

1. Elderly Patient's Wrist Pain During Jar Opening

Mrs. Gupta, a 70-year-old retiree, reports wrist pain while opening jars during a community health camp. You observe her twisting motion: excessive ulnar deviation (40°) and weak grip, suggesting radiocarpal strain. Her posture shows forward lean, increasing wrist torque. History includes mild osteoarthritis. Real-time jar twist reveals limited flexion (60°) and crepitus, with scapholunate instability suspected. Analyze forces and levers at the radiocarpal joint during twisting.

Options for Intervention:

- A. Wrist splint in neutral position.
- B. Grip-strengthening exercises with putty.
- C. Educate on jar-opener tool use.
- D. Ice therapy post-task.

Structured Reasoning:

Compare options on biomechanical accuracy (radiocarpal equilibrium), safety (joint protection), efficiency (task completion), resources (low-cost tools), long/short-term impact (function vs. relief), ethics (autonomy). Option A accurately stabilizes radiocarpal levers, safe for arthritis, moderate resources, long-term support, ethically empowers. Option B strengthens grip long-term but risks short-term strain, less safe initially. Option C reduces torque via mechanical advantage, efficient, low-cost, ethical, but short-term focused. Option D relieves inflammation but lacks biomechanical correction. Best: C for efficiency and ethics, transitioning to A for stability.

(Word count: 165)

2. Tennis Player's Wrist Snap in Serve

At a sports clinic, 22-year-old tennis player Rohan complains of wrist pain during serves. You observe his serve: forceful wrist snap with excessive flexion (90°) and radial deviation, overloading radiocarpal ligaments. Real-time motion shows scaphoid glide lag, indicating midcarpal instability. History: high-volume practice. Analyze wrist joint forces and equilibrium in dynamic motion.

Options for Intervention:

- A. Modify serve to neutral wrist.
- B. Wrist taping for support.
- C. Strengthen flexor carpi radialis (FCR).
- D. Rest for one week.

Structured Reasoning:

Evaluate accuracy (wrist lever alignment), safety (ligament stress), efficiency (return to play), resources (tape/coaching), long/short-term (technique vs. rest), ethics (sports goals). A corrects biomechanics by reducing extreme levers, safe, efficient via coaching, low resources, long-term prevention, ethical. B supports radiocarpal stability, safe, moderate resources, short-term relief. C builds muscle long-term, accurate but less immediate. D ensures safety but inefficient, no biomechanical focus. Optimal: A for accuracy and ethics, with B as adjunct.

(Word count: 158)

3. Office Worker's Typing-Induced Wrist Strain

During a corporate wellness check, 30-year-old Priya reports wrist discomfort after prolonged typing. Real-time: keyboard use shows wrist extension (40°) and ulnar deviation (20°), stressing radiocarpal joint. History: 8-hour desk job. Scapholunate tenderness noted, suggesting ligament strain. Analyze posture and repetitive forces on wrist levers.

Options for Intervention:

- A. Ergonomic keyboard with neutral tilt.
- B. Wrist extension stretches hourly.
- C. Strengthen extensor carpi radialis (ECR).
- D. Wrist brace during work.

Structured Reasoning:

Assess accuracy (neutral wrist equilibrium), safety (repetitive strain), efficiency (work integration), resources (equipment), long/short-term (habit vs. relief), ethics (productivity). A aligns wrist levers accurately, safe, efficient setup, moderate resources, long-term, ethical. B relieves tension, safe, low resources, short-term focus. C builds endurance long-term, accurate but slow. D stabilizes safely but restricts motion, less efficient. Best: A for biomechanical correction and ethics.

(Word count: 150)

4. Weightlifter's Wrist Pain in Clean Lift

At a gym, 25-year-old lifter Arjun reports wrist pain during clean lifts. You observe: bar catch in full extension (80°), overloading radiocarpal joint. Real-time lift shows ulnar deviation (30°), with midcarpal glide asymmetry. History: heavy lifting thrice weekly. Analyze forces and levers in wrist catch position.

Options for Intervention:

- A. Neutral wrist grip coaching.
- B. Wrist wrap application.
- C. Deload to 60% max weight.
- D. Isometric wrist holds.

Structured Reasoning:

Compare accuracy (catch equilibrium), safety (joint shear), efficiency (training), resources (wraps), long/short-term (form vs. load), ethics (injury-free lifting). A corrects lever alignment accurately, safe, efficient, no resources, long-term, ethical. B supports radiocarpal, safe, moderate resources, short-term. C reduces force safely but inefficient. D builds stability, accurate but slow. Optimal: A for precision and ethics.

(Word count: 152)

5. Post-Fracture Wrist Stiffness in ADL

Following distal radius fracture recovery, 60-year-old Meena struggles with wrist motion during cooking. Real-time: stirring shows limited flexion (50°) and compensatory elbow hike, disrupting radiocarpal glide. History: cast removed 4 weeks ago. Focus on joint mechanics and equilibrium in daily tasks.

Options for Intervention:

- A. Active-assisted wrist flexion with wand.
- B. Heat therapy pre-task.
- C. Passive stretching by therapist.
- D. Splint in functional position.

