



# OUTCOME ASSESSMENT TOOLS

## ADVISORY: PATIENT SPECIFIC FUNCTIONAL SCALE

### Overview

This clinical advisory will present an Outcome Assessment Tool (OAT) that can be used effectively in a wide variety of musculoskeletal conditions regardless of the patient's diagnosis. In this sense, the measure is "patient specific" and uses measures that the patient considers to be important to their own life and well-being.

### The Patient Specific Functional Scale (PSFS)

The PSFS was developed by Stratford et al <sup>1</sup> as a means of helping patients identify functional limitations that are important to them. Patients are asked to identify up to five important activities that they are having difficulty with or unable to perform as a result of their condition. These items are measured over time throughout treatment to provide a comparison of activity levels at a given point with respect to a pre-disability [or pre-injury] state<sup>2</sup>.

Because it is not disease or condition specific, the PSFS can be used in any clinical situation that affects a patient's activity. Demonstration and documentation of improvement in activities chosen by the patient is clearly more patient-centered. Keeping both the patient and the clinician focused on outcomes that matter to the patient is a good way to promote mutual engagement in the process and compliance with treatment. The PSFS has been found to be suitable for numerous conditions involving disability due to injury, disease, and/or pain. It has been used to evaluate outcomes of treatment for neck pain, back pain, whiplash, and disorders of both the upper and lower extremities.<sup>3 4 5 6 7 8 9</sup>

### The PSFS in Clinical Practice

The PSFS is efficient and easy to administer, easy to record in the medical record, produces valid and reliable measurements, demonstrates clinically meaningful change over time of a patient's specified important activity level, and is applicable to a large number of clinical presentations (e.g., conditions, diseases, problems, ages).

The PSFS is administered at the initial assessment, during the history taking, and prior to the assessment of any impairment measures or physical examination. This is to maximize the patient's focus on function ("I have difficulty walking downstairs") rather than impairment ("I can't flex my knee").

The PSFS includes a script that the clinician reads leading patients to identify up to five important activities that they are having difficulty with or are unable to perform (see PSFS attached). Patients are asked to rate, on an 11-point scale, the current level of difficulty

associated with each activity. The scale anchors are 0 ("unable to perform activity") to 10 ("able to perform activity at same level as before injury or problem"). The clinician's role is to read the script (instructions) to the patient and record the activities, the corresponding numerical difficulty ratings (0-10), and the assessment date.

*Scoring the PSFS:* The score is calculated as:

Total score = sum of the activity scores/number of activities

At subsequent reassessments, the clinician reads the follow-up script, which reminds the patients of the activities that they identified previously. Once again, the clinician records the ratings specified by each patient and the date. The form provides space for additional activities to be added. Because patients identify between one and five activities and this activity set is unique to each patient, the PSFS is not a comprehensive measure of disability and was not designed to compare disabilities among patients.<sup>10</sup>

*Minimum Significant Change:* The minimum score that represents a change in the patient's condition is:

Minimum detectable change (90%CI) for average score = 2 points

Minimum detectable change (90%CI) for single activity score = 3 points

---

<sup>1</sup>Stratford PW, Gill C, Westaway M, Binkley JM. Assessing disability and change on individual patients: a report of a patient-specific measure. *Physiotherapy Canada*. 1995;47:258-263.

<sup>2</sup>Hudak PL, Amadio PC, Bombardier C. Development of an upper extremity outcome measure: the DASH (disabilities of the arm, shoulder and hand) [corrected]. The Upper Extremity Collaborative Group (UECG). *Am J Ind Med*. 1996;29:602-8. doi:10.1002/(SICI)1097-0274(199606)29:6<602::AID-AJIM4>3.0.CO;2-L

<sup>3</sup>Chatman AB, Hyams SP, Neel JM, et al. The Patient-Specific Functional Scale: measurement properties in patients with knee dysfunction. *Phys Ther*. 1997;77:820-9.

<sup>4</sup>Cleland JA, Fritz JM, Whitman JM, et al. Predictors of short-term outcome in people with a clinical diagnosis of cervical radiculopathy. *Phys Ther*. 2007;87:1619-32. doi:10.2522/ptj.20060155.

<sup>5</sup>Nourbakhsh MR, Fearon FJ. The effect of oscillating-energy manual therapy on lateral epicondylitis: a randomized, placebo-control, double-blinded study. *J Hand Ther*. 2008;21:4-13.

<sup>6</sup>Stewart M, Maher CG, Refshauge KM, et al. Responsiveness of pain and disability measures for chronic whiplash. *Spine*. 2007;32:580-5. doi:10.1097/01.brs.0000256380.71056.6d

<sup>7</sup>Vitiello AL, Bonello R, Pollard H. The effectiveness of ENAR for the treatment of chronic neck pain in Australian adults: a preliminary single-blind, randomised controlled trial. *Chiropr Osteopat*. 2007;15:9. doi:10.1186/1746-1340-15-9

<sup>8</sup>Walker MJ. Manual physical therapy examination and intervention of a patient with radial wrist pain: a case report. *J Orthop Sports Phys Ther*. 2004;34:761-9

<sup>9</sup>Westaway MD, Stratford PW, Binkley JM. The patient-specific functional scale: validation of its use in persons with neck dysfunction. *J Orthop Sports Phys Ther*. 1998;27:331-8.

<sup>10</sup>Stabler, Mike. (1997, August 1). The Patient-Specific Functional Scale: measurement properties in patients with knee dysfunction *The Free Library*. (1997). Retrieved December 07, 2010 from

# The Patient-Specific Functional Scale

This useful questionnaire can be used to quantify activity limitation and measure functional outcome for patients with any orthopaedic condition.

**Clinician to read and fill in below:** Complete at the end of the history and prior to physical examination.

## Initial Assessment:

I am going to ask you to identify up to three important activities that you are unable to do or are having difficulty with as a result of your \_\_\_\_\_ problem. Today, are there any activities that you are unable to do or having difficulty with because of your \_\_\_\_\_ problem? (Clinician: show scale to patient and have the patient rate each activity).

## Follow-up Assessments:

When I assessed you on (state previous assessment date), you told me that you had difficulty with (read all activities from list at a time). Today, do you still have difficulty with: (read and have patient score each item in the list)?

## Patient-specific activity scoring scheme (Point to one number):

|                            |   |   |   |   |   |   |   |   |   |                                                                        |
|----------------------------|---|---|---|---|---|---|---|---|---|------------------------------------------------------------------------|
| 0                          | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10                                                                     |
| Unable to perform activity |   |   |   |   |   |   |   |   |   | Able to perform activity at the same level as before injury or problem |

## (Date and Score)

| Activity   | Initial |  |  |  |  |  |
|------------|---------|--|--|--|--|--|
| 1.         |         |  |  |  |  |  |
| 2.         |         |  |  |  |  |  |
| 3.         |         |  |  |  |  |  |
| 4.         |         |  |  |  |  |  |
| 5.         |         |  |  |  |  |  |
| Additional |         |  |  |  |  |  |
| Additional |         |  |  |  |  |  |

Total score = sum of the activity scores/number of activities

Minimum detectable change (90%CI) for average score = 2 points

Minimum detectable change (90%CI) for single activity score = 3 points

PSFS developed by: Stratford, P., Gill, C., Westaway, M., & Binkley, J. (1995). Assessing disability and change on individual patients: a report of a patient specific measure. Physiotherapy Canada, 47, 258-263.

Reproduced with the permission of the authors.