

# **Physical Functional Performance for Persons Using Wheelchairs (WC-PFP): Testing Dialog and Administration**

## **Preliminary Instructions**

This is a test to quantify your ability to perform tasks which are important for living independently. The way we quantify these tasks is by measuring the time it takes for you to do the task, the weight you carry, and sometimes both. These tests are ordered from easiest to most difficult. It is important for you to pace yourself so you can complete all the tasks. I will show you where you are on this data sheet to help you monitor your total progress. You may stop the test at any time. Because this is a timed test, verbal conversation needs to be held to a minimum. I will accompany you throughout the testing process and give you specific directions for each task. Please tell me if you do not understand the directions or if you would like them to be repeated.

## **Special Needs and Caution**

Do you have any health problems that we have not talked about? Please let me know if you would like a drink of water or to use the bathroom during the course of the test. As this test requires physical exertion, please stop the test if you feel tightness in your chest, pain radiating down your left arm, or pain in your lower jaw or at the base of your left scapula. If you need to rest, do not wait for me to offer, please request a rest break.

## **Reported Perceived Effort (RPE)**

I will monitor your perceived effort with the Borg 6-20 Scale of Perceived Exertions. During the test I want you to pay close attention to how hard you feel the work rate is. This feeling should be your total amount of exertion and fatigue, combining all sensations and feelings of physical stress, effort, and fatigue. Don't concern yourself with any one factor such as leg pain, shortness of breath or exercise intensity, but try to concentrate on your total, inner feeling of exertion. Don't underestimate or overestimate; just be as accurate as you can.

Your Physical Functional Performance score is based upon the amount of weight you carry and how fast you complete each task. Perform each task safely, working **AS FAST AS YOU CAN**. Do you have any questions before we begin?

## **Basic Level Tasks**

### **1. *LIFT AND TRANSFER PAN OF WEIGHT***

In this task I will fill a pan with as much weight as you think you can lift from your lap onto the counter next to the stove. Feel the weight of the various sand bags. Please tell me when you think the pan is filled with the maximum amount of weight you can carry from your lap to the counter next to the stove. (The examiner fills the pan with sand bags). Now I will place the pan on your lap. Place your hands at the side of the pan. At the word 'go' lift the pan from your lap onto the counter next to the stove. Then, set the pan down on the counter. Do you have any questions? Ready. Set. Go. If the subject cannot lift the pan to the counter, remove sand bags one by one until he/she can accomplish the task. If the subject can lift the weight, ask "Can your lift more weight?" If yes, add sand bags until they are unable to accomplish task. The maximum weight lifted is recorded. Time is started when the examiner says 'go', and stopped when the pan touches the counter. Record time.

### **2. *TRANSFER AND POUR FROM JUG INTO A CUP***

In this task you will carry a 1-gallon jug of water from the counter next to the sink to the counter next to the stove, and pour from the jug into a cup. The jug is now 4.0 kg. Test the weight. You may adjust the weight by pouring some water out. (The examiner stops the instructions and waits until subject has adjusted amount of

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water in the jug.) Start next to the counter. Put your hands by your sides. At the word 'go', pick up the jug, carry it to this counter, and pour up to, but not over, the fill line of the cup. Then, set the jug down on the counter. Do you have any questions? Ready. Set. Go. Timer is started when examiner says 'go', and stopped when the jug touches the counter. Record time. Weigh the jug of water and the cup, and record total weight.

### **3. PUT ON AND REMOVE A JACKET**

Participant is asked to remove loose or bulky clothing such as sweaters, transfer belt, and wristwatch. The examiner selects a jacket that is close to subject's size. The appropriate sized jacket, folded with sleeves together and on top, is placed on the bed or couch. The participant is at the foot of the bed with hands at sides. At the word 'go', pick up the jacket, put it on, pull the back down, pull the front together but do not zip, then remove the jacket. Replace it on the bed. Do you have any questions? Ready. Set. Go. (Examiner: When the jacket is on, say, "now remove it"). Timer is started when examiner says, 'go', and stopped when the person's second hand emerges from the second sleeve. Record time. Stop the task if the participant requires more than 2 minutes.

### **4. PUT A VELCRO-CLOSED STRAP OVER SHOE**

The participant is sitting with back against the chair and is handed a shoe-band with Velcro closure. To start the test, the band is in the participant's lap with the Velcro in a closed position. At the word 'go', put this Velcro strap around your shoe, attach the Velcro, and then sit back up into your chair. Start with the Velcro strap in your lap. Do you have any questions? Ready. Set. Go. The participant has to open the band, put the band over the shoe, close it, and sit back up. Time is started when examiner says 'go', and stopped when the subject's back is against the chair. Record time.

### **5. PICK UP 4 SCARVES FROM FLOOR**

Four brightly colored scarves are placed on the floor 1 in. apart. The participant is facing the scarves and sitting straight up. In this task you will pick up 4 scarves from the floor. Facing the scarves, begin with your back against the chair and your hands in your lap. At the word 'go', pick up the scarves one at a time, and return to the sitting position. Do you have any questions? Ready. Set. Go. Timer is started when examiner says 'go', and stopped when the participant is sitting back up in the chair. Record time.

