

Testing Technologies

Online Functional Capacity Evaluation System

Evaluation Data Intake Worksheets

| | |
|-------------------------|--|
| Patient: | |
| Referece # | |
| Evaluation Date: | |
| Conducted By: | |

Patient Interview

Verbally interview the subject to collect indicated data. Remember to speak clearly and slowly and to request every data item.

Patient Information/Treatment History

| | | |
|-------------------|--|----------------------------|
| Gender: | | How Injury Occurred: _____ |
| Dominant Hand: | | _____ |
| Date of Birth | | _____ |
| Diagnosis: | | _____ |
| Injury Date: | | _____ |
| Date Last Worked: | | _____ |

Reported Capacities

| | |
|------------------------------|------------------------------|
| Can sit for _____ minutes. | Can stand for _____ minutes. |
| Can drive for _____ minutes. | Can walk for _____ minutes. |

Present Injury information

Describe Pain: _____

Difficult Activities: _____

Therapeutic Activities: _____

Medical History Information

Ask the subject to indicate yes or no for the presence of each potential health factor in their medical history and record their answers in the table below. Describe where requested.

| | | | |
|-----------------------------------|--|---------------------------|--|
| Heart disease: | | Thyroid disease: | |
| Heart attack: | | Hernia: | |
| High blood pressure: | | Kidney disorders: | |
| Diabetes: | | Liver disorders: | |
| Seizures: | | Nervous system disorders: | |
| Lung disease/breathing disorders: | | Muscle disorders: | |
| History of Headaches | | | |
| Any other unexplained illness: | | Describe: _____ _____ | |
| Surgeries: | | Describe: _____ _____ | |

Notes/Observations:

Pain Assessment

Step 1: Borg Pain Scale

Administer the the Borg Pain Scale test and record the numeric result.

| | |
|--------------------|--|
| Borg Scale Result: | |
|--------------------|--|

Step 2: Ransford Pain Drawing

Administer the the Borg Pain Scale test and record the numeric result.

| | |
|-----------------|--|
| Ransford Score: | |
|-----------------|--|

Step 3: Analog Pain Scale

Administer the analog pain scale test and record the distance (centimeters).

| | |
|------------------|--|
| Analog Distance: | |
|------------------|--|

Notes/Observations:

| |
|--|
| |
|--|

Range of Motion – Group 1

(Non-calculated Observations – optional to main protocol, may be required by client specification)

Step 1: Measure and Record ROM Data

- Record range of motion metrics as required.

Elbow: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|---|------|-------|
| Extension: (0 – Elbow should fully straighten) | | |
| Flexion (0 – 145) | | |

Forearm: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|-------------------------|------|-------|
| Supination: (0 – 90) | | |
| Pronation (0 – 85) | | |

Gross Manipulation

Step 1: Set up test equipment

- Prepare grip dynamometer
- Position client in chair
- Demonstrate how to hold grip dynamometer.

Step 2: Patient Instructions

- Provide instructions:
"I want you to hold the handle like this and squeeze as hard as you can."
- Demonstrate proper use of equipment, then give dynamometer to client.
- Provide instructions:
"Are you ready? Squeeze as hard as you can, then relax."
- Answer any questions, and correct any mistakes.

Pre-Test Observations

| | |
|----------------|--|
| Dominant Hand: | |
|----------------|--|

Step 3-6: Conduct Test

- Set handle on grip dynamometer to 5th position
- Place grip dynamometer in client's right hand
- Record pounds of force for repetition
- Repeat process for each hand through every step and position until protocol is complete or client declines to continue

| Trial 1 | | | Trial 2 | | | Trial 3 | | |
|---------|------|-------|---------|------|-------|---------|------|-------|
| | Left | Right | | Left | Right | | Left | Right |
| Pos. 5 | | | Pos. 5 | | | Pos. 5 | | |
| Pos. 4 | | | Pos. 4 | | | Pos. 4 | | |
| Pos. 3 | | | Pos. 3 | | | Pos. 3 | | |
| Pos. 2 | | | Pos. 2 | | | Pos. 2 | | |
| Pos. 1 | | | Pos. 1 | | | Pos. 1 | | |

| | |
|--------------------------|--|
| Maximum Stage Completed: | |
|--------------------------|--|

Notes/Observations:

Range of Motion – Group 2

(Non-calculated Observations – optional to main protocol, may be required by client specification)

Step 1: Measure and Record ROM Data

- Record range of motion metrics as required.

