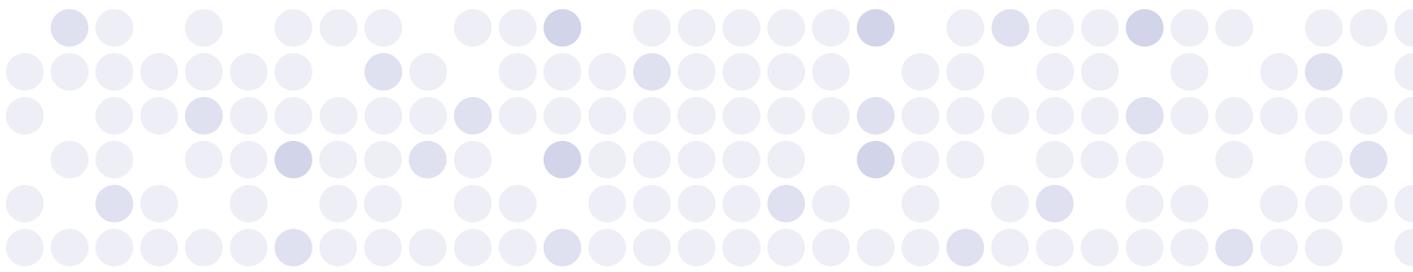


Clinical guidelines for the Queensland workers' compensation scheme

Elbow





Contents

Before you start

Relevance to the workers' compensation sector	2
Agree appraisal.....	3
Register of clinical practice guidelines for elbow	4

Click to the relevant guideline

Elbow complaints	5
Elbow (acute & chronic).....	11

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Foreword

Clinical guidelines for the Queensland workers' compensation scheme is a selection of clinical guidelines or 'treatment protocols' used by other jurisdictions and medical bodies.

Q-COMP compiled this selection to create a resource for clinicians treating injured workers in Queensland.

Over the course of our research it became clear what type of guidelines are successfully applied to practice and what we should include.

They include guidelines where:

- medical providers were consulted
- nurse and allied health providers identified relevant areas to include
- medical specialty groups endorsed the guidelines
- an effective promotion program was used
- patient education brochures or fact sheets for General Practitioners to provide to their patients were developed
- an education strategy included the Continuing Professional Development (CPD) program
- frameworks for evaluating the guidelines effectiveness were developed ahead or simultaneously with the guidelines themselves.

I am looking forward to receiving your feedback on *Clinical guidelines for the Queensland workers' compensation scheme* and your support in achieving the best outcomes for injured workers in Queensland.

Elizabeth Woods
Chief Executive Officer

Relevance to the workers' compensation sector

Each item is rated on a 5-point scale ranging from 5 "Strongly Agree" to 1 "Strongly Disagree". The scale measures the extent to which a criterion (item) has been fulfilled.

	1	2
	Elbow complaints	Elbow (acute & chronic)
<i>Functional Restoration</i>		
Does the guideline consider graded increases in activity and function?	4	4
<i>Psychosocial Factors</i>		
To what degree does the guideline consider psychosocial factors that may influence recovery?	1	1
<i>Return to Work Process (vocational rehabilitation)</i>		
To what degree does the guideline consider the Return to Work Process (vocational rehabilitation)?	5	5
<i>Risk Factors for Recovery</i>		
To what degree does the guideline consider Risk Factors for Recovery?	3	5
Total Score	13	15

Rating criteria

CPG 1 and CPG 2 have the highest rating scores in the Functional Restoration and Return to Work Process.

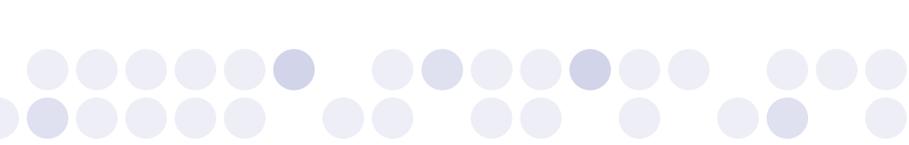


Agree appraisal

Each item is rated on a 5-point scale ranging from 5 “Strongly Agree” to 1 “Strongly Disagree”. The scale measures the extent to which a criterion (item) has been fulfilled.

The aggregate scores are then converted into a percentage scale ranging from 100% “Strongly Agree” to 1% “Strongly Disagree”.

