



clsa élcv

Canadian Longitudinal Study on Aging
Étude longitudinale canadienne sur le vieillissement

Supplementary Appendix 5

- Medical Assessment

(Canadian Longitudinal Study on Aging (CLSA) Memory Study)

v1.2, 2022 October 20th

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Sociodemographic Information (SDC)

Overview	<p>These questions obtain basic sociodemographic information from the participant. They function as an interview icebreaker and, by comparison with the most recent response for each question from the main CLSA interviews when available, a check on their remote memory.</p> <p>Clinicians are expected to complete all items in this module. However, they have flexibility in determining the order in which the questions are asked and the specific wording used for each question.</p>
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SDC_1	SDC_AGEBL_MSP
Participant's age in years – <u>based on date of birth provided at CLSA Baseline</u>	
CLINICIAN NOTE: If there is no response shown for this item, the participant did not answer this question at baseline.	
NUMBER	[CALCULATED BY PINE USING BASELINE CLSA DATA – AGE_DOB_COM]

SDC_2	SDC_AGE_MSP
[ALWAYS ASK]	
What is the participant's self-reported age in years?	
NB_SP	Age _____ [MASK: MIN=53, MAX=94]
DK_NA	8 [DO NOT READ] Don't know / No answer
REFUSED	9 [DO NOT READ] Refused

SDC_3	SDC_SEXBL_MSP
Participant's sex – <u>self-reported at CLSA baseline</u>	
CLINICIAN NOTE: If there is no response shown for this item, the participant did not answer this question at baseline.	
GENDER	[IMPUTED BY PINE USING BASELINE CLSA DATA – SEX_ASK_COM. IF EMPTY, ANSWER 'DATA UNAVAILABLE']

SDC_4	SDC_GENDER_MSP	
[ALWAYS ASK]		
What is the participant's self-reported gender identity?		
CODE ONLY ONE RESPONSE		
MALE	1	Male
FEMALE	2	Female
TRANSMAN	3	Transgender Man/Transman
TRANSWOMAN	4	Transgender Women/Transwoman
GENDERQUEER	5	Genderqueer
OTSP	7	Other (please specify: _____)
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

SDC_5	SDC_EDU4BL_MSP	
[ALWAYS ASK]		
Participant's education – <u>self-reported</u> at CLSA Baseline		
CLINICIAN NOTE: If there is no response shown for this item, the participant did not answer this question at baseline.		
EDU4	<p>_____ [IMPUTED BY PINE USING BASELINE CLSA DATA]</p> <p>1 = Less than secondary school graduation – code if: ED_ELHS_COM = (1, 2, 3) and ED_HSGR_COM = 2 and ED_OTED_COM = 2</p> <p>2 = Secondary school graduation, no post-secondary secondary education – code if: ED_HSGR_COM = 1 and ED_OTED_COM = 2</p> <p>3 = Some post-secondary education – code if: ED_HIGH_COM = 01</p> <p>4 = Post-secondary degree/diploma – code if: 02 ≤ ED_HIGH_COM ≤ 06 or ED_HIGH_COM = 97</p> <p>9 = At least one required question as not answered – code if: ED_ELHS_COM = (8,9, EMPTY) or ED_HSGR_COM = (8,9, EMPTY) or ED_OTED_COM = (7,8,9, EMPTY) or ED_HIGH_COM = (98,99, EMPTY)]</p>	

SDC_6	SDC_EDU_MSP	
[ALWAYS ASK]		
What is the participant's self-reported highest level of education?		
CODE ONLY ONE RESPONSE		
LESS_SEC	1	Less than secondary school graduation
SEC	2	Secondary school graduation, no post-secondary education
SOME_POST	3	Some post-secondary education
POST_SEC	4	Post-secondary degree/diploma
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

SDC_7	SDC_LBF_MSP	
[ALWAYS ASK]		
What is the participant's self-reported employment status?		
CODE ONLY ONE RESPONSE		
COM_RET	1	Completely retired
PAR_RET	2	Partly retired
NOT_RET_WORK	3	Not retired and currently working
NOT_RET_NO_WORK	4	Not retired and not currently working
NEVER_WORKED	5	Never held a paid job
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

SDC_8	SDC_OCCBL_MSP
[ASK IF SDC_LBF_MSP ≠ NEVER_WORKED]	
Type of job participant did for the longest period of time – <u>self-reported at CLSA Baseline</u>	
CLINICIAN NOTE: Please note that this is not the “main occupation” of the participant. Rather it is the job at which the participant had worked at the longest.	
If there is no response shown for this item, the participant did not answer this question at baseline.	
OCC_TYPE	<p>CLSA DATA [IMPUTED BY PINE USING BASELINE]</p> <p>Never worked – code if: LBF_EVER_COM = “NO”</p> <p>[open text for LFP_TYPE_SP_COM] – code if: (RET_RTRD_COM = 1 or RET_RTRD_COM = 2) and LFP_LNGST_COM = 1</p> <p>[open text for LFP_LGTYPE_SP_COM] – code if: (RET_RTRD_COM = 1 or RET_RTRD_COM = 2) and LFP_LNGST_COM = 2</p> <p>[open text for LBF_TYPE_NB_COM] – code if: RET_RTRD_COM = 3 and LBF_LGEVER_COM = 2</p> <p>[open text for LBF_LGTYPE_SP_COM] – code if: RET_RTRD_COM = 3 and LBF_LGEVER_COM = 1</p> <p>Data unavailable – code if: ALL required questions do not fit into categories above, or ALL are DK_NA or REFUSED or not answered/missing data</p>

SDC_9	SDC_OCC_MSP
[ASK IF SDC_LBF_MSP = COM_RET, PAR_RET, NOT_RET_WORK, or NOT_RET_NO_WORK]	
What is the participant’s self-reported primary occupation?	

CLINICIAN NOTE: Provide a brief description of the occupation. Please note, this question refers to the primary occupation of the participant while the previous question from the main CLSA interview refers to the occupation that the participant did for the longest period of time.		
OCC_SP	Occupation	_____
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

SDC_10	SDC_NOTES_MSP	
[ALWAYS ASK]		
Do you have any additional notes to include for this module? For example, are there any other sociodemographic characteristics that should be taken into account when interpreting the results of the cognitive testing?		
YES	1	Yes
NO	2	No

SDC_11	SDC_NOTESSP_MSP	
[ASK IF SDC_NOTES_MSP = YES]		
CLINICIAN NOTE: Please do not enter any identifying information in this section.		
Please provide any relevant notes (e.g., how congruent the participant's responses were to previously collected information) below:		

SDC_END

Cognitive Status (COG)

Overview	<p>The purpose of this section is to assess if the participant has experienced cognitive decline. Participants that report the presence of cognitive decline will be asked to provide details regarding the onset, progression, and symptoms related to the cognitive decline.</p> <p>Clinicians are expected to complete all items in this module. However, they have flexibility in determining the order in which the questions are asked and the specific wording used for each question.</p>
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COG_1	COG_DEC_MSP	
[ALWAYS ASK]		
Has the participant reported experiencing cognitive decline?		
CLINICIAN NOTE: This question should be asked directly to the participant.		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

COG_2	COG_YRS_MSP	
[ASK IF COG_DEC_MSP = YES]		
How many years has the participant reported experiencing cognitive decline?		
CLINICIAN NOTE: This question should be asked directly to the participant. Please provide the number of years.		
LESS_YR	001	Less than one year
YEARS	Years	_____ [MASK: MIN=1, MAX=PARTICIPANT'S AGE]
DK_NA	998	[DO NOT READ] Don't know / No answer
REFUSED	999	[DO NOT READ] Refused

COG_3	COG_SEV_MSP	
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[ASK IF COG_DEC_MSP = YES]		
The participant describes the severity of their cognitive decline as...		
CODE ONLY ONE RESPONSE		
CLINICIAN NOTE: This question should be asked directly to the participant.		
IRRT	1	Present and may be an irritant but not a concern of theirs
WORR	2	Worrisome but not having overt impact on daily life
IMPT	3	Having an impact on their life (e.g., occupation, autonomy/independence)
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

COG_4	COG_ONS_MSP	
[ASK IF COG_DEC_MSP = YES]		
The participant believes the onset of their cognitive decline was...		
CODE ONLY ONE RESPONSE		
GRAD	1	Gradual
ABRT	2	Abrupt
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

COG_5	COG_VAS_MSP	
[ASK IF COG_ONS_MSP = ABRT]		
The participant believes their cognitive decline was related to a cerebrovascular event.		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

COG_6	COG_PRO_MSP	
[ASK IF COG_DEC_MSP = YES]		

The participant believes the trajectory of their cognitive impairment was...		
CODE ONLY ONE RESPONSE		
NONE	1	Improvement/none-stability after onset
GRAD	2	Gradual or insidious progression
STEP	3	Stepwise progression
FLUC	4	Fluctuating
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

COG_7	COG_NOTES_MSP	
[ALWAYS ASK]		
Do you have any additional notes to include for this module (e.g., whether you concur with the participant's perceptions of presence, severity, onset, and progression of any cognitive decline)?		
YES	1	Yes
NO	2	No

COG_8	COG_NOTESSP_MSP	
[ASK IF COG_NOTES_MSP = YES]		
CLINICIAN NOTE: Please do not enter any identifying information in this section.		
Please provide any notes below:		

COG_END

Medical History (MED)

Overview	<p>The medical history module captures information that will assist the examining physician in determining if any observed cognitive limitations are secondary to medical conditions such as neurodegenerative diseases. This information may also increase the confidence in the physician's diagnosis based on the absence or presence of risk factors for neurocognitive disorders.</p> <p>Clinicians are expected to complete all items in this module. However, they have flexibility in determining the order in which the questions are asked and the specific wording used for each question.</p>
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MED_1	MED_CON_MSP	
[ALWAYS ASK]		
Does the participant have any of the following medical conditions?		
MULTIPLE RESPONSES ALLOWED (EXCEPT IF 96, 98 OR 99 ARE SELECTED), CODE ALL THAT APPLY		
CAD	1	Coronary artery disease
HF	2	Heart failure
AF	3	Atrial fibrillation/flutter
TIA	4	Transient ischemic attack (TIA)
STR	5	Cerebrovascular accident (stroke)
HEM	6	Intracerebral hemorrhage
HYP	7	Hypertension
DIA	8	Diabetes mellitus
DYS	9	Dyslipidemia
PKD	10	Parkinson's Disease or Parkinsonism
DEP	11	Depression
ANX	12	Anxiety disorder
PSY	13	Psychotic illness
HR	14	Hearing impairment
VS	15	Visual impairment
SM	16	Impaired sense of smell
DEM	17	Dementia
DELI	18	Suspected delirium (in the past 5 years)
IN	19	Insomnia
REM	20	REM-Sleep Behaviour Disorder
OSA	21	Obstructive Sleep Apnea
HYPT	22	Hypothyroidism
B12	23	Vitamin B12 deficiency
OTSP	24	Other conditions relevant to cognitive status (e.g. cancer and/or cancer treatments); specify _____
NONE	96	None of the above
DK_NA	98	[DO NOT READ] Don't know / No answer
REFUSED	99	[DO NOT READ] Refused

MED_2	MED_TBI_MSP	
[ALWAYS ASK]		
Has the participant suffered a head injury or a concussion in the past?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_3	MED_TBI1_MSP	
[ASK IF MED_TBI_MSP = YES]		
How many head injuries or concussions has the participant had in his/her lifetime?		
CLINICIAN NOTES: If the informant cannot remember exact number, please probe for their best estimate		
TBI_NUM	Number	_____ [MASK: MIN=1]
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_4	MED_TBI2_MSP	
[ASK IF MED_TBI_MSP = YES]		
At what age or in what year did the participant have the most serious head injury?		
CLINICIAN NOTES: If the informant cannot remember the specific year, please probe for their best estimation of when the head injury occurred.		
YR_SP	Year	_____ [MASK: MIN=BIRTH YEAR, MAX=CURRENT YEAR]
NB_SP	Age	_____ [MASK: MIN=1, MAX=CURRENT AGE]
DK_NA	998	[DO NOT READ] Don't know / No answer
REFUSED	999	[DO NOT READ] Refused

MED_5	MED_TBI3_MSP	
[ASK IF MED_TBI3_MSP = YES]		
Did the most serious head injury result in...?		
READ LIST, MULTIPLE RESPONSES ALLOWED (EXCEPT IF 6, 8 OR 9 ARE SELECTED), CODE ALL THAT APPLY		
DZ	1	Being dazed, confused, or "seeing stars"
DRM	2	Not remembering the injury
KO	3	Losing consciousness (knocked out)
NONE	6	Head injury did not result in any of the above
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_6	MED_TBI4_MSP	
[ASK IF MED_TBI3_MSP = KO]		
How long did you lose consciousness for?		
READ LIST, CODE ONLY ONE RESPONSE		
KO1	1	Less than a minute
KO20	2	1-20 minutes
KO20MORE	3	Longer than 20 minutes
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_7	MED_MED2_MSP	
[ALWAYS ASK]		
Which of the following medications is the participant currently taking?		
MULTIPLE RESPONSES ALLOWED (EXCEP IF 96, 98 OR 99 ARE SELECTED), CODE ALL THAT APPLY		
<p>CLINICIAN NOTES: If the participant does not bring in a list of medications or the medications themselves for review, please select option “Don’t know / No answer”. If you feel that the medication is an essential data element, you can ask if you can call the participant after the assessment when they are home and have access to their medications. Alternatively, you may also ask the participant if he/she would like you to contact the informant about which medications are being used.</p> <p>To determine if a medication has moderate to high anticholinergic activity, please refer to: https://www.rxfiles.ca/rxfiles/uploads/documents/Psyc-anticholinergic-Ref%20List%20SPDP-complete.pdf</p> <p>If the participant is taking a medication with moderate/high anticholinergic activity that also falls under another listed category, please select both options. For example, if a participant is taking desipramine for the treatment of depression, select the options “anti-depressants” and “drugs with moderate/high anticholinergic activity”.</p> <p>If the participant is not taking a medication regularly but rather as required, please include details in the “Notes” section at the end of this module.</p>		
DEP	01	Anti-depressants (whether used for depression, anxiety or other reason)
PSY	02	Anti-psychotics
SED	03	Hypnotics and sedatives (whether used for insomnia, anxiety or other reason)
CHL	04	Drugs with moderate/high anticholinergic activity including prescribed and over the counter medications
CON	05	Anticonvulsants
PKD	06	Antiparkinsonian
OPI	07	Opioids
COG	08	Cognitive enhancers (cholinesterase inhibitor, memantine)
OT	09	Other medication that you think may affect cognition: Specify: _____
NONE_	96	None of the above
DK_NA	98	[DO NOT READ] Don’t know / No answer
REFUSED	99	[DO NOT READ] Refused

MED_8	MED_SMKSTATUS_MSP	
[ALWAYS ASK]		
What is the participant’s smoking status...?		
READ LIST, CODE ONLY ONE RESPONSE		

YES	1	Yes, he/she currently smokes
NEVER	2	No, he/she does not currently smoke and never has
FORM_DAY	4	Former daily smoker (non-smoker now)
FORM_OCC	5	Former occasional smoker (non-smoker now)
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_9	MED_CAN_MSP	
[ALWAYS ASK]		
Does the participant use any cannabis products?		
CODE ONLY ONE RESPONSE		
YES	1	Yes, he/she currently uses cannabis products
NEVER	2	No, he/she does not and has never used cannabis products
FORMER	3	Former cannabis user, but does not use cannabis products now
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_10	MED_ALC_MSP	
[ALWAYS ASK]		
What is the participant's drinking status?		
CODE ONLY ONE RESPONSE		
NEVER	1	Never drank alcohol
FORMER	2	Used to drink alcohol but does not currently drink
CURRENT	3	Currently consumes alcohol
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_11	MED_ALCNMB_MSP	
[ASK IF MED_ALC_MSP = CURRENT]		
A "standard" drink is considered 12 ounces of regular beer (~5% alcohol), 5 ounces of wine (~12% alcohol), or 1.5 ounces of distilled spirits (~40% alcohol). How many estimated standardized drinks per week does the participant consume?		
ALC_NB	Number	_____ [MASK: MIN=0, MAX=200]
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_12	MED_ALCMLFQ_MSP	
[ASK IF MED_ALC_MSP = CURRENT AND SDC_SEXBL_MSP = MALE]		
In the past 12 months, has the participant consumed 5 or more drinks in 2 hours at least once a month?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_13	MED_ALCFMFQ_MSP	
[ASK IF MED_ALC_MSP = CURRENT AND SDC_SEXBL_MSP = FEMALE]		
In the past 12 months, has the participant consumed 4 or more drinks in 2 hours at least once a month?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_14	MED_FAM_MSP	
[ALWAYS ASK]		
Does the participant have a first degree relative who has been diagnosed with dementia or Alzheimer's Disease?		
CLINICIAN NOTE: First degree relatives include biological parents, siblings, or children		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

MED_15	MED_NOTES_MSP	
[ALWAYS ASK]		

Do you have any additional notes to include for this module? For example, are there any other details regarding the participant's medical history that should be taken into account when interpreting the results of the cognitive testing such as the use of non-prescription drugs?		
YES	1	Yes
NO	2	No

MED_16	MED_NOTESSP_MSP
[ASK IF MED_NOTES_MSP = YES]	
CLINICIAN NOTE: Please do not enter any identifying information in this section.	
Please provide any notes below:	

MED_END

Basic Activities of Daily Living (ADL)

This module contains a subset of the Activities of Daily Living questions of the OARS Multidimensional Assessment Questionnaire© developed by Dr. Gerda G. Fillenbaum (Duke University Medical Center). The Canadian Longitudinal Study on Aging received permission from Dr. Fillenbaum (instrument developer) for the use of this instrument.

Overview	<p>Activities of daily living assess respondents' ability to perform <u>basic</u> daily activities. Activities of daily living are the tasks considered vital to live independently in the community. This module contains key activities relevant to neurocognitive disorders and is a subset of the list of questions asked to the informant regarding the participant's ability to perform activities independently. The informant supplied data will in most cases be used to determine the participant's functional abilities. Exceptions would include where the informant is not able to respond to the functional questions or where the accuracy of the information they provide is judged less reliable than the information provided by the participant.</p> <p>Clinicians are expected to complete all items in this module. However, they have flexibility in determining the order in which the questions are asked and the specific wording used for each question.</p>
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Now I'd like to ask you about activities of daily living. You may feel that some of these questions do not apply to you, but it is important that we ask the same questions of everyone.

ADL_1	ADL_ABLDR_MSP	
[ALWAYS ASK]		
Can you dress and undress yourself without help (including picking out clothes and putting on socks and shoes)?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

ADL_2	ADL_HPDR_MSP	
[ASK IF ADL_ABLDR_MSP = NO]		
Can you dress and undress yourself with some help?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

ADL_3	ADL_UNDR_MSP	
[ASK IF ADL_HPDR_MSP = NO]		
Are you completely unable to dress and undress yourself?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

ADL_4	ADL_ABLBT_MSP	
[ALWAYS ASK]		
Can you take a bath or shower without help?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

ADL_5	ADL_HPBT_MSP	
[ASK IF ADL_ABLBT_MSP = NO]		
Can you take a bath or shower with some help (i.e., you need help from someone getting in and out of the tub or you need special attachments on the tub)?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

ADL_6	ADL_UNBT_MSP	
[ASK IF ADL_HPBT_MSP = NO]		
Are you completely unable to take a bath and a shower by yourself?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

ADL_7	ADL_BATH_MSP	
[ALWAYS ASK]		
Do you ever have trouble getting to the bathroom in time?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

ADL_8	ADL_INCNT_MSP	
[ASK IF ADL_BATH_MSP = YES]		
How often do you wet or soil yourself (either day or night)? Would you say...		
READ LIST, CODE ONLY ONE RESPONSE		
0_1_TIME_WEEK	1	Never or less than once a week
1_2_TIME_WEEK	2	Once or twice a week
3_MORE_TIMES_WEEK	3	Three times a week or more
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

ADL_9	ADL_NOTES_MSP	
[ALWAYS ASK]		
Do you have any additional notes to include for this module?		
YES	1	Yes
NO	2	No

ADL_10	ADL_NOTES_SP_MSP	
[ASK IF ADL_NOTES_MSP = YES]		
CLINICIAN NOTE: Please do not enter any identifying information in this section.		
Please provide any notes below:		

ADL_END

Instrumental Activities of Daily Living (IADL)

This module contains a subset of the Activities of Daily Living questions of the OARS Multidimensional Assessment Questionnaire developed by Dr. Gerda G. Fillenbaum (Duke University Medical Center). The Canadian Longitudinal Study on Aging received permission from Dr. Fillenbaum (instrument developer) for the use of this instrument.

Overview	<p>The Instrumental Activities of Daily Living (IADL) scale assesses respondents' ability to independently perform a series of daily activities.</p> <p>This module contains key instrumental activities of daily living relevant to neurocognitive disorders and is a subset of the list of questions asked to the informant regarding the participant's ability to perform activities independently. The informant supplied data will in most cases be used to determine the participant's functional abilities. Exceptions would include where the informant is not able to respond to the functional questions or where the accuracy of the information they provide is judged less reliable than the information provided by the participant.</p> <p>Clinicians are expected to complete all items in this module. However, they have flexibility in determining the order in which the questions are asked and the specific wording used for each question.</p>
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Now I'd like to ask you about some activities of daily living. You may feel that some of these questions do not apply to you, but it is important that we ask the same questions of everyone.

IAL_1	IAL_ABLGRO_MSP	
[ALWAYS ASK]		
Can you go shopping for groceries or clothes without help (taking care of all shopping needs yourself)?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_2	IAL_HPGRO_MSP	
[ASK IF IAL_ABLGRO_MSP = NO]		
Can you go shopping for groceries or clothes with some help (i.e., you need someone to go with you on all shopping trips)?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_3	IAL_UNGRO_MSP	
[ASK IF IAL_HPGRO_MSP = NO]		
Are you completely unable to do any shopping?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_4	IAL_ABLML_MSP	
[ALWAYS ASK]		
Can you prepare your own meals without help (i.e., you plan and cook full meals yourself)?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_5	IAL_HPML_MSP	
[ASK IF IAL_ABLML_MSP = NO]		
Can you prepare your own meals with some help (i.e., you can prepare some things but are unable to cook full meals yourself)?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_6	IAL_UNML_MSP	
[ASK IF IAL_HPML_MSP = NO]		
Are you completely unable to prepare any meals?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_7	IAL_ABLMED_MSP	
[ALWAYS ASK]		
Can you take your own medicine without help (in the right doses at the right time)?		
CLINICIAN INSTRUCTIONS: IF THE PARTICIPANT OCCASIONALLY FORGETS, CODE AS 'YES'.		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_8	IAL_HPMED_MSP	
[ASK IF IAL_ABLMED_MSP = NO]		
Can you take your own medicine with some help (i.e., you are able to take medicine if someone prepares it for you or reminds you to take it)?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_9	IAL_UNMED_MSP	
[ASK IF IAL_HPMED_MSP = NO]		
Are you completely unable to take your medicine?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_10	IAL_ABLMO_MSP	
[ALWAYS ASK]		
Can you handle your own money without help (i.e., you write cheques, pay bills, etc.)?		
CLINICIAN INSTRUCTIONS: IF THE PARTICIPANT OCCASIONALLY FORGETS, CODE AS 'YES'.		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_11	IAL_HPMO_MSP	
[ASK IF IAL_ABLMO_MSP = NO]		
Can you handle your own money with some help (i.e., you manage day-to-day buying but need help with managing your chequebook or paying your bills)?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_12	IAL_UNMO_MSP	
[ASK IF IAL_HPMO_MSP = NO]		
Are you completely unable to handle your money?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_13	IAL_FUNCT_MSP	
[ALWAYS ASK]		
Have you experienced any changes in your functional abilities due to cognitive changes?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

IAL_14	IAL_NOTES_MSP	
[ALWAYS ASK]		
Do you have any additional notes to include for this module?		
YES	1	Yes
NO	2	No

IAL_15	IAL_NOTES_SP_MSP	
[ASK IF IAL_NOTES_MSP = YES]		
CLINICIAN NOTE: Please do not enter any identifying information in this section.		
Please provide any notes below:		

IAL_END

Transportation (TRA)

Overview	<p>The questions in this module ask participants about their driving status, and details regarding their license status.</p> <p>The informant is also being asked questions about the participant's driving. The informant supplied data will in most cases be used to determine the participant's driving status. Exceptions would include where the informant is not able to respond to the functional questions or where the accuracy of the information they provide is judged less reliable than the information provided by the participant.</p> <p>Clinicians are expected to complete all items in this module. However, they have flexibility in determining the order in which the questions are asked and the specific wording used for each question.</p>
-----------------	---

TRA_1	TRA_DSTATUS_MSP	
[ALWAYS ASK]		
Which of the following describes the participant's driving status? (Include cars, vans, trucks and motorcycles)		
READ LIST, CODE ONLY ONE RESPONSE		
NEVER	1	Never had a driver's license
FORMER	2	Had a driver's license at one point in his or her life, but currently do not have it
CURRENT	3	Have a driver's license without restrictions (except corrective lenses)
RESTRICTED	4	Have a driver's license with restrictions on time of driving (daylight only), distance from home, type of road (no highway), or number of passengers
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

TRA_2	TRA_STOP_MSP	
[ASK IF TRA_STA_MSP = FORMER]		
Why did the participant stop driving?		
CODE ONLY ONE RESPONSE		
VOL_STOP	1	Voluntarily stopped driving
LICS_RESC	2	License rescinded
OT_SP	3	Other (please specify: _____)
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

TRA_3	TRA_STOPYR_MSP	
[ASK IF TRA_STA_MSP = FORMER]		
At what age or in what year did the participant stop driving?		
YR_SP	Year	_____ [MASK: MIN=YEAR OF BIRTH, MAX=CURRENT YEAR]
NB_SP	Age	_____ [MASK:MIN=00, MAX=CURRENT AGE]
DK_NA	9998	[DO NOT READ] Don't know / No answer
REFUSED	9999	[DO NOT READ] Refused

TRA_4	TRA_NOTES_MSP	
[ALWAYS ASK]		
Do you have any additional notes to include for this module?		
YES	1	Yes
NO	2	No

TRA_5	TRA_NOTES_SP_MSP	
[ASK IF TRA_NOTES_MSP = YES]		
CLINICIAN NOTE: Please do not enter any identifying information in this section.		
Please provide any notes below:		

TRA_END

Mood and Behaviour (BHV)

The first two questions of this module are from the Patient Health Questionnaire-2 (PHQ-2). It is publicly available and no permission is required to use, reproduce, or distribute the tools.

Kroenke K, Spitzer RL, Williams JB. The Patient Health Questionnaire-2: Validity of a Two-Item Depression Screener. *Medical Care*. 2003;41:1284-92. The other questions in this module capture information on mood and behaviour relevant to the diagnosis of neurocognitive disorder.

Overview	<p>The questions in this module ask participants about their mood and behaviour.</p> <p>Clinicians are expected to complete all items in this module. However, with the exception of the first two questions (BHV_DEP1 and BHV_DEP2) they have flexibility in determining the order in which the questions are asked and the specific wording used for each question.</p>
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Physician Note: Please read the first two questions verbatim.

Over the past 2 weeks, how often have you been bothered by any of the following problems...?

BHV_1	BHV_DEP1_MSP	
[ALWAYS ASK]		
Little interest or pleasure in doing things?		
READ LIST, CODE ONLY ONE RESPONSE		
NO	1	Not at all
SEVERAL	2	Several days
HALF	3	More than half the days
EVERY	4	Almost every day
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

BHV_2	BHV_DEP2_MSP	
[ALWAYS ASK]		
Feeling down, depressed or hopeless?		
READ LIST, CODE ONLY ONE RESPONSE		
NO	1	Not at all
SEVERAL	2	Several days
HALF	3	More than half the days
EVERY	4	Almost every day
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

BHV_3	BHV_PERS_MSP	
[ALWAYS ASK]		
Has the participant noted any persistent adverse changes in their personality (such as apathy, irritability, or lability) lasting a year or longer?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

BHV_4	BHV_ANX_MSP	
[ALWAYS ASK]		
Is the participant currently experiencing anxiety?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

BHV_5	BHV_SUS_MSP	
[ALWAYS ASK]		
Is the participant currently experiencing feelings of suspiciousness?		
YES	1	Yes
NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

BHV_6	BHV_PSY_MSP	
[ALWAYS ASK]		
Is the participant currently experiencing psychotic symptoms (delusions and/or hallucinations)?		
YES	1	Yes

NO	2	No
DK_NA	8	[DO NOT READ] Don't know / No answer
REFUSED	9	[DO NOT READ] Refused

BHV_7	BHV_NOTES_MSP	
[ALWAYS ASK]		
Do you have any additional notes to include for this module?		
YES	1	Yes
NO	2	No

BHV_8	BHV_NOTES_SP_MSP	
[ASK IF BHV_NOTES_MSP = YES]		
CLINICIAN NOTE: Please do not enter any identifying information in this section.		
Please provide any notes below. For example, are there any other details regarding the participant's mood and behaviour that should be taken into account when interpreting the results of the cognitive testing?		

BHV_END

Physical Examination (EXM)

Overview	Clinicians are expected to complete all items in this module. However, they have flexibility in determining the order in which the physical exam is completed.
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EXM_1	EXM_ALERT_MSP	
[ALWAYS ASK]		
Is the alertness/level of consciousness of the participant normal or abnormal?		
CODE ONLY ONE RESPONSE		
NRM	1	Normal
ABNRM	2	Abnormal
UNSURE	7	Unsure

EXM_2	EXM_HEAR_MSP	
[ALWAYS ASK]		
Is the participant willing to complete the hearing test?		
YES	1	Yes
NO	2	No

To evaluate hearing, please follow these instructions:

1. Position yourself approximately 60cm from the participant's ear
2. Mask the ear not being tested by rubbing the tragus. Do not place your arm across the face of the participant when rubbing the tragus, it is far nicer to occlude the ear from behind the head. If possible shield the participant's eyes to prevent any visual stimulus.
3. Whisper a number or word.
4. Ask the participant to repeat the number or word back to you. If they get two-thirds or more correct then their hearing level is 12db or better. If there is no response use a conversational voice (48db or louder) or loud voice (76db or louder).
5. If there is no response you can move closer and repeat the test at 15cm. Here the thresholds are 34db for a whisper and 56db for a conversational voice.
6. Assess the other ear in the same way.
7. Modifications may have to be made if personal protective equipment is worn.