Wrist: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|----------------------------|------|-------|
| Extension (0 – 70): | | |
| Flexion (0 – 80): | | |
| Radial Deviation (0 – 20): | | |
| Ulnar Deviation (0 – 30): | | |

Hand: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|--|------|-------|
| Extension (open hand fully): | | |
| Flexion (full grasp): | | |
| Opposition (thumb touches tip of 5 th digit): | | |

Ankle: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|------------------------|------|-------|
| Dorsiflexion (0-20): | | |
| Plantarflexion (0-50): | | |
| Inversion (0-35): | | |
| Eversion (0-20): | | |

Cervical: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|--|------|-------|
| Extension (look at ceiling): | | |
| Flexion (chin touches chest): | | |
| Lateral Flexion (0 – 45): | | |
| Rotation (chin in line with shoulder): | | |

Fine Manipulation (Right)

Step 1: Set up test equipment

- Position Perdue Pegboard on flat surface approximately 30 inches from the ground.
- Situate pins, collars and washers [based on hand dominance]
- Position client in chair.

Step 2: Patient Instructions

- Provide instructions:

“Pick up one pin at a time with your right hand from the right-handed cup. Starting with the top hole, place each pin in the right-hand row.”

- Demonstrate activity (leave pin used for demonstration in hole).
- Provide instructions:

“Now you may insert a few pins for practice. If during the testing time you drop a pin, do not stop to pick it up. Simply continue by picking another pin out of the cup.”

- Allow subject to place 3-4 pins.
- Provide Instructions:

“Stop. Take out the practice pins and put them back [into the right hand cup].”

Step 3: Conduct Test

- Provide instructions:

“When I say 'Begin' place as many pins as possible in the right-hand row, starting with the top hole. Work as rapidly as you can until I say stop.”

- **[TIME FOR 30 SECONDS]**
- Stop activity.
- **[LEAVE PINS IN BOARD FOR NEXT TEST]**

of pins Inserted:

of pins dropped:

Notes/Observations:

Fine Manipulation (Left)

Step 1: Set up test equipment

- Use current pegboard setup.
- Leave in pins from previous activity

Step 2: Patient Instructions

- Provide instructions:

“Pick up one pin at a time with your left hand from the left-handed cup. Starting with the top hole, place each pin in the left-hand row.”

- Demonstrate activity (leave pin used for demonstration in hole).
- Provide instructions:

“Now you may insert a few pins for practice. If during the testing time you drop a pin, do not stop to pick it up. Simply continue by picking another pin out of the cup.”

- Allow subject to place 3-4 pins.
- Provide Instructions:

“Stop. Take out the practice pins and put them back [into the left hand cup].”

Step 3: Conduct Test

- Provide instructions:

“When I say 'Begin' place as many pins as possible in the right-hand row, starting with the top hole. Work as rapidly as you can until I say stop.”

- **[TIME FOR 30 SECONDS]**
- Stop activity.
- **[LEAVE PINS IN BOARD FOR NEXT TEST]**

of pins Inserted:

of pins dropped:

Notes/Observations:

Fine Manipulation (Both)

Step 1: Set up test equipment

- Use current pegboard setup.
- Leave in pins from previous activity

Step 2: Patient Instructions

- Provide instructions:

“Now you will use both hands at the same time. Pick up a pin from the right hand cup with your right hand, and at the same time pick up a pin from the left hand cup with your left hand. Then place the pins down the rows. Begin with the top hole of both rows.”

- Demonstrate activity.
- Replace the pins used for demonstration.
- Provide instructions:

“Now you may insert a few pins with both hands for practice.”

- Allow subject to place 3-4 pins.
- Provide Instructions:

“Stop. Take out the practice pins and put them back into the proper cups.”

Step 3: Conduct Test

- Provide instructions:

“When I say 'Begin' place as many pins as possible with both hands, starting with the top hole in both rows. Work as rapidly as you can until I say stop.”

