MANAGE-PD: A TOOL FOR MAKING INFORMED DECISIONS TO AID TIMELY MANAGEMENT OF PARKINSON'S DISEASE

Parkinson's Foundation | **abbvie**

Patient's ID: _____   Patient's Age: _____

Patient's Initials: _____   Date: _____

MANAGE-PD OVERVIEW

MANAGE-PD is a validated instrument designed to support healthcare providers in the identification of patients with Parkinson's Disease uncontrolled on oral medications. The tool can help determine which patients may be adequately controlled on their current treatment regimen or may require change, including evaluation for device-aided therapy.

The questionnaire consists of two sections and should be answered based on symptoms during the **last month.** Definitions to terms can be found on page 3. **Please refer to ManagePD.com for additional information.**

PATIENTS WILL BE CATEGORIZED INTO THREE CATEGORIES BASED ON YOUR INPUT

1 Category 1

Patient may be controlled on the **current treatment regimen.**

Continue monitoring the patient based on best medical treatment/clinical guidelines and your professional judgment.

2 Category 2

Patient may not be controlled on the current treatment regimen. Additional benefits may be obtained from **further treatment optimization and device-aided therapies may not be needed at this time.**

However, use your patient's medical history, treatment preference, and your best medical judgment for treatment recommendation.

3 Category 3

Patient may not be controlled on the current treatment regimen and may **benefit from device-aided therapy.**

It is suggested that you evaluate eligibility for device-aided therapy based on patient's medical history, treatment preference, and your best medical judgment for treatment recommendation.

SECTION 1

Section 1 is a composed of five questions to assess if your patient is adequately controlled with their current treatment regimen. Your responses will determine if you should proceed to Section 2 for a more detailed assessment.

Please start by completing the five questions (**YES or NO**). If the answer is **NO** to **ALL** questions in Section 1, then the patient is classified as **Category 1** (please see above for explanation of this category). If the answer is **YES** to **ANY** question in Section 1, **please follow the guidance in each case.**

Please check the appropiate answer for each question ✂

Question	≤3 doses		4 doses		≥5 doses	
1. How many daily **doses of levodopa** does the patient report taking?	☐ ≤3 doses		☐ 4 doses		☐ ≥5 doses	
2. Is the patient experiencing a **total of ≥ 2 hours** daily with "off" time?	☐ NO	☐ YES	☐ NO	☐ YES	☐ NO	☐ YES
3. Is the patient experiencing **unpredictable** fluctuations of motor symptoms with current oral treatment?	☐ NO	☐ YES	☐ NO	☐ YES	☐ NO	☐ YES
4. Is the patient experiencing **troublesome** dyskinesia (involuntary, choreic movements) with current oral treatment?	☐ NO	☐ YES	☐ NO	☐ YES	☐ NO	☐ YES
5. Is the patient presently limited in performing **one or more** activities of daily living (eg, writing, walking, bathing, dressing, eating, toileting, etc.)?	☐ NO	☐ YES	☐ NO	☐ YES	☐ NO	☐ YES
Output: Section 1	**Category 1:** "No" to all questions and ≤ 4 levodopa doses	**Category 2:** Yes to any questions and taking ≥ 3 levdopa doses	**Category 1:** "No" to all questions and ≤ 4 levodopa doses	Patient may not be controlled on current treatment regimen **Proceed to Section 2**	Patient may not be controlled on current treatment regimen **Proceed to Section 2**	

This section assesses the frequency and severity of several symptoms, including key motor, non-motor symptoms, adverse events and functional impact.
Output of section 2 will help determine if your patient may benefit from further treatment optimization or may be considered for device-aided therapy.

SECTION 2 SCORING:
- **Frequency score: 0**= Never, **1**= Rarely (≤1/week), **2**= Sometimes (several times per week), **3**= Most/All the time (daily).
- **Severity score: 1**= Mild, **2**= Moderate, **3**= Severe.
- **Level of independence** (Activities of Daily Living): **0**= Independent in all activities, **1**= Independent in most activities, **2**= Needs assistance/dependent in some activities, **3**= Totally dependent in all activities.
- **Falls per month: 0**= No falls, **1**= 1 fall, **2**= 2 or more falls.

The **TOTAL SCORE = FREQUENCY X SEVERITY** for each question should be obtained by the multiplication of frequency and severity (frequency X severity).

RESULTS: The highest category of any individual question is used to determine the overall patient categorization.

Please note: Scores for "**Dystonia with Pain**" and "**Impulse Control Disorder**" do not impacct the outcome of the instrument and are included for your considerations

Please check the approriate answer for each question ✗

MOTOR FLUCTUATIONS If answer to Q3 on SECTION 1 is NO, please skip this question

How often are the **motor fluctuations** unpredictable? — 0 Never | 1 Rarely | 2 Sometimes | 3 Most/All the time — _____

How severe/troublesome are the **motor fluctuations**? — 1 Mild | 2 Moderate | 3 Severe — _____

TOTAL SCORE (frequency X severity) _____

FREEZING OF GAIT

How often is the patient experiencing **freezing of gait** during "off" time? — 0 Never | 1 Rarely | 2 Sometimes | 3 Most/All the time — _____

How severe/troublesome are the episodes of freezing of gait during "off" time? — 1 Mild | 2 Moderate | 3 Severe — _____

TOTAL SCORE (frequency X severity) _____

NON-MOTOR SYMPTOMS

How often is the patient experiencing **non-motor "off" symptoms** (eg, anxiety, pain, mood changes, sleep, etc.)? — 0 Never | 1 Rarely | 2 Sometimes | 3 Most/All the time — _____

How severe/troublesome are the non-motor "off" symptoms? — 1 Mild | 2 Moderate | 3 Severe — _____

TOTAL SCORE (frequency X severity) _____

HALLUCINATION/PSYCHOSIS

How often does the patient experience **hallucination/psychosis** without insight? — 0 Never | 1 Rarely | 2 Sometimes | 3 Most/All the time — _____

How severe/troublesome are the episodes of **hallucination/psychosis** without insight? — 1 Mild | 2 Moderate | 3 Severe — _____

TOTAL SCORE (frequency X severity) _____

IF TOTAL SCORE IS 3 OR MORE TO ANY OF THESE QUESTIONS = CATEGORY 3. ANYTHING ELSE CATEGORY 2

OFF - TIME If answer to Q2 on SECTION 1 is NO, please skip this question

How severe/troublesome are the **"off" time** periods in the patient with current oral treatment? — 1 Mild | 2 Moderate | 3 Severe — **TOTAL SCORE** _____

DYSKINESIA If answer to Q4 on SECTION 1 is NO, please skip this question

How often is the patient experiencing troublesome **dyskinesia?** — 0 Never | 1 Rarely | 2 Sometimes | 3 Most/All the time — **TOTAL SCORE** _____

ADL IMPAIRMENT If answer to Q5 on SECTION 1 is NO, please skip this question

What level of assistance or support does the patient need in performing one or more activities of daily living (eg, walking, bathing, dressing, eating, toileting, etc.)? — 0 Independent in all activities | 1 Independent in most activities | 2 Needs assistance/dependent in some activities | 3 Totally dependent in all activities — **TOTAL SCORE** _____

IF TOTAL SCORE IS 2 OR 3 TO ANY OF THESE QUESTIONS = CATEGORY 3. ANYTHING ELSE CATEGORY 2

FALLS

How often did the patient **fall** in the past month? — 0 No falls | 1 1 fall | 2 2 or more falls — **TOTAL SCORE** _____

IF SCORE 1 OR 2 = CATEGORY 3. ANYTHING ELSE CATEGORY 2

DYSTONIA

How often is the patient experiencing **dystonia** with pain? — 0 Never | 1 Rarely | 2 Sometimes | 3 Most/All the time — _____

How severe/troublesome is the **dystonia** with pain? — 1 Mild | 2 Moderate | 3 Severe — _____

TOTAL SCORE (frequency X severity) _____

IMPULSE CONTROL DISORDER

How often is the patient experiencing **impulse control disorder?** — 0 Never | 1 Rarely | 2 Sometimes | 3 Most/All the time — _____

How severe/troublesome is the impairment due to ICD? — 1 Mild | 2 Moderate | 3 Severe — _____

TOTAL SCORE (frequency X severity) _____

FOR INFORMATIVE PURPOSES

TERM	DEFINITION
"**Off**" Time	Parkinson's symptoms become more noticeable (eg, movement becomes more difficult, slow, or stiff) often after an initial benefit from treatment.[1]
Unpredictable Fluctuations of Motor Symptoms	Sudden and unpredictable recurrence of symptoms (eg, slowness, stiffness) generally unrelated to timing of next dose (also called "on-off" fluctuations).[2]
Troublesome Dyskinesia	Involuntary body movements caused by dopaminergic medications used to treat Parkinson's that interfere with activities of daily living (troublesome) and can appear as jerking, fidgeting, twisting or turning movements.[1,2]
Dystonia With Pain	Sustained or intermittent uncontrolled muscle contractions causing abnormal, often repetitive, movements or postures, or both.[3]
Freezing of Gait	Brief, episodic absence or marked reduction of forward progression of the feet despite the intention to walk.[4]
Non-Motor "**Off**" Symptoms	Refers to non-motor symptoms that are exclusively present or worsen during motor "off" periods. Symptoms include, but are not limited to mood disorders, cognitive changes, hallucinations, autonomic disorders (eg, orthostatic hypotension, sweating), sleep disorders, GI disorders (eg, constipation, bloating), and urinary disorders.[5,6,7]
Impulse Control Disorders	Involve behaviors performed repetitively, excessively, and compulsively. Major symptoms include pathological gambling (PG), hypersexuality (HS), compulsive buying/shopping (CB), and binge eating (BE).[8]
Hallucination/Psychosis Without Insight	Symptoms of psychosis include hallucinations — most commonly visual but may also include other modalities (eg, auditory, tactile, or olfactory). The recognition that some experiences are hallucinations is lost as Parkinson's disease advances.[9]

REFERENCES

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