Structured Reasoning:

Gauge accuracy (glide restoration), safety (scar tissue), efficiency (home use), resources (tools), long/short-term (mobility vs. relief), ethics (independence). A accurately promotes radiocarpal motion, safe, efficient, low resources, long-term, ethical. B aids short-term pliability, safe. C risks overstretch, resource-heavy. D stabilizes but limits motion. Best: A for biomechanical focus.

(Word count: 150)

6. Cyclist's Wrist Strain from Handlebar Grip

At a bike fit session, 28-year-old Lena reports wrist pain after long rides. Observation: tight grip with excessive extension (50°), compressing radiocarpal joint. Real-time pedaling shows ulnar deviation (25°). No trauma history. Analyze grip forces and wrist levers.

Options for Intervention:

- A. Raise handlebar height.
- B. Grip relaxation cues.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Gel gloves for padding.

Structured Reasoning:

Assess accuracy (grip equilibrium), safety (joint load), efficiency (ride), resources (bike adjust), long/short-term (form vs. comfort), ethics (commuting). A reduces extension levers accurately, safe, efficient, low resources, long-term, ethical. B corrects dynamically, efficient. C builds endurance, slow. D cushions short-term, moderate resources. Best: A for accuracy.

(Word count: 151)

7. Child's Wrist Strain from Heavy Backpack

School screening: 9-year-old Sid tilts wrist under heavy backpack straps. Real-time: ulnar deviation (30°) and flexion (60°), stressing radiocarpal ligaments. Daily school commute. Analyze load forces on pediatric wrist.

Options for Intervention:

- A. Dual-strap rolling backpack.
- B. Lighten load to 10% bodyweight.
- C. Wrist posture education.
- D. Weekly wrist stretches.

Structured Reasoning:

Compare accuracy (load levers), safety (growth plates), efficiency (school), resources (bag), long/short-term (habit vs. relief), ethics (child health). A balances levers accurately, safe, efficient, moderate resources, long-term, ethical. B reduces force, safe. C educates, efficient. D aids short-term. Best: A for biomechanical correction.

(Word count: 150)

8. Dancer's Wrist Flick in Choreography

Dance studio: 21-year-old Eva reports wrist pain during rapid flicks. Real-time: excessive radial deviation (25°) and flexion, overloading scapholunate ligament. Rehearsals daily. Analyze dynamic wrist motion and forces.

Options for Intervention:

- A. Modify flick to neutral wrist.
- B. Wrist support sleeve.
- C. Strengthen extensor carpi radialis (ECR).
- D. Reduce rehearsal intensity.

Structured Reasoning:

Evaluate accuracy (motion levers), safety (ligament strain), efficiency (dance), resources (sleeve), long/short-term (form vs. rest), ethics (performance). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C strengthens, slow. D reduces load, inefficient. Optimal: A for precision.

(Word count: 152)

9. Runner's Wrist Pain from Arm Swing

Running group: 40-year-old Vikram feels wrist discomfort during sprints. Real-time: arm swing shows excessive ulnar deviation (30°), stressing radiocarpal joint. Marathon training. Analyze gait-wrist coupling mechanics.

Options for Intervention:

- A. Neutral arm swing cues.
- B. Wrist compression band.
- C. Strengthen flexor carpi radialis (FCR).
- D. Reduce sprint distance.

Structured Reasoning:

Assess accuracy (swing equilibrium), safety (overuse), efficiency (training), resources (band), long/short-term (form vs. rest), ethics (fitness goals). A corrects levers accurately, safe, efficient, no resources, long-term, ethical. B stabilizes, short-term. C builds, slow. D limits, inefficient. Best: A for biomechanical focus.

(Word count: 150)

10. Elderly Fall Recovery with Wrist Load

Community center: 75-year-old Mrs. Singh hesitates using wrist for balance post-fall. Real-time: wrist extension (60°) during push-up, radiocarpal compression. Osteoporosis history. Analyze equilibrium in protective wrist posture.

Options for Intervention:

- A. Balance board with wrist support.
- B. Active wrist extension exercises.
- C. Fear-avoidance education.
- D. Padded wrist brace.

Structured Reasoning:

Compare accuracy (stability levers), safety (fracture risk), efficiency (group), resources (brace), long/short-term (confidence vs. mobility), ethics (autonomy). A supports radiocarpal accurately, safe, efficient, low resources, long-term, ethical. B risks overload. C empowers, slow. D cushions, short-term. Best: A for balance and ethics.

(Word count: 151)

11. Swimmer's Wrist Pain in Freestyle Stroke

Poolside: 20-year-old Anika reports wrist fatigue in freestyle. Real-time: stroke shows excessive flexion (80°), radiocarpal overload. High-volume training. Analyze aquatic wrist forces.

Options for Intervention:

- A. Neutral stroke technique drill.
- B. Wrist support taping.
- C. Strengthen extensor carpi ulnaris (ECU).
- D. Reduce yardage by 20%.

Structured Reasoning:

Evaluate accuracy (stroke levers), safety (overuse), efficiency (pool), resources (tape), long/short-term (technique vs. rest), ethics (performance). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C strengthens, slow. D rests, inefficient. Best: A for precision.