- **[TIME FOR 30 SECONDS]**
- Stop activity.
- Have subject return the pins to the proper cups.

of pins Inserted:

of pins dropped:

Notes/Observations:

Fine Manipulation (Assembly)

Step 1: Set up test equipment

- Use current pegboard setup (with all pins removed).

Step 2: Patient Instructions

- Provide instructions:

“Pick up one pin from the right-hand cup with your right hand. While you are placing it in the top hole in the right-hand row, pick up a washer with your left hand. As soon as the pin has been placed, drop the washer over the pin.

While the washer is being placed over the pin with your left hand, pick up a collar with your right hand. While the collar is being dropped over the pin, pick up another washer with your left hand and drop it over the collar.

This completes the first 'assembly,' consisting of a pin, a washer, a collar and a washer.

While the final washer for the first assembly is being placed with your left hand, start the second assembly immediately by picking up another pin with your right hand. Place it in the next hole, drop a washer over it with your left hand, and so on, completing another assembly.

Now, take a moment to try a few practice assemblies.”

- Allow subject to make 2-3 practice assemblies.
- Provide Instructions:

“Stop. Take out the practice pins and put them back into the proper cups.”

Step 3: Conduct Test

- Provide instructions:

“When I say 'Begin' make as many assemblies as possible, beginning with the top hole. Work quickly until I say stop.”

- **[TIME FOR 60 SECONDS]**
- Stop activity.

| | |
|--|--|
| Combined total of all parts assembled: | |
|--|--|

| | |
|---------------------|--|
| # of parts dropped: | |
|---------------------|--|

| |
|---------------------|
| Notes/Observations: |
|---------------------|

Sitting

Instructions

- Record approximate total time sitting continuously
- Record subject difficulty with sitting (if any)
- Note whether subject has declined to sit throughout entire FCE

| | |
|-----------------------|--|
| Time Sitting (approx) | |
|-----------------------|--|

| | |
|---------------------------|--|
| Demonstrate difficulty: | |
| Decline to sit during FCE | |

Notes/Observations:

| |
|--|
| |
|--|

Range of Motion – Group 3

(Non-calculated Observations – optional to main protocol, may be required by client specification)

Step 1: Measure and Record ROM Data

- Record range of motion metrics as required.

Hip: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|-----------------------------|------|-------|
| Extension (0 – 30): | | |
| Flexion (0 – 125): | | |
| Adduction (0 – 45): | | |
| Abduction (0 – 30): | | |
| Internal Rotation (0 – 45): | | |
| External Rotation (0 – 45): | | |

Knee: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|---|------|-------|
| Extension (0-knee should fully straighten): | | |
| Flexion (0-135): | | |

Thoracic/Lumbar: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|--------------------------------|------|-------|
| Flexion (0-60): | | |
| Extension (reversal of curve): | | |
| Lateral Flexion (0-35): | | |
| Rotation (0-45): | | |

Squatting

Step 1: Set up test equipment

- Prepare Stopwatch

Step 2: Patient Instructions

- Provide instructions:

"This is a test to see how you squat. I am going to have you squat up and down for two minutes. You may move at whatever pace you choose."

Step 3: Conduct Test

- Provide instructions:

"When I say 'Begin' please start the activity. Continue with this task until I say stop or until you can no longer comfortably tolerate the activity."

- **[TIME FOR TWO MINUTES (120 Seconds)]**
- Count number of squats completed.
- Note the presence of cogwheeling.
- Record the amount of time engaged in activity.
- Note demonstrated difficulty with activity (if any)
- **Stop activity when time is complete**

| | |
|---|--|
| Time (seconds) subject engaged in activity: | |
| # of full squats completed: | |

| | |
|--|--|
| Demonstrated difficulty with activity: | |
| Cogwheeling Present: | |

Notes/Observations:

Range of Motion – Group 4

(Non-calculated Observations – optional to main protocol, may be required by client specification)

Step 1: Measure and Record ROM Data

- Record range of motion metrics as required.

