings, diagnosis and treatment plan</li> </ul> <p>Absence of clinical findings that may contraindicate the initiation of a trial of care:</p> <ul style="list-style-type: none"> <li>• Findings suggestive of infection or organic pathology</li> <li>• Non-physiologic responses or lack of correlation of the objective findings with the subjective complaints (e.g., exaggerated pain response, positive distraction or simulation testing findings, nondermatomal/myotomal symptoms, and observations of the injured worker outside of therapy examination room)</li> <li>• Physical exam findings and/or test results suggestive of severe or progressive neurologic compromise, tumor or fracture that correlates with the medical history may indicate a need for immediate consultation.</li> </ul>	<ul style="list-style-type: none"> <li>• Severity</li> <li>• Functional limitations</li> <li>• All submitted pertinent clinical evidence (diagnostic evidence and/or therapeutic functional outcome evidence determined to be valid and reliable)</li> <li>• Previous history and potential co-morbidities</li> </ul> <p>Review work restrictions/work place modifications, if any, for appropriateness</p> <p>Clinical quality evaluators are trained to identify variations in clinical presentation that may influence the approval of a treatment plan.</p> <p>Contact practitioner by phone for:</p> <ul style="list-style-type: none"> <li>• Clarification of red flag findings/conditions</li> <li>• Requiring referral for co-treatment (e.g., pain medication.)</li> <li>• Discussion of work restrictions/job modifications</li> <li>• Discussion of inappropriate treatment or diagnostics</li> <li>• To recommend additional treatment/ diagnostic interventions</li> </ul>

1 Clinical decisions are based on clinical quality evaluator experience guided by the above and as  
 2 generally indicated by ACOEM guidelines, ODG guidelines, Colorado Guidelines, and/or other valid  
 3 evidence-based treatment guidelines that are generally recognized by the national medical community  
 4 and are scientifically based; and:

- 5 • An understanding that similar case presentations should be handled in similar fashion in order  
 6 to produce reasonably consistent results;
- 7 • Consideration that, for a given diagnosis, the effect of variability in general health status (age,  
 8 gender, past medical history, psychosocial factors, and presence of co-morbid conditions)  
 9 may influence the appropriate dosage of care.

10  
 11 Workers' compensation regulation requires periodic reporting by the primary treating physician  
 12 (PTP) or when there is a significant change in the injured worker's condition.

13 Each state has specific requirements or rules that apply to administration of worker's compensation  
 14 for that jurisdiction. The rules and regulations which pertain to a particular jurisdiction are available  
 15 from that state's labor code and/or code of regulations or law.

16  
 17 Recommendations for the use of acupuncture in treatment of industrial injury to the extremities vary.  
 18 It may be considered as reasonable for palliative therapy on a trial basis with emphasis on functional  
 19 restoration of the injured worker towards normal ADLs and work activities. Factors for consideration  
 20 include condition being treated, response to care, how long the condition has existed, treatment,  
 21 experience/skill of the practitioner, and support from the evidence based literature. Treatment should  
 22 demonstrate some clinical benefit after 3-6 treatments to justify its continued use.

23  
 24 Recommendations for the use of extremity joint manipulation in treatment of industrial injury to the  
 25 extremities varies from "appropriate for a few weeks" to "not recommended". Factors for  
 26 consideration include condition being treated, response to care, how long the condition has existed,  
 27 treatment, experience/skill of the practitioner, and limited support from the evidence based literature.

28  
 29 Recommendations for the use of passive modalities in treatment of industrial injury to the extremities  
 30 vary from appropriate for a few weeks, especially if tied to a home exercise program, to "not  
 31 recommended". Factors for consideration include condition being treated, objective response to care,  
 32 how long the condition has existed, treatment, experience/skill of the practitioner, and limited support  
 33 from the evidence based literature.