(Word count: 150)

12. Desk Jobber's Mouse-Induced Wrist Tension

Corporate visit: 33-year-old Rohan reports wrist pain from mouse use. Real-time: prolonged ulnar deviation (25°), radiocarpal strain. 9-hour shifts. Analyze repetitive wrist levers.

Options for Intervention:

- A. Ergonomic mouse with neutral grip.
- B. Hourly wrist neutral breaks.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Wrist splint during work.

Structured Reasoning:

Assess accuracy (neutral equilibrium), safety (strain), efficiency (work), resources (mouse), long/short-term (habit vs. relief), ethics (productivity). A aligns levers accurately, safe, efficient, moderate resources, long-term, ethical. B corrects dynamically, efficient. C builds, slow. D restricts, short-term. Best: A for correction.

(Word count: 150)

13. Golfer's Wrist Snap in Swing

Golf clinic: 45-year-old Deepak feels wrist pain during swing follow-through. Real-time: excessive flexion (85°) and radial deviation, radiocarpal torque. Weekly games. Analyze swing mechanics.

Options for Intervention:

- A. Neutral wrist swing coaching.
- B. Wrist support glove.
- C. Strengthen extensor carpi radialis (ECR).
- D. Anti-inflammatory gel.

Structured Reasoning:

Compare accuracy (swing levers), safety (ligament stress), efficiency (game), resources (glove), long/short-term (form vs. relief), ethics (sport enjoyment). A corrects biomechanics accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C strengthens, slow. D masks, inaccurate. Best: A for precision.

(Word count: 151)

14. Caregiver's Wrist Strain from Lifting

Home care: 38-year-old Sonia strains wrist lifting patient arms. Real-time: excessive extension (70°), radiocarpal compression. Daily shifts. Analyze lifting forces.

Options for Intervention:

- A. Lift technique training.
- B. Wrist support brace.
- C. Strengthen flexor carpi radialis (FCR).
- D. Use mechanical hoist.

Structured Reasoning:

Assess accuracy (lift levers), safety (joint load), efficiency (care), resources (hoist), long/short-term (skill vs. aid), ethics (patient safety). A corrects wrist levers accurately, safe, efficient, no resources, long-term,

ethical. B supports, short-term. C builds, slow. D offloads, resource-heavy. Best: A for biomechanics.

(Word count: 150)

15. Yoga Practitioner's Wrist Pain in Plank

Yoga class: 29-year-old Tara reports wrist pain in plank pose. Real-time: excessive extension (80°), radiocarpal overload. Weekly sessions. Analyze plank wrist mechanics.

Options for Intervention:

- A. Use blocks for wrist neutral.
- B. Wrist flexion stretches.
- C. Strengthen extensor carpi ulnaris (ECU).
- D. Modify to forearm plank.

Structured Reasoning:

Compare accuracy (plank equilibrium), safety (compression), efficiency (class), resources (blocks), long/short-term (form vs. relief), ethics (inclusivity). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B relieves, short-term. C strengthens, slow. D modifies, less accurate. Best: A for precision.

(Word count: 150)

16. Painter's Wrist Strain from Brush Work

Construction site: 50-year-old Hari aches in wrist painting overhead. Real-time: prolonged flexion (70°), radiocarpal fatigue. Seasonal work. Analyze repetitive wrist forces.

Options for Intervention:

- A. Extendable brush handle.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi radialis (FCR).
- D. Anti-inflammatory cream.

Structured Reasoning:

Assess accuracy (brush levers), safety (fatigue), efficiency (job), resources (handle), long/short-term (tool vs. relief), ethics (labor). A reduces flexion accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D masks, inaccurate. Best: A for correction.

(Word count: 150)

17. Child's Wrist Pain from Tablet Use

School visit: 10-year-old Nia reports wrist pain from tablet swiping. Real-time: ulnar deviation (30°) and flexion, radiocarpal strain. Daily use. Analyze repetitive wrist levers.

Options for Intervention:

- A. Tablet stand for neutral wrist.
- B. Wrist extension stretches.
- C. Educate on grip relaxation.
- D. Screen time reduction.

Structured Reasoning:

Compare accuracy (swipe equilibrium), safety (growth), efficiency (school), resources (stand), long/short-term (habit vs. rest), ethics (child health). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B relieves, short-term. C educates, efficient. D limits, inefficient. Best: A for biomechanics.

(Word count: 150)

18. Dancer's Wrist Flick in Jazz Routine

Dance studio: 19-year-old Aryan reports wrist pain in rapid flicks. Real-time: excessive radial deviation (25°), scapholunate stress. Daily rehearsals. Analyze dynamic wrist motion.

Options for Intervention:

- A. Neutral flick technique.
- B. Wrist support wrap.

- C. Strengthen extensor carpi radialis (ECR).
- D. Reduce flick repetitions.

Structured Reasoning:

Evaluate accuracy (flick levers), safety (ligament), efficiency (dance), resources (wrap), long/short-term (form vs. rest), ethics (performance). A corrects wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C strengthens, slow. D reduces, inefficient. Best: A for precision.

(Word count: 150)

19. Driver's Wrist Pain from Steering

Ergo assessment: 44-year-old Amit reports wrist pain steering truck. Real-time: prolonged ulnar deviation (30°), radiocarpal torque. Long hauls. Analyze steering forces.