Shoulder: Was range of motion test performed: Yes: _____ No: _____

| | Left | Right |
|---|------|-------|
| Extension (0 – 50): | | |
| Flexion (0 – 180): | | |
| Adduction (0–Arm to rest against side of body): | | |
| Abduction (0 – 180): | | |
| Internal Rotation (0 – 80): | | |
| External Rotation (0 – 90): | | |

Reaching

Step 1: Set up test equipment

Equipment Needed:

- Perdue Pegboard
- Stopwatch

Preparation

- Position Perdue Pegboard on a platform set at approximately shoulder height of the subject

Step 2: Patient Instructions

- Provide instructions:

“This is a test to see how you work with your arms raised.

Alternating hands, place pins in the board for five minutes. Once you have put all the pins in the board, remove each of the pins alternately with each hand.

If necessary, you may continue this task with just one arm if you are no longer able to tolerate the activity with your other arm.”

Step 3: Conduct Test

- Provide instructions:

“When I say 'Begin' please start the activity. Continue with this task until I say stop or until you can no longer comfortably tolerate the activity.”

- **[TIME FOR FIVE MINUTES (300 Seconds)]**
- Observe hand usage
- Record demonstrated difficulty for both the right and left hand.
- Record the amount of time engaged in activity.
- **Stop activity when time is complete**

| | | | |
|-------------------------|--|---|--|
| Right hand performance: | <input type="checkbox"/> used WITHOUT difficulty <input type="checkbox"/> used WITH difficulty <input type="checkbox"/> unused | Time (seconds) subject engaged in activity: | |
| Left hand performance: | <input type="checkbox"/> used WITHOUT difficulty <input type="checkbox"/> used WITH difficulty <input type="checkbox"/> unused | | |

Notes/Observations:

| |
|--|
| |
|--|

Kneeling

Step 1: Set up test equipment

Equipment Needed:

- Perdue Pegboard
- Stopwatch

Preparation

- Position Perdue Pegboard on a platform approximately 18" from the floor.

Step 2: Patient Instructions

- Provide instructions:

"This is a test to see how you kneel. You may kneel on one knee or two in any position that is comfortable. Without getting up, you will then use the pegboard.

With one hand, place pins in the board for one minute.

At the end of one minute, I will have you remove the pins for one minute."

Step 3: Conduct Test

- Provide instructions:

"When I say 'Begin' please start the activity. Continue with this task until I say stop or until you can no longer comfortably tolerate the activity."

- **[TIME FOR TWO MINUTES (120 Seconds)]**

- **After 1 minute (60 seconds)** Provide instructions: **(DO NOT STOP ACTIVITY)**

"Now, please begin to remove the pins."

- Record time engaged in test
- Record any demonstrated difficulty with activity.

| Time (seconds) subject engaged in activity: | | Demonstrated difficulty performing activity: | |
|---|--|--|--|
| Notes/Observations: | | | |

Crawling

Step 1: Set up test equipment

Equipment Needed:

- Perdue Pegboard
- Stopwatch

Preparation

- Position Perdue Pegboard on the floor

Step 2: Patient Instructions

- Provide instructions:

“This is a test to see how you crawl.

First, you will crawl ten feet forward and ten feet backward. This will allow me to see how you tolerate moving in this position.

Without getting up, you will then use the pegboard. With your one hand, place pins in the board for one minute.

At the end of one minute, I will have you remove the pins for one minute. Continue with this task until I say stop or until you can no longer comfortably tolerate the activity.”

Step 3: Conduct Test

- Provide instructions:

“When I say begin, please crawl forward than back.”

- Begin dynamic crawling activity and observe any difficulty
- Provide instructions: *(DO NOT STOP ACTIVITY)*

“Now, please begin placing pins in the board.”

- **[TIME FOR ONE MINUTE (60 Seconds)]**
- Provide instructions: *(DO NOT STOP ACTIVITY)*

“Now, please begin to remove the pins.”