	1	2
	Elbow complaints	Elbow (acute & chronic)
Scope and Purpose	67%	50%
Stakeholder Involvement	67%	50%
Rigour of Development	14%	36%
Clarity and Presentation	100%	79%
Applicability	17%	0%
Editorial Independence	67%	67%



Register of clinical practice guidelines for elbow

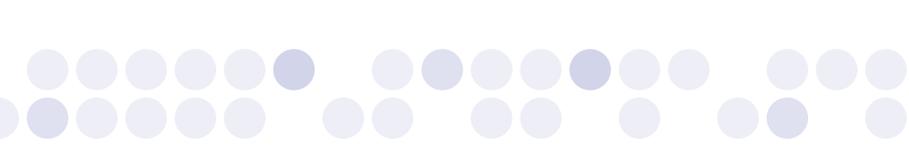
CPG	Name	Source	Developed by
1	Elbow complaints	National Guideline Clearinghouse www.guideline.gov	Elbow complaints. Elk Grove Village (IL): American College of Occupational and Environmental Medicine (ACOEM); 2004.25p. [28 references]
2	Elbow (acute & chronic)	National Guideline Clearinghouse www.guideline.gov	Work Loss Data Institute. Elbow (acute & chronic). Corpus Christi (TX): Work Loss Data Institute; 2006.110p. [166 references]



Elbow complaints

Contents

1. Developed by	6
2. Guideline status	6
3. Where located/how accessed	6
4. Description/scope	6
5. Outcomes considered	7
6. Agree appraisal.....	7
7. Relevance/appropriateness of use in workers compensation sector.....	8
a) Functional progression	8
b) Physical/psychiatric rehabilitation.....	8
c) Risk factor/recovery	9
d) Return to work.....	9
8. Priority for Q-COMP.....	10



1. Developed by

Elbow complaints. Elk Grove Village (IL): American College of Occupational and Environmental Medicine (ACOEM); 2004.25p. [28 references]

2. Guideline status

This is the current release of the guideline.

This guideline updates a previous version; Harris, J, ed. Occupational Medicine Practice Guidelines: American College of Occupational and Environmental Medicine. Beverly Farms, MA:OEM Prewss; 1997.

3. Where located/how accessed

National Guideline Clearinghouse www.guideline.gov

Electronic version and print copies are available from ACOEM, 25 Northwest Point Boulevard, Suite 700, Elk Grove Village, IL 60007; Phone: 847-818-1800 x399

4. Description/scope

Disease/condition(s)

- Elbow complaints

Guideline category

- Diagnosis
- Evaluation
- Management
- Treatment

Clinical speciality

- Family Practice
- Internal Medicine
- Orthopaedic Surgery
- Physical medicine and Rehabilitation
- Preventative Medicine
- Surgery

Intended users

- Advance Practice Nurses
- Physicians Assistants
- Physicians
- Utilization Management



Guideline objectives

- To provide information and guidance on generally accepted elements of quality to improve care in occupational and environmental medicine
- To improve the efficiency with which the diagnostic process is conducted, the specificity of each diagnostic test performed, and the effectiveness of each treatment in relieving symptoms and achieving cure
- To present recommendations on assessing and treating adults with potentially work-related elbow complaints

Target population

- Adults with potentially work-related elbow complaints seen in primary care settings

Interventions and practices considered

Note from the *National Guideline Clearinghouse (NGC)*: The following general clinical measures were considered. Refer to the original guideline document for information regarding which specific interventions and practices under these general headings are recommended, optional, or not recommended by the American College of Occupational and Environmental Medicine.

1. History and physical exam
2. Patient education
3. Medication
4. Physical treatment methods
5. Injections
6. Rest and immobilization
7. Activity and exercise
8. Detection of neurological abnormalities
9. Radiography and other imaging studies
10. Surgical considerations

5. Outcomes considered

Missed work days

6. Agree appraisal

- Scope and Purpose 67%
- Stakeholder Involvement 46%
- Rigour of Development 33%
- Clarity and Presentation 79%
- Applicability 6%
- Editorial Independence 17%

7. Relevance/appropriateness of use in workers' compensation sector

a) Functional progression

Functional progression is not stated.