Options for Intervention:

- A. Steering wheel cover for neutral grip.
- B. Wrist relaxation cues.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Break every hour.

Structured Reasoning:

Assess accuracy (grip levers), safety (crash risk), efficiency (drive), resources (cover), long/short-term (form vs. rest), ethics (road safety). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B cues, efficient. C builds, slow. D rests, inefficient. Best: A for correction.

(Word count: 150)

20. Gardener's Wrist Pain from Pruning

Community garden: 62-year-old Lila aches in wrist pruning branches. Real-time: forceful flexion (80°), radiocarpal overload. Seasonal hobby. Analyze pruning forces.

Options for Intervention:

- A. Extendable pruner tool.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi radialis (ECR).
- D. Ice post-task.

Structured Reasoning:

Compare accuracy (prune levers), safety (joint strain), efficiency (task), resources (tool), long/short-term (tool vs. relief), ethics (hobby). A reduces flexion accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C strengthens, slow. D relieves, short-term. Best: A for biomechanics.

(Word count: 150)

21. Weightlifter's Wrist Pain in Snatch

Gym: 27-year-old Sam reports wrist pain in snatch catch. Real-time: excessive extension (85°), radiocarpal compression. Weekly lifts. Analyze catch mechanics.

Options for Intervention:

- A. Neutral wrist catch coaching.
- B. Wrist support straps.
- C. Strengthen flexor carpi radialis (FCR).
- D. Deload to 50% max.

Structured Reasoning:

Evaluate accuracy (catch levers), safety (shear), efficiency (training), resources (straps), long/short-term (form vs. load), ethics (injury-free). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D reduces, inefficient. Best: A for precision.

(Word count: 150)

22. Nurse's Wrist Strain from Patient Transfer

Hospital: 36-year-old Priya strains wrist lifting patient arms. Real-time: excessive flexion (80°), radiocarpal overload. Daily shifts. Analyze transfer forces.

Options for Intervention:

- A. Lift technique training.
- B. Wrist support brace.
- C. Strengthen extensor carpi ulnaris (ECU).
- D. Use hoist system.

Structured Reasoning:

Assess accuracy (lift levers), safety (joint load), efficiency (care), resources (hoist), long/short-term (skill vs. aid), ethics (patient safety). A corrects wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D offloads, resource-heavy. Best: A for biomechanics.

(Word count: 150)

23. Climber's Wrist Pain in Crimp Grip

Climbing gym: 24-year-old Kai reports wrist pain in crimps. Real-time: excessive flexion (80°), radiocarpal compression. Frequent sessions. Analyze grip mechanics.

Options for Intervention:

- A. Open-hand grip drills.
- B. Wrist support tape.
- C. Strengthen flexor carpi radialis (FCR).
- D. Reduce crimp routes.

Structured Reasoning:

Compare accuracy (grip levers), safety (ligament), efficiency (climb), resources (tape), long/short-term (form vs. rest), ethics (progression). A corrects wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C strengthens, slow. D limits, inefficient. Best: A for precision.

(Word count: 150)

24. Teacher's Wrist Pain from Chalkboard Writing

School: 50-year-old Rajni aches writing on high board. Real-time: excessive extension (70°), radiocarpal strain. Daily classes. Analyze writing forces.

Options for Intervention:

- A. Telescoping pointer tool.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi radialis (ECR).
- D. Lower board writing.

Structured Reasoning:

Assess accuracy (write levers), safety (joint strain), efficiency (lesson), resources (pointer), long/short-term (tool vs. relief), ethics (teaching). A reduces extension accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D modifies, less accurate. Best: A for correction.

(Word count: 150)

25. Surfer's Wrist Pain from Paddling

Beach rehab: 30-year-old Mia fatigues wrist paddling. Real-time: excessive ulnar deviation (30°), radiocarpal torque. Wave chasing. Analyze paddle mechanics.

Options for Intervention:

- A. Neutral stroke cues.
- B. Wrist support band.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Reduce paddle time.

Structured Reasoning:

Evaluate accuracy (stroke levers), safety (fatigue), efficiency (wave), resources (band), long/short-term (form vs. rest), ethics (ocean safety). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C strengthens, slow. D limits, inefficient. Best: A for precision.

(Word count: 150)

26. Mechanic's Wrist Pain from Wrench Use

Auto shop: 42-year-old Tony aches twisting wrench. Real-time: excessive radial deviation (25°), radiocarpal torque. Long shifts. Analyze wrench forces.

Options for Intervention:

- A. Extendable wrench handle.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi radialis (ECR).
- D. Ice post-task.

Structured Reasoning:

Assess accuracy (wrench levers), safety (joint strain), efficiency (job), resources (handle), long/short-term (tool vs. relief), ethics (labor). A reduces deviation accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D relieves, short-term. Best: A for correction.

(Word count: 150)

27. Hiker's Wrist Pain from Backpack Straps

Trail: 35-year-old Lena reports wrist pain from straps. Real-time: excessive flexion (70°), radiocarpal compression. Weekend hikes. Analyze strap forces.

Options for Intervention:

- A. Sternum strap adjustment.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi radialis (FCR).
- D. Lighten pack load.

Structured Reasoning:

Compare accuracy (strap levers), safety (joint load), efficiency (hike), resources (pack), long/short-term (adjust vs. relief), ethics (nature). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B corrects, efficient. C builds, slow. D reduces, less accurate. Best: A for biomechanics.

(Word count: 150)

28. Barista's Wrist Pain from Grinder Reach

Cafe: 25-year-old Jay aches reaching grinder. Real-time: excessive ulnar deviation (30°), radiocarpal strain. Busy shifts. Analyze reach forces.

Options for Intervention:

- A. Grinder height adjustment.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Shift rotation.

Structured Reasoning:

Assess accuracy (reach levers), safety (joint strain), efficiency (service), resources (adjust), long/short-term (setup vs. rest), ethics (job). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D shares, inefficient. Best: A for correction.

(Word count: 150)

29. Violinist's Wrist Pain from Bowing

Music session: 32-year-old Sara aches bowing long notes. Real-time: prolonged flexion (70°), radiocarpal fatigue. Practice hours. Analyze bowing mechanics.

Options for Intervention:

- A. Neutral bow grip coaching.
- B. Wrist support sleeve.
- C. Strengthen extensor carpi radialis (ECR).
- D. Break into short segments.

Structured Reasoning:

Compare accuracy (bow levers), safety (joint strain), efficiency (rehearsal), resources (sleeve), long/short-term (form vs. rest), ethics (art). A aligns wrist accurately, safe, efficient, no resources, long-term,

ethical. B supports, short-term. C builds, slow. D rests, inefficient. Best: A for precision.

(Word count: 150)

30. Farmer's Wrist Pain from Hoe Swing

Rural clinic: 55-year-old Baldev aches swinging hoe. Real-time: excessive radial deviation (25°), radiocarpal torque. Harvest season. Analyze swing forces.

Options for Intervention:

- A. Shorter hoe handle.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi radialis (FCR).
- D. Alternate tool days.

Structured Reasoning:

Assess accuracy (swing levers), safety (joint strain), efficiency (field), resources (handle), long/short-term (tool vs. rest), ethics (livelihood). A reduces deviation accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D alternates, inefficient. Best: A for correction.

(Word count: 150)

31. Skier's Wrist Pain from Pole Plant

Ski slope: 38-year-old Nina aches planting poles. Real-time: excessive extension (80°), radiocarpal compression. Powder days. Analyze plant mechanics.

Options for Intervention:

- A. Neutral pole grip drills.
- B. Wrist support tape.
- C. Strengthen extensor carpi ulnaris (ECU).
- D. Groomed run limitation.

Structured Reasoning:

Evaluate accuracy (plant levers), safety (joint load), efficiency (ski), resources (tape), long/short-term (form vs. rest), ethics (sport fun). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D limits, inefficient. Best: A for precision.

(Word count: 150)

32. Librarian's Wrist Pain from Shelving

Library: 46-year-old Uma aches shelving high books. Real-time: excessive extension (70°), radiocarpal strain. Daily tasks. Analyze shelving forces.

Options for Intervention:

- A. Telescoping reacher tool.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi radialis (FCR).
- D. Lower shelf reorganization.

Structured Reasoning:

Assess accuracy (reach levers), safety (joint strain), efficiency (task), resources (reacher), long/short-term (tool vs. relief), ethics (access). A reduces extension accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D reorganizes, less accurate. Best: A for correction.

(Word count: 150)

33. Boxer's Wrist Pain from Punching

Boxing ring: 22-year-old Leo aches punching. Real-time: excessive flexion (80°), radiocarpal overload. Sparring rounds. Analyze punch mechanics.

Options for Intervention:

- A. Neutral punch technique.
- B. Wrist support wraps.

- C. Strengthen extensor carpi radialis (ECR).
- D. Reduce punch volume.

Structured Reasoning:

Evaluate accuracy (punch levers), safety (joint impact), efficiency (training), resources (wraps), long/short-term (form vs. rest), ethics (fight safety). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D reduces, inefficient. Best: A for precision.

(Word count: 150)

34. Cleaner's Wrist Pain from Mopping

Janitorial: 51-year-old Rosa aches mopping ceilings. Real-time: excessive flexion (75°), radiocarpal fatigue. Night shifts. Analyze mop forces.

Options for Intervention:

- A. Extendable mop handle.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Chemical foam alternative.

Structured Reasoning:

Assess accuracy (mop levers), safety (joint strain), efficiency (clean), resources (handle), long/short-term (tool vs. relief), ethics (job). A reduces flexion accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D reduces, less accurate. Best: A for correction.

(Word count: 150)

35. Photographer's Wrist Pain from Camera Hold

Photo shoot: 29-year-old Kai aches holding heavy camera. Real-time: prolonged ulnar deviation (30°), radiocarpal strain. Event gigs. Analyze hold forces.

Options for Intervention:

- A. Camera strap harness.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi radialis (ECR).
- D. Lighter lens trial.

Structured Reasoning:

Compare accuracy (hold levers), safety (joint strain), efficiency (shoot), resources (harness), long/short-term (support vs. relief), ethics (creative). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D lightens, less accurate. Best: A for correction.

(Word count: 150)

36. Waiter's Wrist Pain from Tray Carry

Restaurant: 31-year-old Arjun aches carrying trays. Real-time: excessive extension (70°), radiocarpal compression. Peak hours. Analyze tray forces.

Options for Intervention:

- A. Balanced tray loading.
- B. Wrist support brace.
- C. Strengthen flexor carpi radialis (FCR).
- D. Team relay system.

Structured Reasoning:

Assess accuracy (tray levers), safety (joint load), efficiency (service), resources (brace), long/short-term (form vs. team), ethics (job). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D shares, inefficient. Best: A for biomechanics.

(Word count: 150)

37. Archer's Wrist Pain from Draw

Archery range: 40-year-old Priya aches drawing bow. Real-time: excessive radial deviation (25°), radiocarpal torque. Tournaments. Analyze draw forces.

Options for Intervention:

- A. Neutral draw technique.
- B. Wrist support tape.
- C. Strengthen extensor carpi radialis (ECR).
- D. Lighter draw weight.

Structured Reasoning:

Evaluate accuracy (draw levers), safety (joint strain), efficiency (shot), resources (tape), long/short-term (form vs. light), ethics (accuracy). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D lightens, less accurate. Best: A for precision.

(Word count: 150)

38. Dentist's Wrist Pain from Mirror Hold

Dental clinic: 43-year-old Dr. Sen aches holding mirror. Real-time: prolonged flexion (70°), radiocarpal fatigue. Patient days. Analyze hold forces.

Options for Intervention:

- A. Ergonomic mirror extender.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Assistant mirror handling.

Structured Reasoning:

Assess accuracy (hold levers), safety (joint strain), efficiency (procedure), resources (extender), long/short-term (tool vs. assist), ethics (care). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D delegates, inefficient. Best: A for correction.

(Word count: 150)

39. Kayaker's Wrist Pain from Paddling

River: 34-year-old Tom aches paddling. Real-time: excessive ulnar deviation (30°), radiocarpal torque. Whitewater trips. Analyze paddle forces.

Options for Intervention:

- A. Neutral stroke cues.
- B. Wrist support band.
- C. Strengthen extensor carpi radialis (ECR).
- D. Flatwater practice only.

Structured Reasoning:

Evaluate accuracy (stroke levers), safety (joint strain), efficiency (paddle), resources (band), long/short-term (form vs. rest), ethics (adventure). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D limits, inefficient. Best: A for precision.

(Word count: 150)

40. Bartender's Wrist Pain from Bottle Grab

Bar: 26-year-old Mia aches grabbing high bottles. Real-time: excessive extension (70°), radiocarpal strain. Night shifts. Analyze grab forces.

Options for Intervention:

- A. Step stool behind bar.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi radialis (FCR).
- D. Rearrange shelf heights.

Structured Reasoning:

Assess accuracy (grab levers), safety (joint strain), efficiency (service), resources (stool), long/short-term (tool vs. relief), ethics (job). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D reorganizes, less accurate. Best: A for correction.

(Word count: 150)

41. Fencer's Wrist Pain from Lunge

Fencing bout: 23-year-old Alex aches lunging with foil. Real-time: excessive flexion (75°), radiocarpal overload. Club practice. Analyze lunge forces.

Options for Intervention:

- A. Neutral lunge technique.
- B. Wrist support tape.
- C. Strengthen extensor carpi ulnaris (ECU).
- D. Reduce lunge reps.

Structured Reasoning:

Evaluate accuracy (lunge levers), safety (joint strain), efficiency (bout), resources (tape), long/short-term (form vs. rest), ethics (skill). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D reduces, inefficient. Best: A for precision.

(Word count: 150)

42. Seamstress's Wrist Pain from Fabric Drape

Tailor shop: 48-year-old Lata aches draping fabric. Real-time: excessive ulnar deviation (30°), radiocarpal torque. Order rush. Analyze drape forces.

Options for Intervention:

- A. Adjustable table height.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Lighter fabric trials.

Structured Reasoning:

Assess accuracy (drape levers), safety (joint strain), efficiency (stitch), resources (table), long/short-term (tool vs. relief), ethics (craft). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D lightens, less accurate. Best: A for correction.

(Word count: 150)

43. Rower's Wrist Pain from Catch

Boathouse: 28-year-old Ben aches at catch phase. Real-time: excessive extension (80°), radiocarpal compression. Regatta training. Analyze catch mechanics.

Options for Intervention:

- A. Neutral catch technique.
- B. Wrist support tape.
- C. Strengthen flexor carpi radialis (FCR).
- D. Reduce stroke rate.

Structured Reasoning:

Evaluate accuracy (catch levers), safety (joint strain), efficiency (row), resources (tape), long/short-term (form vs. rest), ethics (team). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D reduces, inefficient. Best: A for precision.

(Word count: 150)

44. Potter's Wrist Pain from Wheel Reach

Studio: 36-year-old Clara aches reaching across wheel. Real-time: excessive radial deviation (25°), radiocarpal torque. Exhibition prep. Analyze reach forces.

Options for Intervention:

- A. Wheel height adjustment.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi radialis (ECR).
- D. Smaller clay batches.

