# Hand Functional Testing

## Edited Video Transcript

### Hand Performance Assessments

Okay, so we looked at all these components of functions—strength, range of motion (ROM), edema, etc., okay, but that doesn't [include] performance. So always, we need to make certain to include some type of functional assessment. You know we looked, for example last semester, [at the] nine-hole peg [assessment]. It's a more functional assessment than we've had. Not the best, but not bad, right. This is the Purdue Pegboard Test. What you're going to ask a client to do is various manipulations of these little pegs.

### The Purdue Pegboard Test

“Zach, what I want you to do is with your right hand, fast as you can, pick up a peg, put it in the hole. Start at the top working down—just pegs. Ready? Yep, 30 seconds, and go! Thank you!” So with this test, you know you can use this to measure functional dexterity, and you can do this repeatedly and see improvement. “And stop, okay. The last one you got after all, right?” So we have thirteen pegs. You would do the same thing on his other side, then this test goes on beyond that. But how much slower if Zach had an injury on his left hand? Right, we'd expect it to be a little bit slower on average. You know, instead of thirteen, he may have nine if he had to. Be a pretty big difference, but still, you could measure improvement.

Next part of the test, both hands at the same time. “So, take up [two] pegs at the same time, putting them in, okay, yep—ready, set, go! Now, we're looking at that bimanual. You're doing great. And stop! All right, so now we have sixteen, or we have eight in each side, okay?”

Now, we have another functional level, okay. “What I'm going to have you do, Zach, with your right hand, you're going to pick up a peg at the same time as you're picking that [washer] up. I want you to pick up a washer, put the peg in, put the washer over. While you're putting the washer over with your left hand, grab a collar. Put that [washer] in while the collar is going. And you're grabbing a washer with your left hand, putting the washer on. So that's a completed assembly. You've got peg, washer, collar, washer, all right? Now, you have just a minute, all right, [to] repeat that. Ready, get set, go! Nope, no, you're doing it right. You're doing—you're following directions; you did focus. No, may be [on] top. And stop!” All right, so now we have one, two, three, four, five, six, seven, completed. And he started on the eighth, okay. So that's this example of a functional assessment, and again, you use these to track. Uh-huh, yeah, which is, it's kind of interesting and fun, all right.

Quick DASH—Disabilities of Arm, Shoulder, Hand

So, we also have self-report measures. These are used a great deal. You want to know how this injury impacts function. So, we have the Quick DASH—it's the quick disabilities of arm, shoulder, hand, and this goes through and asks the person to self-rate. You know, “How much difficulty would you have opening a tight or new jar?” And you do this [self-report], and you'd measure. So, your minimal—important difference in this case— you're looking at somewhere around nine. If you can improve nine to twelve points over all of these items, you can make that person's life better, all right. Questions about that?