The following clinical algorithms are provided in the original guideline document:

- American College of Occupational and Environmental Medicine Guidelines for care of acute and subacute occupational elbow complaints
- Initial evaluation of occupational elbow complaints
- Initial and follow-up management of occupational elbow complaints
- Evaluation of slow-to-recover patients with occupational elbow complaints (symptoms >4 weeks)
- Surgical considerations for patients with anatomic and physiologic evidence of nerve compression coupled with persistent elbow complaints
- Further management of occupational elbow complaints

b) Physical/psychiatric rehabilitation

Rehabilitation is not stated specifically.

Summary of recommendations for evaluating and managing elbow complaints (refer to the original guideline document for more detailed information)

Clinical measure	Recommended	Optional	Not recommended
History and physical exam	Basic history and exam (search for red flags for tumor, infection, systemic disease) Occupational and nonoccupational activity history		
Patient education	Patient education regarding diagnosis, prognosis, expectations of treatment, etc.		
Medication (See Chapter 3 in the original guideline document)	Acetaminophen Non-steroidal anti-inflammatory drugs (NSAIDs)	Opioids Topical medications	Use of opioids for more than 2 weeks
Physical treatment methods	Physician recommendations for range-of-motion instruction and strengthening exercises in epicondylitis patients	Exercise instruction by a therapist for epicondylitis At-home applications of heat or cold packs Other physical modalities based on objective results for a 2-3-week trial	Use of passive modalities by a therapist



Clinical measure	Recommended	Optional	Not recommended
Injections		Acupuncture based on objective results after a 2-3 week trial Local corticosteroid injection for epicondylitis	Corticosteroid injection into olecranon bursa
Rest and immobilization	Immobilization with a sling for a brief period for severe symptoms	Trial of casting for severe recalcitrant epicondylitis Tennis elbow bands for conservative treatment	
Activity and exercise	Stretching Aerobic exercise Activity modification		
Detection of neurologic abnormalities	Nerve conduction velocity (NCV) to confirm ulnar nerve entrapment if conservative treatment fails	Electromyography (EMG) to distinguish radial entrapment from lateral epicondylitis if history and physical exam are equivocal	EMG/NCV before conservative treatment
Radiography and other imaging procedures	Plain-film radiography for red-flag cases	Magnetic resonance imaging (MRI) for suspected ulnar collateral ligament tears	Repeat plain-film radiography for readings with "fat pad sign" MRI for epicondylitis
Surgical considerations	Ulnar nerve transposition for patients with significant activity limitation and delayed nerve conduction velocity (NCV) Debridement of inflammatory or scarred tissue for patients with epicondylitis if conservative treatment fails Excision and closure over drains for infected olecranon bursitis not responsive to intravenous antibiotics Radial tunnel decompression for failure of conservative treatment and positive EMG		Excision of olecranon bursa due to metabolic arthritis (rather than medical treatment) Ulnar or radial nerve surgery in the presence of normal electrical studies

c) Risk factor/recovery

Risks and complications of surgical procedures and imaging studies (e.g., infection, radiation).

d) Return to work

Not stated

8. Priority for Q-COMP

Rating criteria

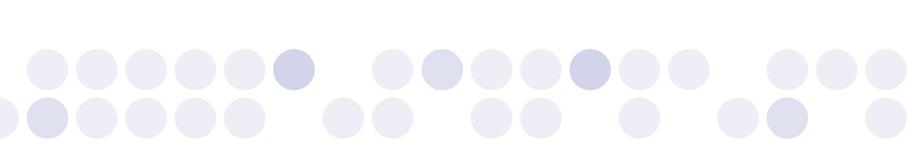
Functional restoration Does the guideline consider graded increases in activity and function?	4
Psychosocial factors To what degree does the guideline consider psychosocial factors that may influence recovery?	1
Return to work process (vocational rehabilitation) To what degree does the guideline consider the Return to Work Process (vocational rehabilitation)?	5
Risk factors for recovery To what degree does the guideline consider Risk Factors for Recovery?	3
Total rating	13



Elbow (acute & chronic)

Contents

1. Developed by	12
2. Guideline status	12
3. Where located/how accessed	12
4. Description/scope	12
5. Outcomes considered	14
6. Agree appraisal.....	15
7. Relevance/appropriateness of use in workers' compensation sector.....	15
a) Functional progression	15
b) Physical/psychiatric rehabilitation.....	18
c) Risk factor/recovery	19
d) Return to work.....	19
8. Priority for Q-COMP.....	21



1. Developed by

Work Loss Data Institute. Elbow (acute & chronic). Corpus Christi (TX): Work Loss Data Institute; 2006.110p. [166 references]

2. Guideline status

This is the current release of the guideline.