- **[TIME FOR ONE MINUTE (60 Seconds)]**
- Record time engaged in test
- Record any demonstrated difficulty with activity.

| | |
|--|--|
| Was dynamic test completed: | |
| Difficulty with dynamic activity: | |

| | |
|---|--|
| Difficulty with static activity: | |
| Time engaged in static activity(to 120 seconds): | |

Notes/Observations:

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|--|
| |
|--|

Floor to Waist Lift w/ Rotation

Step 1: Set up test equipment

Preparation

- Set up a lifting platform with a height setting of 30 inches.
- Place the lifting container on the floor at a 90 degree angle to the lifting platform.
- Position all 5# weights near the lifting container.

Step 2: Patient Instructions

- Collect pre-test safety metrics.

| | | | |
|----------------------|--|--------------------------|--|
| Starting Heart Rate: | | Starting Blood Pressure: | |
|----------------------|--|--------------------------|--|

- Provide instructions:

“Please lift the container from the floor to the platform, and then back to the floor. You will need to move [the container] 90 [degrees] to and from the lifting platform.

Hold the lifting container and perform the lift however you are most comfortable.

Start with the box empty. I will add five pounds each lift. Please stop when you do not feel you can lift any more weight comfortably.”

Step 3: Conduct Test

- Provide instructions:

“We will now begin the test. Please stop when you do not feel you can lift any more weight comfortably.”

- Observe and record waist rotation and grip quality
- Note the presence of cogwheeling (if any).

Step 4: Post-test Observations

- Record post-test safety metrics.
- Record the number of repetitions lifted fully to the waist height platform.
- Record the number of repetitions lifted to knee height (if any) as partial reps.
- Remove the weights from the container.

| | |
|--|--|
| Grip Quality: ___ Good ___ Fair ___ Poor | Body Mechanics: ___ Good ___ Fair ___ Poor |
| Rotation amount at waist | Cogwheeling Present: |
| Ending heart rate: | Ending blood pressure: |
| # Full Reps Complete | # Partial Reps Complete |

Notes/Observations:

Waist to Shoulder (Overhead) w/ Rotation

Step 1: Set up test equipment

Preparation

- Position two platforms approximately two feet apart and at a right angle to each other.
- Adjust the lower platform to approximately waist height.
- Adjust the higher to approximately shoulder height.
- Place the empty container on the lower platform.

Step 2: Patient Instructions

- Collect pre-test safety metrics.

Starting Heart Rate:

Starting Blood Pressure:

- Provide instructions:

“Please lift the container from the lower platform to the higher platform, and then back to the lower platform. You will need to move 90 degrees to and from the lifting platforms.

Start with the box empty. I will add five pounds each lift. Hold the lifting container and perform the lift however you are most comfortable.”

Step 3: Conduct Test

- Provide instructions:

“We will now begin the test. Please stop when you do not feel you can lift any more weight comfortably.”

- Observe and record waist rotation and grip quality
- Note the presence of cogwheeling (if any).

Step 4: Post-test Observations

- Record post-test safety metrics.
- Record the number of repetitions lifted fully to the waist height platform.
- Record the number of repetitions lifted to knee height (if any) as partial reps.
- Remove the weights from the container.

| | |
|--|--|
| Grip Quality: ___ Good ___ Fair ___ Poor | Body Mechanics: ___ Good ___ Fair ___ Poor |
| Rotation amount at waist | Cogwheeling Present: |
| Ending heart rate: | Ending blood pressure: |
| # Full Reps Complete | # Partial Reps Complete |

Notes/Observations:

Knee/Chest Lift

Step 1: Set up test equipment

Preparation

- Position two lifting platforms next to each other.
- Adjust the lower platform to approximately knee height (15 inches).
- Adjust the higher platform to approximately chest height (50 inches).
- Place the empty container on the lower platform.

Step 2: Patient Instructions

- Collect pre-test safety metrics.

Starting Heart Rate:

Starting Blood Pressure:

- Provide instructions:

“Please lift the container from the lower platform to the higher platform, and then back to the lower platform.”

Start with the box empty. I will add five pounds each lift. Hold the lifting container and perform the lift however you are most comfortable.”

Step 3: Conduct Test

- Provide instructions:

“We will now begin the test. Please stop when you do not feel you can lift any more weight comfortably.”

- Observe and record waist rotation and grip quality
- Note the presence of cogwheeling (if any).