34  
 35 Injured workers should avoid activities that precipitate symptoms but should continue general activities  
 36 and motion. Therapeutic exercise should start as soon as it can be done without aggravating symptoms.  
 37 Instruction in proper exercise technique is important, and a few visits to a qualified health care  
 38 practitioner may serve to educate the injured worker about an effective home exercise program.  
 39 Sophisticated rehabilitation programs involving equipment should be reserved for significant problems  
 40 as an alternative to surgery or for postoperative rehabilitation. Properly conducted, these programs



1 minimize the active participation of the therapist and direct the injured worker to take an active role in  
 2 the program by simply using the equipment after instruction and then graduating to a home program.  
 3 Injured workers’ at-home applications of heat or cold packs may be used before or after exercises and  
 4 are as effective as those performed by a therapist.

5  
 6 Durable Medical Equipment or appliances may be appropriate for the injured extremity and directed to  
 7 a goal of functional improvement.

8  
 9 X-ray procedures are performed only when necessary to improve diagnostic accuracy and treatment  
 10 planning. Indicators from history and physical examination supporting the need for X-ray procedures  
 11 are described in the *X-Ray Guidelines (CPG 1 – S)* ASH clinical practice guideline and in ACOEM  
 12 Guidelines. In the absence of recognized red-flags, plain film radiography is generally not necessary  
 13 in order to initiate a trial of care.

14  
 15 **Approve appropriate dosage of care for continuation of a treatment plan for an ongoing**  
 16 **episode.**

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<p>Clinically significant improvement reported (but not to pre-clinical status) in domains such as:</p> <ul style="list-style-type: none"> <li>• Pain</li> <li>• Frequency of symptoms</li> <li>• Reduction of work restrictions or return to work</li> <li>• Functional deficit as compared to baseline</li> <li>• Absence of signs or symptoms suggesting red flag conditions (e.g., infection, fracture, metastatic disease, progressive and/or gross neurological deficit, compartment syndromes, deep vein thrombosis, full tendon rupture, complicated fracture, avascular necrosis)</li> </ul>	<p>Clinical findings that support the continuation of care for an ongoing episode include the following:</p> <ul style="list-style-type: none"> <li>• Improved orthopedic and/or neurological findings</li> <li>• Decreased tenderness</li> <li>• Decreased hypertonicity</li> <li>• Improved ROM at area of complaint including decreased pain and/or increased range.</li> <li>• Functional improvement</li> <li>• Absent non-physiologic responses or lack of correlation of the objective findings with the subjective complaints (e.g., exaggerated pain response, positive findings with distraction or simulation testing, nondermatomal/myotomal symptoms, and observations</li> </ul>	<p>Approve the level of care necessary for pain/symptom relief and functional improvement if:</p> <ul style="list-style-type: none"> <li>• The injured worker has made reasonable progress toward pre-clinical status or functional outcomes under the initial treatment/services</li> <li>• Additional significant improvement can be reasonably expected by continued treatment</li> <li>• The injured worker has not reached maximum therapeutic benefit (MTB) or maximum medical improvement (MMI)</li> <li>• There is no indication that immediate care/evaluation is required by other health care professionals.</li> <li>• High probability that the condition will continue to</li> </ul>

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<p>Additionally:</p> <ul style="list-style-type: none"> <li>Care is transitioning from passive to active care</li> <li>Documented appropriate coordination of other appropriate health care services, if necessary</li> <li>Absence of yellow flags or treatment dependency</li> <li>Injured worker complying with treatment plan (e.g., willingness to make necessary lifestyle changes to help reduce frequency and intensity of symptoms</li> <li>No indication that the need for additional care is due to new complicating factors or misdiagnosis</li> </ul>	<p>of the injured worker outside of therapy/examination room)</p> <ul style="list-style-type: none"> <li>Increased ability to perform work and/or ADLs</li> <li>No evidence that a treatment dependency is developing</li> <li>Coherence between the injured worker’s response to care and the new treatment proposal</li> </ul> <p>Absence of clinical findings that may contraindicate continuation of care:</p> <ul style="list-style-type: none"> <li>Infection, fracture, organic pathology, or non-physiologic findings</li> </ul>	<p>improve and/or resolve with additional treatment</p> <p>Clinical quality evaluators are trained to identify variations in clinical presentation that may influence the approval of a treatment plan</p>