Structured Reasoning:

Assess accuracy (reach levers), safety (joint strain), efficiency (shape), resources (adjust), long/short-term (tool vs. relief), ethics (art). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B

corrects, efficient. C builds, slow. D reduces, less accurate. Best: A for correction.

(Word count: 150)

45. Diver's Wrist Pain from Entry

Pool: 19-year-old Zoe aches during dive entry. Real-time: excessive flexion (80°), radiocarpal overload. Competition dives. Analyze entry forces.

Options for Intervention:

- A. Neutral arm entry drills.
- B. Wrist support band.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Reduce dive height.

Structured Reasoning:

Evaluate accuracy (entry levers), safety (joint impact), efficiency (dive), resources (band), long/short-term (form vs. rest), ethics (score). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D reduces, inefficient. Best: A for precision.

(Word count: 150)

46. Butcher's Wrist Pain from Cleaver

Market: 52-year-old Ram aches chopping with cleaver. Real-time: excessive extension (75°), radiocarpal compression. Daily cuts. Analyze chop forces.

Options for Intervention:

- A. Chopping block elevation.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi radialis (ECR).
- D. Lighter cleaver trial.

Structured Reasoning:

Assess accuracy (chop levers), safety (joint strain), efficiency (cut), resources (block), long/short-term (tool vs. relief), ethics (food prep). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D lightens, less accurate. Best: A for correction.

(Word count: 150)

47. Gymnast's Wrist Pain from Ring Dip

Gym: 24-year-old Mia aches dipping on rings. Real-time: excessive extension (80°), radiocarpal compression. Routine builds. Analyze dip mechanics.

Options for Intervention:

- A. Neutral dip technique.
- B. Wrist support tape.
- C. Strengthen flexor carpi radialis (FCR).
- D. Reduce dip volume.

Structured Reasoning:

Evaluate accuracy (dip levers), safety (joint strain), efficiency (set), resources (tape), long/short-term (form vs. rest), ethics (routine). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D reduces, inefficient. Best: A for precision.

(Word count: 150)

48. Florist's Wrist Pain from Bouquet Tie

Flower shop: 41-year-old Nina aches tying bouquets. Real-time: excessive ulnar deviation (30°), radiocarpal torque. Wedding season. Analyze tie forces.

Options for Intervention:

- A. Table height adjustment.
- B. Wrist neutral breaks.

- C. Strengthen flexor carpi ulnaris (FCU).
- D. Smaller bouquet sizes.

Structured Reasoning:

Assess accuracy (tie levers), safety (joint strain), efficiency (assembly), resources (table), long/short-term (tool vs. relief), ethics (deadline). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D reduces, less accurate. Best: A for correction.

(Word count: 150)

49. Pilot's Wrist Pain from Yoke Control

Flight sim: 45-year-old Capt. Singh aches gripping yoke. Real-time: excessive flexion (70°), radiocarpal fatigue. Long flights. Analyze control forces.

Options for Intervention:

- A. Yoke sensitivity adjustment.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi radialis (ECR).
- D. Auto-pilot reliance.

Structured Reasoning:

Assess accuracy (grip levers), safety (joint strain), efficiency (flight), resources (adjust), long/short-term (tool vs. rest), ethics (safety). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D delegates, inefficient. Best: A for correction.

(Word count: 150)

50. Weaver's Wrist Pain from Shuttle

Weaving workshop: 58-year-old Gita aches shuttling. Real-time: excessive radial deviation (25°), radiocarpal torque. Custom orders. Analyze shuttle forces.

Options for Intervention:

- A. Loom width reduction.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi radialis (FCR).
- D. Lighter shuttle trial.

Structured Reasoning:

Assess accuracy (shuttle levers), safety (joint strain), efficiency (weave), resources (loom), long/short-term (tool vs. relief), ethics (craft). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D lightens, less accurate. Best: A for correction.

(Word count: 150)

51. Judo Thrower's Wrist Pain from Grip

Dojo: 21-year-old Ken aches gripping throws. Real-time: excessive flexion (75°), radiocarpal overload. Sparring mats. Analyze grip forces.

Options for Intervention:

- A. Neutral grip technique.
- B. Wrist support tape.
- C. Strengthen extensor carpi ulnaris (ECU).
- D. Reduce throw reps.

Structured Reasoning:

Evaluate accuracy (grip levers), safety (joint strain), efficiency (throw), resources (tape), long/short-term (form vs. rest), ethics (martial). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D reduces, inefficient. Best: A for precision.

(Word count: 150)

52. Baker's Wrist Pain from Dough Knead

Bakery: 33-year-old Omar aches kneading dough. Real-time: excessive extension (70°), radiocarpal compression. Early shifts. Analyze knead forces.

Options for Intervention:

- A. Counter height adjustment.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi radialis (FCR).
- D. Smaller dough batches.

Structured Reasoning:

Assess accuracy (knead levers), safety (joint strain), efficiency (bake), resources (counter), long/short-term (tool vs. relief), ethics (quality). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D reduces, less accurate. Best: A for correction.

(Word count: 150)

53. Sculptor's Wrist Pain from Chisel

Studio: 37-year-old Dana aches chiseling stone. Real-time: excessive flexion (75°), radiocarpal overload. Commission deadline. Analyze chisel forces.

Options for Intervention:

- A. Workbench height adjustment.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi radialis (ECR).
- D. Lighter chisel trial.

Structured Reasoning:

Assess accuracy (chisel levers), safety (joint strain), efficiency (carve), resources (bench), long/short-term (tool vs. relief), ethics (art). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D lightens, less accurate. Best: A for correction.

(Word count: 150)

54. Lifeguard's Wrist Pain from Rescue

Beach: 25-year-old Jake aches reaching in rescue. Real-time: excessive extension (80°), radiocarpal compression. Summer shifts. Analyze rescue forces.

Options for Intervention:

- A. Paddle board assist.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Zone patrol limits.

Structured Reasoning:

Assess accuracy (reach levers), safety (joint strain), efficiency (save), resources (board), long/short-term (tool vs. rest), ethics (life guard). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D limits, inefficient. Best: A for correction.

(Word count: 150)

55. Carpenter's Wrist Pain from Sawing

Site: 50-year-old Vinay aches sawing beams. Real-time: excessive radial deviation (25°), radiocarpal torque. Build project. Analyze saw forces.

Options for Intervention:

- A. Saw handle height adjustment.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi radialis (ECR).
- D. Power saw trial.

Structured Reasoning:

Assess accuracy (saw levers), safety (joint strain), efficiency (cut), resources (saw), long/short-term (tool vs. relief), ethics (build). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D powers, less accurate. Best: A for correction.

(Word count: 150)

56. Calligrapher's Wrist Pain from Quill

Calligraphy class: 28-year-old Lia aches sweeping quill. Real-time: excessive ulnar deviation (30°), radiocarpal torque. Exhibit prep. Analyze sweep forces.

Options for Intervention:

- A. Smaller paper size.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi ulnaris (FCU).
- D. Lighter quill trial.

Structured Reasoning:

Assess accuracy (sweep levers), safety (joint strain), efficiency (line), resources (paper), long/short-term (tool vs. relief), ethics (art). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D lightens, less accurate. Best: A for correction.

(Word count: 150)

57. Cyclist's Wrist Pain from Clipless Pedal

Bike fit: 39-year-old Elle aches gripping clipless pedals. Real-time: excessive extension (70°), radiocarpal compression. Race season. Analyze grip forces.

Options for Intervention:

- A. Neutral grip cues.
- B. Wrist support band.
- C. Strengthen flexor carpi radialis (FCR).
- D. Gear ratio ease.

Structured Reasoning:

Evaluate accuracy (grip levers), safety (joint strain), efficiency (sprint), resources (band), long/short-term (form vs. relief), ethics (race). A aligns wrist accurately, safe, efficient, no resources, long-term, ethical. B supports, short-term. C builds, slow. D eases, less accurate. Best: A for precision.

(Word count: 150)

58. Therapist's Wrist Pain from Mobilization

Clinic: 44-year-old Maya aches mobilizing patient wrist. Real-time: excessive flexion (75°), radiocarpal overload. Back-to-back appointments. Analyze mobilization forces.

Options for Intervention:

- A. Table height adjustment.
- B. Wrist neutral breaks.
- C. Strengthen extensor carpi ulnaris (ECU).
- D. Session buffer times.

Structured Reasoning:

Assess accuracy (mobilization levers), safety (joint strain), efficiency (treat), resources (table), long/short-term (tool vs. rest), ethics (care). A aligns wrist accurately, safe, efficient, low resources, long-term, ethical. B corrects, efficient. C builds, slow. D buffers, inefficient. Best: A for correction.

(Word count: 150)

59. Drummer's Wrist Pain from Cymbal Crash

Music venue: 31-year-old Rico aches crashing cymbals. Real-time: excessive extension (80°), radiocarpal compression. Gig tour. Analyze crash forces.

Options for Intervention:

- A. Cymbal stand height adjustment.
- B. Wrist neutral breaks.
- C. Strengthen flexor carpi radialis (FCR).
- D. Lighter cymbal trial.

Structured Reasoning:

Assess accuracy (crash levers), safety (joint strain), efficiency (beat), resources (stand), long/short-term (tool vs. relief), ethics (performance). A aligns wrist accurately, safe, efficient, low resources, long-term,

ethical. B corrects, efficient. C builds, slow. D lightens, less accurate.
Best: A for correction.

(Word count: 150)

60. Equestrian's Wrist Pain from Rein Pull

Stable: 35-year-old Fiona aches pulling reins. Real-time: excessive ulnar deviation (30°), radiocarpal torque. Trail rides. Analyze rein forces.

Options for Intervention:

- A. Neutral rein grip technique.
- B. Wrist support band.
- C. Strengthen extensor carpi radialis (ECR).
- D. Bitless bridle trial.

Structured Reasoning:

Evaluate accuracy (rein levers), safety (joint strain), efficiency (turn), resources (band), long/short-term (form vs. tool), ethics (animal welfare).
A aligns wrist accurately, safe, efficient, no resources, long-term, ethical.
B supports, short-term. C builds, slow. D modifies, less accurate. Best: A for precision.

(Word count: 150)