Step 4: Post-test Observations

- Record post-test safety metrics.
- Record the number of repetitions lifted fully to the waist height platform.
- Record the number of repetitions lifted to knee height (if any) as partial reps.
- Remove the weights from the container.

| | |
|--|--|
| Grip Quality: ___ Good ___ Fair ___ Poor | Body Mechanics: ___ Good ___ Fair ___ Poor |
| Rotation amount at waist | Cogwheeling Present: |
| Ending heart rate: | Ending blood pressure: |
| # Full Reps Complete | # Partial Reps Complete |

Notes/Observations:

Carrying

Step 1: Set up test equipment

Preparation

- Place the one-handed lifting container on the floor.
- Position disk weights near the lifting container.

Step 2: Patient Instructions

- Collect pre-test safety metrics.

| | |
|----------------------|--|
| Starting Heart Rate: | |
|----------------------|--|

| | |
|--------------------------|--|
| Starting Blood Pressure: | |
|--------------------------|--|

- Provide instructions:

“Please lift the container from the floor with whichever hand you prefer. You will walk ten feet forward, turn around and walk ten feet back.

You will walk back and forth like this five times so that you will walk a total of 100 feet with the container.

You will rest for twenty seconds after each repetition and I will add five pounds to the container.”

Step 3: Conduct Test

- Provide instructions:

“We will now begin the test. Please stop when you do not feel you can carry the container comfortably any more.”

Step 4: Post-test Observations

- Record post-test safety metrics.
- Record total number of pounds added during activity (with a full lift).
- Record total number repetitions completed during activity.
- Record highest repetition completed without observed/reported difficulty.
- Record hand used for carry.

| | | | |
|--|--|---|----------------------------|
| Total Weight Added: | | Hand used for Test: | ___Left ___ Right ___ Both |
| Total # of activity repetitions completed: | | # of repetitions completed WITHOUT difficulty: | |
| Ending heart rate: | | Ending blood pressure: | |

Notes/Observations:

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|--|
| |
|--|

Climbing

Step 1: Set up test equipment

- **IMPORTANT:** If using the lifting container as a step, position the container against a firm object so it will not slide.

Step 2: Patient Instructions

- Collect pre-test safety metrics.

Starting Heart Rate:

Starting Blood Pressure:

- Provide instructions:

"Please step up on the step with both feet, then step down.

Step up and down at a pace of approximately one step every two seconds.

Continue stepping for one minute or until you feel you need to stop."

Step 3: Conduct Test

- Provide instructions:

"When I say 'Begin' please start the activity. Continue stepping for one minute or until you feel you need to stop."

- **[TIME FOR ONE MINUTE (60 Seconds)]**
- Count number of steps completed.
- Record the amount of time engaged in activity.
- Record post-test safety metrics.

of steps completed:

Ending Heart Rate:

Time (seconds) subject
engaged in activity:

Notes/Observations:

Balancing

Step 1: Set up test equipment

- Hold ruler at shoulder height while client performs activity.
- Position client alongside yard stick.

Step 2: Patient Instructions

- Provide instructions:

“Begin with shoulder at 90 [degrees] flexion with feet at shoulder width apart. Reach forward along the yard stick as far as you can using any strategy you choose.

Do not touch the yard stick or any other surface. Do not take a step.

You will perform two practice trials and then three actual trials.”

- Hold yard stick in position
- Allow subject two practice trials.

Step 3: Conduct Test

- Provide instructions:

“Now, please begin the activity.”

- Record functional reach, in inches, for each repetition

| | |
|-----------------------------|--|
| # of repetitions completed: | |
|-----------------------------|--|

| | |
|---------------------------|--|
| Functional Reach (rep 1): | |
| Functional Reach (rep 2): | |
| Functional Reach (rep 3): | |

Notes/Observations:

| |
|--|
| |
|--|

Standing

Instructions

- Record approximate total time standing continuously
- Record subject difficulty with standing (if any)

| | |
|-----------------------|--|
| Time Sitting (approx) | |
|-----------------------|--|

| | |
|-------------------------|--|
| Demonstrate difficulty: | |
|-------------------------|--|

Notes/Observations:

| |
|--|
| |
|--|

Notes/Observations: