# Functional Capacity Evaluation Elements

A standard FCE evaluation will need to include the following 6 elements:

## 1. Worker Information
- Worker subjective pain complaints
- Medications - related to injury or would impact test, was scheduled medication taken?
- Assistive devices used during evaluation
- Worker’s report of functional ability in self-care, chores, yard work, driving, shopping, recreation, exercise
- Worker’s self-reported goal(s)
- Height/Weight
- Blood Pressure, Oxygen saturation, Pulse

## 2. Musculoskeletal Screen
As determined by the evaluator. May include these areas: Balance, Posture, Range of Motion (Passive/Active), Gait Abnormalities, Sensation, Extremity Edema Measurements (Pre/Post), Strength UE/LE, Other Clinical Findings

## 3. Capacity Testing – Positional, Material Handling, Non-Material Handling

<table>
<thead>
<tr>
<th>Standard categories:</th>
<th>Additional Categories if noted on any job description/analysis to include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sit</td>
<td>Grasp (forceful)</td>
</tr>
<tr>
<td>Stand</td>
<td>Handle/Grasp</td>
</tr>
<tr>
<td>Walk</td>
<td>Fine Manipulation</td>
</tr>
<tr>
<td>Climb Ladders</td>
<td>Lifting Floor to Waist</td>
</tr>
<tr>
<td>Climb Stairs</td>
<td>Lifting Waist to Shoulder</td>
</tr>
<tr>
<td>Twist Neck</td>
<td>Lifting Shoulder to Overhead</td>
</tr>
<tr>
<td>Twist Truck</td>
<td>Push</td>
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<tr>
<td>Bend/Stoop</td>
<td>Pull</td>
</tr>
<tr>
<td>Kneel</td>
<td>Carry</td>
</tr>
<tr>
<td>Squat Partial/Full</td>
<td>Perform work on ladders</td>
</tr>
<tr>
<td>Crawl</td>
<td>Keyboarding</td>
</tr>
<tr>
<td>Reach forward</td>
<td>Wrist flexion/extension</td>
</tr>
<tr>
<td>Reach waist to shoulder</td>
<td>Operate Foot controls</td>
</tr>
<tr>
<td>Work above shoulders</td>
<td>Vibration high/low</td>
</tr>
</tbody>
</table>

## 4. Cardiorespiratory Endurance Testing
Best practices are in development

## 5. Consistency/Level of Effort Testing:
   a) Consistency
   b) Level of Effort

Includes combined approach:
- Observational – hard and soft signs
- Consistency of test performance – distraction, placebo, test/retest
- Heart rate monitoring/response
- Isometric grip test battery
6. **Musculoskeletal/Psychosocial Questionnaires:**
   - Include reliability as it relates to a worker’s report of pain and abilities
   - Selection based on characteristics of the client


<table>
<thead>
<tr>
<th>Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oswestry (ODI)</td>
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<tr>
<td>Roland (RMQ)</td>
</tr>
<tr>
<td>Neck Disability (NDI)</td>
</tr>
<tr>
<td>Shoulder Pain and Disability (SPADI)</td>
</tr>
<tr>
<td>Patient Health (PHQ-9)</td>
</tr>
<tr>
<td>Fear-Avoidance Belief (FABQ)</td>
</tr>
<tr>
<td>Tampa Kinesiophobia (TSK-11)</td>
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<tr>
<td>EPIC Hand Function Sort</td>
</tr>
<tr>
<td>PACT Spinal Function Sort</td>
</tr>
<tr>
<td>Pain Disability Index (PDI)</td>
</tr>
<tr>
<td>McGill Pain Questionnaire (MPQ-SF)</td>
</tr>
</tbody>
</table>

World Health Organization Disability Assessment Schedule (WHODAS) http://www.lni.wa.gov/ClaimsIns/Providers/TreatingPatients/ByCondition/MentalHealth/Assess.asp

**Additional:**
- Dalles Pain Questionnaire
- Orebro Musculoskeletal Pain Questionnaire (OMPQ)
- Ransford Pain Drawing
- Injustice Experiences Questionnaire (IEQ)
- The Effect of Pain Scale (EOP)
- MTAP (combines EPIC/PACT – requires a fee)
Functional Capacity Evaluation
Additional Testing Considerations for the Upper Extremity

Upper Extremity: Shoulder, arm, elbow, forearm, wrist, hand

- Additional testing to consider with the comprehensive evaluation elements
- Same battery of screening/testing for injured and uninjured side based on job demands
- Early/late day comparison testing (except for material handling)

1. UE musculoskeletal screen (may include cervical)
   - Active/Passive Range of Motion
   - Strength
     - Grip
       - Power
     - Pinch
       - Tip
       - Palmer
       - Lateral
   - Sensibility: May include light touch, warm/cold, 2 point discrimination (Stereognosis if 2 point diminished; Monofilament testing if light touch/2 point discrimination is diminished.)
   - Edema (circumference/volume)
   - Skin: Inspection (cleanliness – presence of dirt, grease, etc.) color, temperature, integrity, atrophy, callous formation
   - Tone/Neural Tension
   - Reflexes
   - Quality of Movement

2. Coordination/dexterity testing (involved and uninvolved side based on job demands)
   - Fine motor
   - Gross motor

3. Unilateral and bilateral functional testing based on job demands
   - Reach forward, reach waist to shoulder, work above shoulders, forceful grasping, handle/grasp (power), fine manipulation, lift floor to waist, waist to shoulder, shoulder to overhead, carry, push, pull.
   - As needed: keyboarding, wrist flexion/extension, vibration high/low, handle/grasp (hook, cylindrical, spherical)
   - Unique job specific tasks for handling/grasping/coordination (consider awkward spaces)

4. Brace/Splint (if worn, type, fit)
Sample Testing Protocol:

1. Intake interview
2. Pain questionnaires
3. Seated resting blood pressure and heart rate
4. Brief active/functional range of motion screen for initial quality of movement
5. Volumetric/circumferential measurements
6. Inspection: color; temperature; trophic changes; atrophy; scar integrity, swelling, cleanliness (dirt/grease), clubbing, color, callous formation, splint/brace
7. Sensory testing:
   - Light touch
   - Protective sensation to include temperature
   - 2-point discrimination
8. Full musculoskeletal screen of bilateral upper extremities to include:
   - AROM
   - PROM
   - Muscle testing
   - Reflexes
   - Neural tension (Median, Radial, Ulnar)
   - Provocative testing as indicated. (Purpose: to assess consistency)
9. Functional motion tests:
   - Overhead reach - measured in inches, compare each side
   - Forward reach bilateral upper extremity
10. Repetitive motion test/endurance testing: examples may include:
    - Overhead reach
    - Forward reach
    - Elbow flexion/extension
11. Jamar Grip test: 5-position and Rapid exchange (Purpose: to assess consistency and to match tool usage)
12. Pinch Test:
    - Palmar, Tip, Lateral
13. Functional Testing:
   - Perform back to back MTM and time duration tests to measure repetitive fingering/fine manipulation; grasping/handling for frequency tolerances
     - May include: Purdue Pegboard; Minnesota Dexterity test: Valpar 7; Valpar 8; Valpar 9; Valpar 1; Matheson panel system; Bennett Tool Task test; Bus Bench assembly/disassembly

14. Material handling based on job demands:
   - Bilateral
   - Unilateral

15. Maximum lift test:
   - Occasional basis:
     - Lifting: Floor to waist; waist to shoulder; shoulder to overhead; Carry
     - Push-pull
   - Frequent basis
     - Lifting: Floor to waist; waist to shoulder; shoulder to overhead;

16. Work circuit: May include work simulation for Job of Injury/job goal/potential retraining goal: tool use; impact tool use; vibratory tools use; keyboarding on computer; Repetitive and sustained reaching and grasping/handling tasks

17. Post-test/repeat testing of:
   a) Functional testing
   b) Functional motion tests
   c) Repetitive motion test/endurance testing
   d) Jamar grip test on position of peak force
   e) Sensory testing as appropriate
   f) Volumetric/circumference measurements

**This sample is provided for educational purposes only. It is not meant to be an all-inclusive format. Use your clinical reasoning and judgement to fully evaluate the client based on their individual needs and job demands.**

Developed by the members of the L&I Therapy Stakeholder Group