## **Intermediate Level Tasks**

### **6. TRANSFER 5.9 KG (13 lbs) OF LAUNDRY FROM WASHER TO DRYER AND FROM DRYER TO COUNTER**

A washing machine will contain 3 (2 lb) sandbags and 1 (3 lb) sand bag and 6 articles of clothing. The total weight of the bags and dry clothing is 5.9 kg (13 lbs). Both the washer and dryer doors are closed. The participant is positioned in front of the washer.

Start in front of the washer. At the word 'go', open the washer door, and transfer the clothes and the sandbags from the washer to the dryer. Close the dryer door. Do you have any questions? Ready. Set. Go. Timer is started when examiner says 'go', and stopped when the dryer door is closed. Record time.

Start in front of the dryer. At the word 'go', open the dryer door, and transfer ONLY the clothes from the dryer to the laundry basket. Leave the sandbags in the dryer. Place the basket of clothes here. (Examiner: Indicate position where the basket goes on this counter). Close the dryer door. Do this as quickly as possible. You may move the basket closer to the dryer after the word 'go'. Do you have any questions? Ready. Set. Go. (Examiner: Place basket on the floor just behind subject.) Timer is started when examiner says 'go', and stopped when the basket fully hits the counter, or when the dryer door is closed, whichever comes last. Record time.

## **7. PLACE AND REMOVE A SPONGE FROM AN ADJUSTABLE SHELF**

The participant is positioned in front of the adjustable shelf, about 30 cm away from the wall, and pushes the shelf up with 2 fingers to the maximum possible height. Place this sponge on the shelf and let go. Reach up and remove the sponge. If you can go higher, adjust the shelf for another attempt. After the test, the examiner asks “Can you go higher?” If yes, the examiner moves the shelf up 1 cm and the test is repeated. If the subject could not do the task, the examiner moves the shelf down 1 cm and the test is repeated. Record the height of the shelf in cm, and record the participant’s sitting height.

### **Difficult Level Tasks**

## **8. CARRY GROCERIES 52.3 M**

Two to four canvas bags are available. Describe the distance to carry bags (52.3 m from grocery store to bus stop to house). The participant will follow you so you can show them the sidewalk ramps. In this task you will carry groceries from the store to the turn-around cone, and then to the door. You need to open the closed door and set the groceries on the counter. You may carry the bags any way you like. Knowing the distance, place the quantity of items you can safely carry into one or more of these grocery bags. (The examiner carries the bags to the designated start point for the subject.) At the word ‘go’, carry the bag(s) to the cone, turn around, and proceed to the house. Open the door, go to the kitchen, and put the groceries on the counter. Do you have any questions? Ready. Set. Go. The timer is started when examiner says ‘go’, and stopped when the last bag comes in contact with the counter. Record the time and any comments. Weigh bags and record weight for each bag separately. If the participant can’t lift the bag up to the counter, he/she may remove items one at a time until he/she can. Timer is running until the bag touches the counter.

## **9. PULL OPEN AND PASS THROUGH A DOOR.**

Using an outside double door, have the participant go through the door from the side where it is pulled toward the participant. In this task you will start behind this line (indicate line) and go inside. Do you have any questions? Ready. Set. Go. Timer is started when examiner says ‘go’, and stopped once the participant has gone through the door, and the door is free of the wheelchair or hand. Record time.

## **10. TRANSFER TO A STANDARD CHAIR**

The participant positions him/herself adjacent to a standard straight-back chair with arms. At the word ‘go’, transfer from the wheelchair to the standard chair. Do you have any questions? Ready. Set. Go. Time is started when examiner says ‘go’, and stopped when the subject is fully in the standard chair (subject’s back against the standard chair and legs fully transferred). Record time.

## **11. SIX-MINUTE WHEEL**

The participant covers the greatest distance possible in 6 minutes while negotiating the halls safely. At the word ‘go’, move at a pace that will allow you to cover the GREATEST distance you can in 6 minutes. You will cover several laps of this corridor. Minimize the time it takes to turn around at the end of each lap. This is a busy hallway, be careful of people walking and of going around obstacles. I will give you your time each minute. You may stop and rest at any time. Set your own pace. I will follow you. Do you have any questions? Ready. Set. Go. The examiner starts the timer and walks slightly behind the participant during the test. Time is given to the subject every minute. On the last lap, the examiner picks up the measuring wheel and checks to see that it is set at 0. At 5 minutes and 45 seconds, the examiner says “15 seconds.” Then the examiner counts down the last 5 seconds: “5, 4, 3, 2, 1 stop”. The examiner measures the portion of the last lap that was covered during the test. The number of laps is also recorded and the total distance covered in 6 minutes is recorded in

meters. A lap should not be shorter than 300 feet (91.44m) as the turn-around will shorten the distance that can be covered.

**RPE:**

Ask the participant to rate their perceived exertion of the whole test using the Borg 6-20 scale. (Examiner: show participant the scale)