

Long COVID Tests & Measures



Long COVID can initiate or exacerbate a wide variety of health conditions, [some of which can be difficult to detect](#). This makes it essential to assess different aspects of a patient's overall health and well-being and refer to the appropriate type of provider when indicated.

APTA has identified the tests and measures below that PT clinicians can use as appropriate for patients with long COVID. These tools have either been cited in long COVID rehabilitation literature or are in use at long COVID clinics in the United States.

Although these tools measure many different target areas, it is crucial to understand that patients with long COVID may not be able to tolerate multiple tests at one time. **It is also important to note that some of these tests may require permission or license for clinical use.** See the test summary or tool website for specifics.

[APTA's Long COVID Clinical Summary explains the condition in more detail.](#)

Aerobic Capacity/Endurance

Fitness testing demonstrated lower VO₂max in individuals after symptomatic COVID-19 infection compared with their asymptomatic and uninfected peers ([Crameri, 2022](#)).

Tool	Description
Six-Minute Walk Test or Two-Minute Walk Test	Clinician records ambulation distance.
Five Times Sit-to-Stand Test	Clinician records time. (This test is also a predictor of fall risk.)
30-Second Chair Stand Test	Clinician records number of stands from seated position in chair.

Cardiac Response

People with long COVID can experience a wide variety of cardiovascular impairments including myocardial inflammation or infarction, dysfunction, arrhythmia, and postural orthostatic tachycardia syndrome, also called POTS ([Raman, 2022](#)).

Tool	Description
Vital Signs (See APTA Learning Center Course)	Clinician measures heart rate, blood pressure, respiratory rate, oxygen saturation, etc.
10-Minute Passive Stand Test	Clinician measures heart rate and blood pressure at intervals.

Cognition/Brain Fog

Approximately 20% of people living with Long COVID struggle with cognitive impairment ([Ceban, 2022](#)).

Tool	Description
Saint Louis University Mental Status Exam	Clinician completes 11-item assessment.
Montreal Cognitive Assessment (Cost associated with required training and certification)	Clinician completes 11-item assessment.

Fatigue

About one-third of people with long COVID report significant fatigue ([Ceban, 2022](#)). Some people also experience post-exertional malaise or post-exertional symptom exacerbation ([Twomey, 2022](#)).

Tool	Description
Screen for Post-Exertional Malaise	Patient completes 10-item self-report questionnaire.
Fatigue Severity Scale	Patient completes 9-item self-report questionnaire.
DePaul Symptom Questionnaires (Versions available for PEM and COVID, available through DePaul College of Science and Health)	Patient self-reports symptom frequency and severity.
Modified Fatigue Impact Scale (Tool included in fatigue and Multiple Sclerosis CPG)	Patient completes 21-item self-report questionnaire.

Mental Health

A recent study showed that more than a third of people with long COVID experience post-traumatic stress disorder, anxiety and/or depression ([Houben-Wilke, 2022](#)).

Tool	Description
Patient Health Questionnaire	Patient completes 9-item self-report questionnaire.
Hospital Anxiety and Depression Scale (Available soon on APTA website)	Patient completes 14-item self-report questionnaire.
Perceived Stress Scale	Patient completes 10-item self-report.

Pain

A literature review of post-COVID complications identified the most common pain syndromes as chronic pain, chest pain, headache, and testicular pain ([Fiala, 2022](#)).

Tool	Description
PROMIS: Pain Interference (Short-form versions available)	Patient completes self-report of physical, mental, and social limitations caused by pain.

Quality of Life/Function

People with long COVID have reported persistent problems with pain, mobility, usual activities, and mental health ([Shah, 2021](#)).

Tool	Description
EuroQol 5 Dimension 5 Level	Patient completes self-report on limitations in mobility, self-care, usual activities, pain, and mental health.
PROMIS: Global-10	Patient completes 10-item self-report questionnaire that includes pain and function.
Quality of Life in Neurological Disorders	Patient completes self-report on limitations in mental health, cognition, sleep, function, activities, and communication.

Respiration/Ventilation

A 2022 study showed a high incidence of breathing dysregulation among people with Long COVID ([Voorthuizen, 2022](#)).

Tool	Description
Vital Signs (See APTA Learning Center Course)	Clinician measures heart rate, blood pressure, respiratory rate, oxygen saturation, etc.
Borg Rating of Perceived Exertion; Modified Borg Dyspnea Scale	Clinician conducts subjective rating of exertion.
Modified Medical Research Council Dyspnea Scale	Clinician assesses dyspnea severity.

Sleep Disorders

People with Long COVID have decreased total and deep sleep times compared with matched controls ([Mekhaelm, 2022](#)).

Tool	Description
Insomnia Severity Index (Available soon on APTA website)	Patient completes 7-item self-report questionnaire.
PROMIS: Sleep Disturbance	Patient completes 8-item self-report questionnaire.

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