



Implementing UDS4: NPS, MBI and More

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Current approach in UDS3

- Capture NPS on:
 - NPI-Q
 - GDS
 - B9
- “Psychiatric” contribution to cognition on D1

Proposed approach in UDS4

- Continue as now with NPI-Q, GDS, B9
- Focus on participants without dementia
- Update D1:
 - MBI v. NPS not MBI v. DSM-5 disorder
 - Contribution of DSM-5 disorders to clinical picture

Case Study

72yo retired nurse referred to ADC. In good health without significant co-morbidities. She has no psychiatric or substance use history.

In the last two years has began complaining of memory loss and trouble keeping track of appointments. Family sought help when she got lost while driving. She has a POSITIVE Florbetapir (amyloid) PET scan.

Diagnosis: *Amnestic MCI due to AD.*

Screen shots

Section 1 – Level of impairment – *Unimpaired cognition, SCD, MCI/MBI, or dementia*

2. Does the participant have:

1. Unimpaired cognition (*for example, cognitive performance and functional status (i.e., CDR) judged to be unimpaired*)?

AND

2. Unimpaired behavior (*i.e., the participant does not exhibit behavior sufficient to diagnose MBI (see MBI section starting at Q7) or dementia due to FTLD or LBD and/or FTLD behavior and language domains=0*)?

₀ No (SKIP TO QUESTION 3) ₁ Yes (CONTINUE TO QUESTION 2a)

*Note: For those with longstanding cognitive impairment that does not represent a decline from their usual functioning, consider checking **Question 6a** for a diagnosis of “Cognitively Impaired, Not MCI/dementia”.*

3. Does the participant meet criteria for dementia?

₀ No (CONTINUE TO QUESTION 4) ₁ Yes (SKIP TO QUESTION 6a)

Case Study

72yo retired nurse referred to ADRC. In good health without significant co-morbidities. She has no psychiatric or substance use history.

In the last two years has began complaining of memory loss and trouble keeping track of appointments. Family sought help when she got lost while driving. She has a POSITIVE Florbetapir (amyloid) PET scan.

Diagnosis: *Amnestic MCI due to AD.*

Over the last 3-4 years she has had notable changes in mood and behavior that have fluctuated but are getting worse. She currently has anxiety (NPI-Q=2), irritability (NPI-Q=2), loss of interest & social withdrawal (GDS=5). As a result, she stays home much of the time and gets angry when her husband encourages her to join him in activities. A few times in the last month she yelled at him about minor issues and threatened to divorce him.

Mild Behavioral Impairment (MBI) core clinical criteria

- Participant, co-participant, or clinician identifies a change in the participant’s affect, motivation, thought content, behavior, or personality that is clearly different from their usual affect, motivation, thought content, behavior, or personality
- Symptoms have been present at least intermittently for the last six months or longer
- Late onset (i.e., age > ~50, unless early onset neurodegenerative syndrome is suspected)
- Not explained by delirium, other psychiatric disorder by DSM criteria (including recent onset, longstanding or recurrence of longstanding disorder).
- Symptoms interfere with at least one of these: work, interpersonal relationships, social activities
- Largely preserved independence in other functional abilities (no change from prior manner/level of functioning, or uses minimal aids or assistance)

7. Does the participant meet criteria for MBI? *(If participant meets criteria for dementia an MBI diagnosis is excluded.)*

0 No (SKIP TO QUESTION 8)

1 Yes (CONTINUE TO QUESTION 7a)

MBI affected domains — Select one or more affected domains

(Note: If “Yes” is indicated in any domain below, the participant should have a corresponding symptom checked on Form B9 — Clinician Judgment of Symptoms, either from among the specific symptoms denoted there, or in “other”)

		No	Yes
7a.	Motivation <i>(e.g., apathy symptoms on Form B9)</i>	<input type="checkbox"/> 0	<input checked="" type="checkbox"/> 1
7b.	Affective regulation <i>(e.g., anxiety, irritability, depression, and/or euphoria symptoms on Form B9)</i>	<input type="checkbox"/> 0	<input checked="" type="checkbox"/> 1
7c.	Impulse control <i>(e.g., obsessions/compulsions, personality change, and/or substance abuse symptoms on Form B9)</i>	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> 1
7d.	Social appropriateness <i>(e.g., disinhibition, personality change, and/or loss of empathy symptoms on Form B9)</i>	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> 1
7e.	Thought content/perception <i>(e.g., delusions and/or hallucinations on Form B9)</i>	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> 1

Case Study alternative 1

72yo retired nurse referred to ADRC. In good health without significant co-morbidities. She has no psychiatric or substance use history.

In the last two years has began complaining of memory loss and trouble keeping track of appointments. Family sought help when she got lost while driving. She has a POSITIVE Florbetapir (amyloid) PET scan.

Diagnosis: *Amnestic MCI due to AD.*

Participant currently noted to have anxiety (NPI-Q=2), irritability (NPI-Q=2), loss of interest & social withdrawal (GDS=5). These symptoms are not troubling and are not affecting the life of participant or her family.

Mild Behavioral Impairment (MBI) core clinical criteria

- Participant, co-participant, or clinician identifies a change in the participant’s affect, motivation, thought content, behavior, or personality that is clearly different from their usual affect, motivation, thought content, behavior, or personality
- Symptoms have been present at least intermittently for the last six months or longer
- Late onset (i.e., age > ~50, unless early onset neurodegenerative syndrome is suspected)
- Not explained by delirium, other psychiatric disorder by DSM criteria (including recent onset, longstanding or recurrence of longstanding disorder).
- Symptoms interfere with at least one of these: work, interpersonal relationships, social activities
- Largely preserved independence in other functional abilities (no change from prior manner/level of functioning, or uses minimal aids or assistance)

7. Does the participant meet criteria for MBI? (If participant meets criteria for dementia an MBI diagnosis is excluded.)

0 No (SKIP TO QUESTION 8)
 1 Yes (CONTINUE TO QUESTION 7a)

Behaviorally Impaired, not MBI/dementia

Check all applicable criteria for behaviorally impaired, not MBI/dementia in Q8. Indicate suspected etiology below in Section 3. (Note: If recent onset, indicate the behavioral symptom(s) in Form B9 – Clinician Judgment of Symptoms.)

8. 1 Recent onset psychiatric syndrome meeting DSM criteria
 1 Longstanding psychotic disorder

If any of the criteria in Q8 are met, choose 1=Yes for Q8b.

8b. Does the participant meet the criteria for behaviorally impaired, not MBI/dementia?

0 No
 1 Yes

Case Study alternative 2

72yo retired nurse referred to ADRC. In good health without significant co-morbidities. She has no psychiatric or substance use history.

In the last two years has began complaining of memory loss and trouble keeping track of appointments. Family sought help when she got lost while driving. She has a POSITIVE Florbetapir (amyloid) PET scan.

Diagnosis: *Amnestic MCI due to AD.*

Participant has a history of depression with onset in her late 40s. She has been under-regular psychiatric care and has been doing well.

GDS=5 and NPI-Q dysphoria=1. Her concentration is not very good, and she struggles to make decisions when her mood is low.

Section 3 – Primary or contributing non-neurodegenerative or non-CVD conditions

The purpose of Section 3 is to identify conditions or disorders that are present and potentially contributing to the clinical syndrome. This must be filled out for those with cognitive or behavioral impairment (i.e., MCI, MBI, dementia, etc.) Indicate whether a given condition is a primary, contributing, or non-contributing cause of the observed impairment, based on the clinician's best judgment.

Select one or more syndrome(s) as **Present**; all others will default to **Absent** in the NACC database. *Only one diagnosis should be selected as 1 = Primary.*

*In order to diagnose a disorder, **DSM-5-TR criteria require** that symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning. For more guidance see the **UDS Coding Guidebook, Form D1a**.

Condition		Present		Primary	Contributing	Non-contributing
11.	Major depressive disorder (DSM-5-TR criteria*)	<input checked="" type="checkbox"/> ₁	11a.	<input type="checkbox"/> ₁	<input checked="" type="checkbox"/> ₂	<input type="checkbox"/> ₃
12.	Other specified depressive disorder (DSM-5-TR criteria*)	<input type="checkbox"/> ₁	12a.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
13.	Bipolar disorder (DSM-5-TR criteria*)	<input type="checkbox"/> ₁	13a.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
14.	Schizophrenia or other psychotic disorder (DSM-5-TR criteria*)	<input type="checkbox"/> ₁	14a.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃

Section 3 – Primary or contributing non-degenerative or non-CVD conditions

continued...

Condition		Present		Primary	Contributing	Non-contributing
15.	Anxiety disorder (DSM-5-TR criteria*)	<input type="checkbox"/> ₁	15a.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
If present, (SPECIFY) (check all that apply):						
15b.	<input type="checkbox"/> ₁ Generalized anxiety disorder					
15c.	<input type="checkbox"/> ₁ Panic disorder					
15d.	<input type="checkbox"/> ₁ Obsessive-compulsive disorder (OCD)					
15e.	<input type="checkbox"/> ₁ Other (SPECIFY) : _____					
16.	Post-traumatic stress disorder (PTSD)(DSM-5-TR criteria*)	<input type="checkbox"/> ₁	16a.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
17.	Developmental neuropsychiatric disorders (e.g., autism spectrum disorder (ASD), attention-deficit hyperactivity disorder (ADHD), dyslexia)	<input type="checkbox"/> ₁	17a.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
18.	Other psychiatric disorder (DSM-5-TR criteria*)	<input type="checkbox"/> ₁	18a.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
18b.	If present, (SPECIFY) : _____					
19.	Delirium (DSM-5-TR criteria*)	<input type="checkbox"/> ₁	19a.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃

Proposed approach in UDS4

- Continue as now with NPI-Q, GDS, B9
- In the absence of dementia update D1:
 - MBI v. NPS not MBI v. DSM-5 disorder
 - Contribution of DSM-5 defined disorders

Discussion