The guideline updates a previous version; Work Loss Data Institute. Elbow (acute & chronic). Corpus Christi (TX): Work Loss Data Institute; 2005.115p.

3. Where located/how accessed

National Guideline Clearinghouse www.guideline.gov

Electronic copies: Available to subscribers from the Work Loss Data Institute Web site

Print copies: Available from the Work Loss Data Institute, 169 Saxony Road, Suite 210, Encinitas, CA 92024; Phone: 800-488-5548, 760-753-9992; Fax: 760-753-9995; www.worklossdata.com

The following companion documents are available:

- Background information on the development of the Official Disability Guidelines of the Work Loss Data Institute is available from the Work Loss Data Web site
- Appendix A. ODG Treatment in Workers' Comp. Methodology description using the AGREE instrument. Available to subscribers from the Work Loss Data Instrument Web site

The following patient resources are available:

Appendix B. ODG Treatment in Workers' Comp. Patient information resources.2006.

Electronic copies: Available to subscribers from the Work Loss Data Institute Web site

Print copies: Available from the Work Loss Data Institute, 169 Saxony Road, Suite 210, Encinitas, CA 92024; Phone: 800-488-5548, 760-753-9992; Fax: 760-753-9995

4. Description/scope

Disease/condition(s)

Work-related disorders of the elbow including fracture or dislocation, sprain or contusion, laceration, medical epicondylitis, lateral epicondylitis, olecranon bursitis, ulnar nerve entrapment, and radial nerve entrapment.

Guideline category

- Diagnosis
- Evaluation
- Management
- Treatment

Clinical speciality

- Emergency Medicine
- Family Practice
- Internal Medicine
- Orthopaedic Surgery



Intended users

- Advance Practice Nurses
- Health Care Providers
- Health Plans
- Nurses
- Physician Assistants
- Physicians

Guideline objectives

- To offer evidence-based step-by-step decision protocols for the assessment and treatment of workers' compensation conditions.

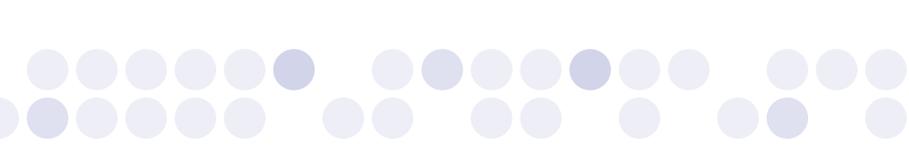
Target population

- Workers with occupational disorders of the elbow.

Interventions and practices considered

The following interventions/procedures were considered and recommended as indicated in the original guideline document:

1. Activity restrictions/Work modifications
2. Acupuncture
3. Chiropractic/manipulation
4. Cold packs
5. Exercise
6. Iontophoresis
7. Laser Doppler Imaging
8. Magnetic resonance imaging (MRI)
9. Night splints
10. Non-prescription medications, such as acetaminophen and nonsteroidal anti-inflammatory drugs (NSAIDs)
11. Patient education
12. Phonophoresis
13. Physical therapy
14. Radiography
15. Returning to work
16. Splinting for cubital tunnel syndrome
17. Static progressive stretch therapy (SPS)
18. Stretching
19. Surgery for cubital tunnel syndrome
20. Tennis elbow band
21. Total elbow replacement (TER) when strict inclusion criteria are observed
22. Ultrasound (diagnostic and therapeutic)



The following interventions/procedures are under study and are not specifically recommended:

1. Augmented soft tissue mobilization
2. Autologous blood injection
3. Corticosteroid injections
4. Electrical stimulation (E-STIM)
5. Extracorporeal shockwave therapy (ESWT) using low energy ESWT
6. Friction massage
7. Light therapy
8. Massage
9. Neural tension
10. Orthotic devices
11. Radial shockwave therapy (RSWT)
12. Soft tissue mobilization
13. Splinting for mobilization
14. Surgery for epicondylitis
15. Surgery for pronator syndrome
16. Tests for cubital tunnel syndrome, epicondylitis, and pronator syndrome
17. Transcutaneous electrical neurostimulation (TENS)
18. Treatment of fractures of humerus and radius
19. Ulnar motor nerve conduction velocity at the elbow

The following interventions were considered, but are not currently recommended:

1. Biofeedback
2. Botulinum toxin injections
3. Brace
4. Deep transverse friction massage
5. Diathermy
6. Extracorporeal shockwave therapy (ESWT) using high energy ESWT
7. Fatty acid supplements
8. Laser treatment
9. Pulsed electromagnetic field therapy

5. Outcomes considered

Sensitivity and specificity of diagnostic tests.

Effectiveness of treatment for relief of pain and other symptoms, optimizing healing/function, increasing work, minimizing risk factors that contributed to the injury.



6. Agree appraisal

- Scope and Purpose 44%
- Stakeholder Involvement 46%
- Rigour of Development 50%
- Clarity and Presentation 83%
- Applicability 6%
- Editorial Independence 17%

7. Relevance/appropriateness of use in workers' compensation sector

a) Functional progression

Major recommendations

Initial diagnosis

- First visit: with Primary Care Physician MD/DO (100%)
- Determine cause: Initial Evaluation:
 - Determine the type of trauma (e.g., fall, repetitive motion, twisting).
 - Determine whether the problem is acute, subacute, chronic, or of insidious onset.
 - Determine the severity and specific anatomic location of the pain.
 - Assess the ability of the patient to use the elbow, from no to full ability.
 - Search for any evidence of an open or penetrating wound.
 - Test the range-of-motion of the joint (normal, mild restriction, severe restriction).
 - Search for any evidence of vascular or nerve injury distal to the injury.
 - Determine any present medication.
 - Determine any previous medical history, history of systemic disease, or previous elbow injury or disability, job requirements, and hobbies.
- Initial diagnosis (Refer to the original guideline document for International Classification of Diseases, Ninth Revision [ICD-9] codes):
 - Traumatic (*Go to Fractures and Dislocations*):
 - Fracture or dislocation
 - Other (*Go to Conservative Treatment*):
 - Sprain or contusion
 - Laceration
 - Epicondylitis, medial
 - Epicondylitis, lateral
 - Olecranon bursitis
 - Rotator syndrome
 - Ulnar nerve entrapment
 - Radial nerve entrapment

Fracture or dislocation of elbow (35% of cases)

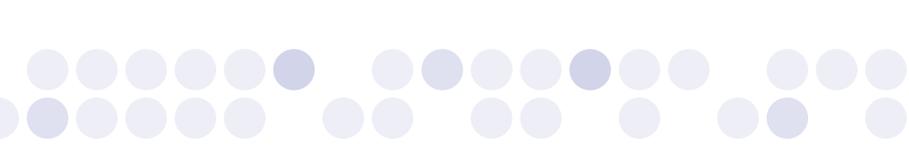
- Definitive Evaluation:
 - Search for any evidence of an open wound in the vicinity of the fracture.
 - Perform a clinical examination for deformity, tenderness, orecchymosis, or associated nerve, neurovascular, or tendon injury. Also look for the inability to perform spontaneous movement of the elbow.
 - Search for any evidence of dislocation and arterial vascular compromise (cold, dusky hand and forearm with loss of sensation). If found, an immediate reduction should take place (prior to x-rays if necessary).
 - X-ray the elbow. Special views should be obtained when necessary.
- Initial Therapy
 - Simple, undisplaced, stable fractures of the elbow can be treated by the primary care physician.
 - Apply a sling and/or a posterior splint with medial and lateral gutter splints. A portion of patients should be converted to a long arm cast after 10 to 14 days. Immobilization should continue for four to six weeks.
 - Ice and elevation whenever lying down for the first 72 hours
 - Analgesics and/or nonsteroidal anti-inflammatory drugs for up to two weeks
 - Aspirating the radiohumeral joint and injection of local anaesthetic to evacuate haematoma is appropriate to relieve pain in selected cases of radial head fractures.
 - Physical therapy (3 to 6 visits) to teach patient range-of-motion and muscle-strengthening exercises out of the splint should begin as soon as tolerated at two to four weeks.
 - Recheck at seven days, then at two-week intervals until healed.
 - Repeat x-rays at seven days and at two weeks to assure that the fracture has not slipped. X-ray again at five weeks.
 - Complex, displaced, or unstable fractures should be immobilized and referred to an orthopaedic surgeon. Compound fractures, when
 - Appropriate, should have a tetanus toxoid injection before being referred to a surgeon.
 - Dislocations of the elbow are accompanied by significant ligament injuries. Even if full reduction has been achieved, orthopaedic referral is appropriate.
- Secondary evaluation for patients with persistent symptoms or minimal improvement after six weeks of therapy
 - Review for compliance of the employee and employer to therapy programs and job modifications and restrictions. Also review for insurance company cooperation.
 - Evaluate for delayed union, malalignment, or signs of associated tendon or nerve injury.
 - Promptly refer to an orthopaedic surgeon if one of these conditions is found.

Initial conservative treatment of disorders other than fractures (65% of cases)

- Definitive Evaluation:
 - Typical symptoms of lateral epicondylitis (“tennis elbow”) include pain in the lateral aspect of the elbow with pain or burning radiating to the forearm (and occasionally proximal radiation). With medial epicondylitis (“golfers elbow”) the pain is on the inside of the elbow (versus outside of the elbow for tennis elbow). There may be loss of grip strength due to forearm pain with hand grip. Pain is usually insidious in onset but may be provoked by an acute trauma or strain. Initial complaints may be vague, such as a dull forearm ache.
 - Specific attention should be directed towards confirming occupational risk factors, such as repetitive, sustained, or forceful wrist dorsiflexion, power grip, exposure to vibration, repetitive extended elbow reach with forceful pulling, and repetitive pronation and supination of the forearm against resistance.
 - Rule out non-occupational activities that could be causing or aggravating the condition, such as activities that require gripping or hyperextending the wrist.
 - Olecranon bursitis may be secondary to systemic illness.
 - A physical examination should be performed with documentation of the following findings:



- Inspection for deformity, swelling, or erythema
- Provocative manoeuvres, such as the presence or absence of pain with resisted dorsiflexion of the wrist, passive wrist flexion with the elbow in full extension, resisted supination of the forearm, and Tinel's sign
- Range of motion: elbow flexion and extension, pronation and supination, wrist flexion and extension. Note any flexion contracture deformity of the elbow.
- Palpation: Document the presence or absence of the following: elbow deformity, tenderness, heat, or crepitus (including olecranon process and medial epicondyle). Also check the forearm for deformity, heat, or tenderness.
- Muscle strength testing of the entire upper extremity should be performed as relevant.
- Appropriate distal extremity exam should include neurological testing. A routine examination of the shoulder, neck, wrist, and hand (palpation, range of motion, strength testing) should be performed.
- A differential diagnosis should be considered at this point, such as radiculopathy or shoulder pathology with referred pain.
- As a rule, the diagnosis of elbow problems does not require an imaging study.
- Appropriate laboratory studies should be considered if there is evidence of an infectious or diffuse inflammatory process as a contributing or causative factor.
- Nerve conduction studies may be indicated for elbow problems associated with neurological deficits.
- Aspiration of the olecranon bursa is not routinely indicated unless there is suspicion of infection or metabolic disease.
- Initial treatment
 - The purpose of the initial treatment is to reduce symptoms, optimize healing/function, and increase work, with appropriate modifications to minimize the risk factors that contributed to the injury.
 - All injured workers should receive instruction concerning the nature of their condition, its risk factors, preventive measures, and goals of initial therapy. The injured worker should be instructed on how to eliminate or modify any aggravating non-occupational activities and sports during treatment.
 - Work restrictions or modifications that reduce the injured worker's exposure to the etiologic or aggravating activity are of central importance. Examples of such restrictions include preclusion from or reduction in time performing tasks requiring repetitive, sustained, or repetitive forceful wrist or hand activities, repetitive elbow motion, prolonged elbow positioning, or prolonged exposure to vibration.
 - Nonsteroidal anti-inflammatory agents (NSAIDs) can be used. Acetaminophen is an analgesic that may be used as an adjunct or alternative to NSAIDs.
 - Physical treatments and passive modalities: If there is no improvement after 2 weeks, the treatment should be modified. Use of thermal modalities in conjunction with physical treatment may be useful. Physical treatments for pain management, splinting, and/or functional retraining and instruction in a graded exercise program. Appropriate exercises may include, but are not limited to 1) gentle muscle stretching, 2) flexibility, and 3) graduated strengthening. Care should be taken while incrementing exercises so that the condition is not aggravated. Appropriate manual therapies may include manipulation, or joint or soft tissue mobilization, supplemented by physical modalities and exercise.
 - Acupuncture: Use of acupuncture in the first 4 weeks of treatment as a part of an overall treatment plan
 - Protective devices: The use of an elbow and/or wrist support for immobilization may be indicated for a brief period. The use of a splint at work must be carefully considered, as it may put the injured worker at risk for further musculoskeletal injury by forcing the adoption of awkward compensatory postures. A forearm strap can be aggravating in the acute stage, so its use should be individualized. It is contraindicated in the presence of nerve compression symptoms. Night splinting may be indicated for nerve entrapment syndromes.
 - Local corticosteroid injection: Local corticosteroid injections of the myofascial areas or bursae may be appropriate, especially if the pain is moderate to severe. Before the injection, it is important to be aware that the olecranon bursa may be the site of infection. In such an instance, a steroid injection would be contraindicated.
 - Surgery is rarely indicated



- Secondary Assessment

- A reconsideration of the initial diagnosis is necessary at this stage, and a differential diagnosis should be reviewed: cervical radiculopathy, shoulder pathology with referred pain and nerve entrapment.
- Diagnostic imaging: Radiographic studies of the elbow and forearm may be considered if, on re-evaluation, the physician suspects morphologic pathology. The use of magnetic resonance imaging (MRI) and arthrography is rarely indicated except for the evaluation of intraarticular pathology.
- Laboratory studies: Laboratory studies may be performed if there is evidence of an infectious or diffuse inflammatory process as a contributing pathology.
- Electromyography/nerve conduction studies (EMG/NCS) to rule out other conditions: Electrodiagnostic studies should be considered if there is clinical evidence of nerve entrapment or cervical radiculopathy as alternative diagnoses.
- Surgical referral: Orthopaedic surgical consultation may be recommended after failure of conservative treatment and indication of a surgically correctable condition.

b) Physical/psychiatric rehabilitation

As stated above:

Fracture or dislocation of elbow

- Initial Therapy
 - Physical therapy (3 to 6 visits) to teach patient range-of-motion and muscle-strengthening exercises out of the splint should begin as soon as tolerated at two to four weeks
- Secondary evaluation for patients with persistent symptoms or minimal improvement after six weeks of therapy
 - Review for compliance of the employee and employer to therapy programs and job modifications and restrictions. Also review for insurance company cooperation.

Initial conservative treatment of disorders other than fractures

- Initial Treatment
 - All injured workers should receive instruction concerning the nature of their condition, its risk factors, preventive measures, and goals of initial therapy. The injured worker should be instructed on how to eliminate or modify any aggravating non-occupational activities and sports during treatment.
 - Work restrictions or modifications that reduce the injured worker's exposure to the etiologic or aggravating activity are of central importance. Examples of such restrictions include preclusion from or reduction in time performing tasks requiring repetitive, sustained, or repetitive forceful wrist or hand activities, repetitive elbow motion, prolonged elbow positioning, or prolonged exposure to vibration.
 - Physical treatments and passive modalities: If there is no improvement after 2 weeks, the treatment should be modified. Use of thermal modalities in conjunction with physical treatment may be useful. Physical treatments for pain management, splinting, and/or functional retraining and instruction in a graded exercise program. Appropriate exercises may include, but are not limited to 1) gentle muscle stretching, 2) flexibility, and 3) graduated strengthening. Care should be taken while incrementing exercises so that the condition is not aggravated. Appropriate manual therapies may include manipulation, or joint or soft tissue mobilization, supplemented by physical modalities and exercise.
 - Protective devices: The use of an elbow and/or wrist support for immobilization may be indicated for a brief period. The use of a splint at work must be carefully considered, as it may put the injured worker at risk for further musculoskeletal injury by forcing the adoption of awkward compensatory postures. A forearm strap can be aggravating in the acute stage, so its use should be individualized. It is contraindicated in the presence of nerve compression symptoms. Night splinting may be indicated for nerve entrapment syndromes.



c) Risk factor/recovery

Potential harms

The use of a splint at work must be carefully considered, as it may put the injured worker at risk for further musculoskeletal injury by forcing the adoption of awkward compensatory postures. A forearm strap can be aggravating in the acute stage so its use should be individualized.

Contraindications

- A forearm strap is contraindicated in the presence of nerve compression symptoms.
- If the olecranon bursa is infected, a steroid injection would be contraindicated.
- Contraindications for total elbow replacement include Type II or III Gustilo–Anderson open fractures (primary irrigation and debridement); pre-existing infection, open wounds; younger, high-demand, or noncompliant patient; paralysis of the biceps muscle.

d) Return to work

Official disability guidelines (ODG) return-to-work pathways – fracture

Stable, clerical/modified work: 2 days

Stable, manual work: 14 days

Reduction/manipulation, clerical/modified work: 14 days

Reduction/manipulation, manual work: 28 days

Reduction/manipulation, heavy manual work: 42 days

ODG Return-to-work pathways – dislocation

Non-dominant arm, clerical/modified work: 0 days Non-dominant arm, manual work: 10 days

Non-dominant arm, heavy manual work: 21 days

Dominant arm, clerical/modified work: 7 days

Dominant arm, manual work: 21 days

Dominant arm, heavy manual work: 42 days

(See *ODG Capabilities & Activity Modifications for Restricted Work under “Work”* in the Procedure Summary of the original guideline document)

ODG Return-to-work pathways – sprain

Moderate, clerical/modified work: 4 days

Moderate, manual work: 21 days

Severe, clerical/modified work: 7 days

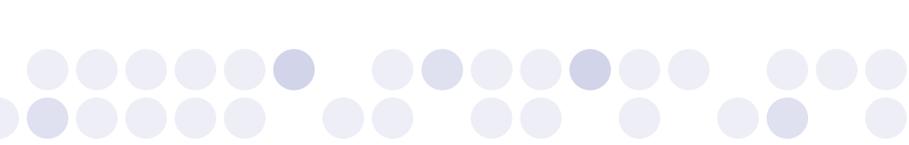
Severe, manual work: 35–42 days

ODG Return-to-work pathways – contusion

Superficial contusions: 0 days

Deep contusions, clerical/modified work: 5 days

Deep contusions, manual work: 21 days



ODG Return-to-work pathways – laceration

Minor: 0 days

Major, clerical/modified work: 3 days

Major, manual work: 8 days

ODG Return-to-work pathways – epicondylitis, medial

Without surgery, modified work: 0 days

Without surgery, regular manual work: 7 days

Without surgery, heavy manual work: 42 days

ODG Return-to-work pathways – epicondylitis, lateral

Without surgery, modified work: 0 days

Without surgery, regular manual work: 7 days

Without surgery, heavy manual work: 42 days

Without surgery, heavy manual vibrating work, if cause of disability: indefinite

With surgery (rare), modified work, non-dominant arm: 6 days

With surgery (rare), modified work, dominant arm: 21 days

With surgery (rare), regular work, non-dominant arm: 28 days

With surgery (rare), regular work, dominant arm: 42 days

Acupuncture (3-6 treatments): 7-21 days

ODG Return-to-work pathways – olecranon bursitis

Without surgery, modified work: 0 days

Without surgery, regular manual work: 4 days

Without surgery, heavy manual work: 35 days

ODG Return-to-work pathways – ulnar nerve entrapment

Without surgery, modified work: 0 days

Without surgery, regular work: 14 days

With surgery, modified work: 14 days

With surgery, regular work, non-dominant arm: 21 days

With surgery, regular work, dominant arm: 49 days

ODG Return-to-work pathways – radial nerve entrapment

Diagnostic testing: 0 days

Treatment, clerical/modified work: 14 days

Treatment, manual work: 42 days



8. Priority for Q-COMP

Rating criteria

Functional restoration Does the guideline consider graded increases in activity and function?	4
Psychosocial factors To what degree does the guideline consider psychosocial factors that may influence recovery?	1
Return to work process (vocational rehabilitation) To what degree does the guideline consider the Return to Work Process (vocational rehabilitation)?	5
Risk factors for recovery To what degree does the guideline consider Risk Factors for Recovery?	5
Total rating	15