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2 Uncomplicated musculoskeletal conditions do not typically require care beyond the initial treatment  
3 plan. Ongoing care for an acute episode of extremity pain is typically approved in 30 - 45 day  
4 increments. Frequency of care generally decreases as symptoms and clinical findings improve.  
5 Prolonged reliance on passive care, including acupuncture, physiotherapy, and manipulation, is not  
6 supported by the clinical literature. Appropriate transition from passive to active treatment modalities  
7 should be considered in the determination of medical/clinical necessity of ongoing care.  
8

9 **Deny initial or continuing treatment plan for present episode.**

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<p><b>Initial Treatment Plan:</b></p> <ul style="list-style-type: none"> <li>Injury is not work related</li> <li>Care is to a non-accepted body region</li> <li>Presence of signs or symptoms suggesting red flag conditions (e.g., infection, fracture, metastatic disease,</li> </ul>	<p>Essentially normal exam to include but not limited to:</p> <ul style="list-style-type: none"> <li>Normal orthopedic and/or neurological exam</li> <li>+0 to +1 Tenderness</li> <li>+0 to +1 muscle tonicity</li> <li>Normal regional ROMs</li> </ul>	<p>Deny or modify the level of care requested by practitioner as indicated by:</p> <ul style="list-style-type: none"> <li>Unremarkable patient history</li> <li>Minimal or no clinical findings</li> </ul>

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<p>progressive and/or gross neurological deficit, compartment syndromes, deep vein thrombosis, full tendon rupture, complicated fracture, avascular necrosis)</p> <ul style="list-style-type: none"> <li>• Numeric Pain Rating Scale (NPRS) <math>\leq 1</math></li> <li>• No functional deficit reported</li> <li>• Preventive or maintenance/elective care</li> <li>• Evidence of treatment dependency and/or presence of yellow flags</li> </ul>	<p>Additionally:</p> <ul style="list-style-type: none"> <li>• Signs of neurological compromise</li> <li>• Poor coherence between history, work relatedness, examination findings, diagnosis and treatment plan</li> <li>• Non-physiologic responses or lack of correlation of the objective findings with the subjective complaints (e.g., exaggerated pain response, positive findings on distraction or simulation testing, nondermatomal/myotomal symptoms, and observations of the injured worker outside of therapy examination room)</li> </ul>	<ul style="list-style-type: none"> <li>• Incomplete physical examination; or</li> </ul> <p>Care is preventive or maintenance/elective care; Care is provided for non - work related condition.</p> <p>Indications of red or yellow flag conditions may need to be investigated and addressed in cases of delayed recovery or prolonged time off work</p> <p>Referral may be an option.</p>
<p><b>Ongoing Care:</b> Same factors as with initial treatment plan in addition to:</p> <ul style="list-style-type: none"> <li>• Insufficient response to initial trial of care/lack of clinically significant progress.</li> <li>• Injured worker has returned to pre-injury status</li> <li>• The injured worker reached maximum therapeutic benefit (MTB) or maximum medical improvement (MMI). Once the injured worker reaches MMI (Permanent and Stationary Status) coordination for consideration of an MMI</li> </ul>	<p>Same factors as with initial treatment plan in addition to:</p> <ul style="list-style-type: none"> <li>• Examination findings have returned to pre-injury status.</li> <li>• Improvement in physical findings is not clinically significant following two successive and different treatment trials.</li> </ul>	<p>Deny or modify the level of care requested by practitioner as indicated by:</p> <ul style="list-style-type: none"> <li>• Injured worker has returned to pre-injury status</li> <li>• The injured worker has reached maximum therapeutic benefit (MTB) or maximum medical improvement (MMI)</li> <li>• If continuing care, minimal to no improvement in physical findings present following two successive re-examinations</li> <li>• No probability that the condition will continue to</li> </ul>

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<p>(Permanent and Stationary) Report should occur.</p> <ul style="list-style-type: none"> <li>Care is ineffective.</li> </ul>		<p>improve and/or resolve with additional treatment</p> <ul style="list-style-type: none"> <li>Referral may be an option</li> <li>May need to coordinate with Claims Administrator for an MMI (Permanent and Stationary) evaluation</li> </ul>

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**Need for referral or coordination of care for new or continuing patient.**

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
<ul style="list-style-type: none"> <li>Presence of signs or symptoms suggesting red flag conditions (e.g., infection, fracture, metastatic disease, progressive and/or gross neurological deficit, compartment syndromes, deep vein thrombosis, full tendon rupture, complicated fracture, avascular necrosis)</li> <li>Identification of co-morbid conditions (e.g., moderate to severe hypertension, inflammatory arthritis, joint hyper-mobility, benign bone tumors, osteopenia, bleeding disorders or anticoagulant therapy) that represent relative contraindications to manipulative therapy</li> <li>Deteriorating condition</li> <li>Deterioration of functional capacity</li> <li>Lack of clinically significant progress despite</li> </ul>	<ul style="list-style-type: none"> <li>Rapidly deteriorating orthopedic and/or neurological findings</li> <li>Clinical and historical findings indicating potential for any of the red flag conditions (e.g., deep vein thrombosis or compartment syndrome)</li> <li>Evidence or suspicion of fracture</li> <li>Clinical findings outside scope of treatment of</li> <li>Pain not provoked and/or relieved through physical examination procedures</li> </ul>	<p>Recommend referral of the injured worker to PCP or other appropriate health care practitioner with the measure of urgency as warranted by the history and clinical findings.</p> <p>Appropriately document all communication with attending practitioner.</p> <p>Possible yellow flag conditions (e.g., psychosocial, workplace or socioeconomic problems) may need to be investigated and addressed in cases of delayed recovery or prolonged time off work.</p>

Patient History/Complaint	Clinical Findings	Action by Clinical Quality Evaluator
treatment. Clinically significant progress is statistically minimal significant change noted on a reliable and valid outcome tool <ul style="list-style-type: none"> <li>• Constant, progressive non-mechanical pain</li> <li>• Systemically unwell (e.g., weight loss of greater than 4.5 kg over 6-month period)</li> <li>• Gross neurological deficit</li> <li>• Gross functional deficit reported</li> </ul>		

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**Guideline Rationale**

In the development of clinical guidelines and their applications to the clinical decision-making process of ASH, clinical quality evaluators are guided by the following principles.

The utilization management policies of ASH are developed through the application of the principles of Evidence-Based-Health-Care (EBHC). Very broadly, EBHC advances these ideas:

1. A reliance on the original clinical scientific literature as the primary source of evidence.
2. An understanding of the rules of evidence in the evaluation of clinical scientific literature.
3. An understanding of the inherent limitations of experience, custom, and common sense as a guide to clinical effectiveness.
4. An understanding of the inherent limitations of basic science (in the absence of clinical science) as a guide to clinical effectiveness.

In the Institute of Medicine (2001), *Crossing the Quality Chasm*, it states, “Evidence-based practice is the integration of best research evidence with clinical expertise and patient values. BEST RESEARCH EVIDENCE refers to clinically relevant research, often from the basic health and clinical (medical) sciences, but especially from patient centered clinical research into the accuracy and precision of diagnostic tests (including the clinical examination); the power of prognostic markers; the efficacy and safety of therapeutic, rehabilitative, and preventive regimens. CLINICAL EXPERTISE means the ability to use clinical skills and past experience to rapidly identify each patient’s unique health state and diagnosis, individual risks and benefits of potential interventions, and personal values and expectations. PATIENT VALUES refers to the unique preferences, concerns, and expectations that each patient brings to a clinical encounter and that must be integrated into clinical decisions.”

1 Clinical decision-making is informed by both the basic and clinical sciences. Together, these two  
 2 disciplines create a body of knowledge relative to the possible biological mechanisms, safety,  
 3 efficacy, and effectiveness of a therapeutic intervention. This information will further provide insight  
 4 into the validity, sensitivity, specificity, and reproducibility of specific diagnostic procedures. This  
 5 knowledge is integrated with the physician's patient care clinical experience. Integrated Health Care  
 6 evidence (clinical science, basic science integrated with the knowledge and art of patient care) can  
 7 then be applied to an individual patient's unique situation to ensure that the patient can be cared for  
 8 in a way that enables an individualized care plan with a goal of reduced suffering, a rapid return to  
 9 normal activities, decreased sequelae, and decreased clinical risk; thus reducing outcome variation  
 10 of randomly attempted interventions selected solely on the basis of clinician bias and belief.

11  
 12 EBHC is not about proof or certainty. It is a method of dealing with uncertainty. It is about weighing  
 13 the evidence and weighing alternatives. EBHC recognizes the limitations and inherent unreliability  
 14 of uncontrolled clinical observations and impressions and the inevitability of mistaken conclusions  
 15 based on those uncontrolled observations. EBHC stresses the importance of outcomes-based clinical  
 16 research, of regularly consulting original literature, and of understanding certain rules of evidence in  
 17 order to evaluate that literature.

18  
 19 In applying these principles, the goal is to limit the range of acceptable diagnostic and treatment  
 20 options that a clinician may consider. At the most extreme, the range of options might be limited to  
 21 a single management profile. That is, there is one permitted diagnostic and treatment regimen while  
 22 all others are proscribed.

23  
 24 For the types of conditions (musculoskeletal pain) that represent the bulk of ASH cases, a parallel set  
 25 of rigid guidelines is particularly unsuitable. A given diagnosis with a given set of clinical findings  
 26 has very poor predictive powers as to the prognosis of the case. In aggregate, it may be possible to  
 27 make some concrete and specific statements about the probable course of 1000 cases of low back  
 28 pain, but it is not possible to make such statements about a single case. Indeed, it is not yet possible  
 29 to accurately identify the source of pain in the majority of cases of low back pain. In essence, every  
 30 treatment episode is a trial of therapy. If the trial is rapidly successful, the injured worker is discharged  
 31 in a few visits. If the trial of therapy shows no improvement within those first few weeks, it is unlikely  
 32 that continuing the same course of treatment will change these results. And if the trial of therapy  
 33 shows slow but continuing improvement, the treatment episode will be extended to maximize the  
 34 clinical results. None of these outcomes is knowable on the basis of a given set of findings at the  
 35 outset of the trial of therapy.

36  
 37 This being said, it does not follow that no standards can be applied to these conditions or that EBHC  
 38 is not relevant to the problem. In applying EBHC to the management of musculoskeletal pain  
 39 syndromes, the following sets of clinical literature are specifically considered:

- 40 • Natural history of condition

- 1 • The ability of specific diagnostic procedures (e.g., imaging) to make meaningful distinctions
- 2 among episodes of condition
- 3 • The safety and efficiency profiles of such diagnostic procedures
- 4 • Relative safety and effectiveness of proposed treatment [e.g., spinal manipulative therapy
- 5 (SMT), acupuncture, and physiotherapy interventions]
- 6 • Relative safety and effectiveness of available alternate treatments (e.g., NSAIDS)
- 7 • Cost of proposed intervention.

8

9 The existing clinical science on the management of back or neck pain, headaches, or other

10 musculoskeletal pain syndromes provides a few instances of clinical absolutes. For example (with

11 back pain), the clinical literature provides fairly conclusive evidence that surgical interventions for

12 back pain should be used only if (a) there are significant neurological deficits; (b) the condition has

13 proven refractory to more conservative interventions; and (c) a reasonable period of time has elapsed

14 (up to 6 months) since the onset of the condition. The literature also provides definitive evidence that

15 prescribed bed rest, and particularly in-patient bed rest, is absolutely proscribed beyond a very limited

16 time period (about 36 hours).

### 17

### 18 Clinical Principles

19 The existing clinical science on back pain provides the following less absolute principles upon which

20 clinical decisions can be made. Most of these principles can be extrapolated to the management of

21 other spinal and extremity musculoskeletal complaints.

- 22 • The natural history of most cases of back pain is likely benign, with most cases capable of
- 23 ultimate self-resolution within a period of several months.
- 24 • This symptomatic period may be reduced by the application of certain conservative
- 25 interventions.
- 26 • A recurrence of back pain following resolution is likely.
- 27 • Routine spinal radiographs are not indicated for the evaluation of spinal pain syndromes in
- 28 the absence of specific clinical findings (refer to the *X-Ray Guidelines (CPG 1 – S)* clinical
- 29 practice guideline, available online at [www.ashlink.com](http://www.ashlink.com)).
- 30 • Advanced imaging (CT/MRI) is not typically indicated except in cases where significant
- 31 neurological deficits already exist. Decisions regarding advance imaging are made on a case
- 32 by case basis.
- 33 • A thorough history and physical/neurological exam are sufficient to identify red flags, which
- 34 may require more aggressive evaluation.
- 35 • There is little evidence of effectiveness for passive physiotherapy modalities (ultra-sound,
- 36 electrical muscle stimulation, etc.) beyond the acute phase of care (6 weeks).
- 37 • Overall, passive therapy should be limited. Reaching an active rehabilitation phase of care as
- 38 rapidly as possible and minimizing dependence on passive forms of treatment/care usually
- 39 lead to optimal result. Often complete resolution of pain is not possible until the injured
- 40 worker begins to focus on increasing the number and kind of activities in which he/she
- 41 participates.

- 1 • There is evidence for the effectiveness of SMT, acupuncture, and physiotherapy for the
- 2 treatment of musculoskeletal pain syndromes.
- 3 • The strength of this evidence for SMT and other manual therapies is generally as strong as or
- 4 stronger than for other conservative or physical modalities that might be considered.
- 5 Acupuncture evidence is strongest for chronic pain.
- 6 • However, there is no evidence that SMT, acupuncture, or Physical Therapy is the gold-
- 7 standard intervention for any of the conditions for which they are known to be effective.
- 8 • As such, there are always alternate treatment options to consider for any injured worker with
- 9 musculoskeletal pain and related disorders.
- 10 • The safety profile of SMT, acupuncture, and physiotherapy, in regard to both mild and serious
- 11 complications, is highly favorable and likely superior to that of most standard medical
- 12 interventions (e.g., NSAID therapy).
- 13 • Disability-related pain can rarely be attributed only to a specific physical injury or pathology.
- 14 Rather, disability is more correctly understood as a function of the interaction of a variety of
- 15 factors, including physical/organic, psychological, social, economic, and secondary gain. This
- 16 myriad should be considered when considering clinical interventions.

17  
18 Clinical guidelines are to be considered in light of the clinical decision-making expertise of the  
19 clinical services manager and the individual case circumstance.

## 20 21 **Cornerstones of ASH Clinical Management**

### 22 **Quality Improvement-focused Quality Management**

- 23 • Systems planning and process improvements designed to meet the needs of dynamic internal
- 24 and external expectations.

### 25 26 **Clinical Quality Assurance and Clinical Improvement**

- 27 • Real-time influence on the quality, clinical safety, and efficiency of delivery and the outcomes
- 28 of injured worker care.

### 29 30 **“Available Evidence” Based Decision Making**

- 31 • Effectively and efficiently manage, using clinical facts and knowledge derived from all
- 32 available evidence.

### 33 34 **Clinical Competency**

- 35 • Competently provide clinical operations for corporation and clinical services to injured
- 36 workers through competent, disciplined practitioners.



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