EXM_3	EXM_HEARRIGHT12_MSP
--------------	----------------------------

[ASK IF EXM_HEAR_MSP = YES]		
Was the participant able to correctly repeat back the word or number you whispered at a distance of 60cm in their right ear?		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_4	EXM_HEARRIGHT48_MSP	
[ASK IF EXM_HEARRIGHT12_MSP = NO]		
Was the participant able to correctly repeat back the word or number you spoke using a conversational volume at a distance of 60cm in their right ear??		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_5	EXM_HEARRIGHT76_MSP	
[ASK IF EXM_HEARRIGHT48_MSP = NO]		
Was the participant able to correctly repeat back the word or number you spoke using a loud voice at a distance of 60cm in their right ear??		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_6	EXM_HEARRIGHT34_MSP	
[ASK IF EXM_HEARRIGHT76_MSP = NO]		

Was the participant able to correctly repeat back the word or number you whispered at a distance of 15cm in their right ear??		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_7	EXM_HEARRIGHT56_MSP	
[ASK IF EXM_HEARRIGHT34_MSP = NO]		
Was the participant able to correctly repeat back the word or number you spoke using a conversational volume at a distance of 15cm in their right ear??		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_8	EXM_HEARLEFT12_MSP	
[ASK IF EXM_HEAR_MSP = YES]		
Was the participant able to correctly repeat back the word or number you whispered at a distance of 60cm in their left ear??		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_9	EXM_HEARLEFT48_MSP	
[ASK IF EXM_HEARLEFT12_MSP = NO]		

Was the participant able to correctly repeat back the word or number you spoke using a conversational volume at a distance of 60cm in their left ear??		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_10	EXM_HEARLEFT76_MSP	
[ASK IF EXM_HEARLEFT48_MSP = NO]		
Was the participant able to correctly repeat back the word or number you spoke using a loud voice at a distance of 60cm in their left ear??		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_11	EXM_HEARLEFT34_MSP	
[ASK IF EXM_HEARLEFT76_MSP = NO]		
Was the participant able to correctly repeat the word or number you whispered at a distance of 15cm in their left ear??		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_12	EXM_HEARLEFT56_MSP	
[ASK IF EXM_HEARLEFT34_MSP = NO]		

Was the participant able to correctly repeat back the word or number you spoke using a conversational volume at a distance of 15cm in their left ear??		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
NOTDONE	8	Unable to assess

EXM_13	EXAM_HEARNOTES_MSP	
[ALWAYS ASK]		
Do you have any additional notes to include regarding the participant's hearing?		
YES	1	Yes
NO	2	No

EXM_14	EXAM_HEARNOTES_SP_MSP	
[ASK IF EXAM_HEAR_NOTES_MSP = YES]		
CLINICIAN NOTE: Please do not enter any identifying information in this section.		
Please provide any notes below:		

EXM_15	EXM_SMELL_MSP	
[ALWAYS ASK]		
Is the participant's sense of smell normal or abnormal?		
CODE ONLY ONE RESPONSE		
NRM	1	Normal
ABNRM	2	Abnormal
UNSURE	7	Unsure

EXM_16	EXM_FOCAL_MSP	
[ALWAYS ASK]		
Are there any focal/lateralizing neurological findings to note?		

MULTIPLE RESPONSES ALLOWED, CODE ALL THAT APPLY (EXCEPT IF 96 IS SELECTED)		
VIS	01	Visual field defect
EXT	02	Abnormal extra-ocular movements
RGD	03	Rigidity
WKN	04	Weakness
SP	05	Speech
NONE	96	None
OTSP	97	Other: Please specify:

EXM_17	EXM_FOCALVIS_SP_MSP
[ASK IF EXAM_FOCAL_MSP = VIS]	
Please describe the visual field defect:	
Open text: _____	

EXM_18	EXM_FOCALEXT_SP_MSP
[ASK IF EXAM_FOCAL_MSP = EXT]	
Please describe the abnormal extra-ocular movements:	
Open text: _____	

EXM_19	EXM_FOCALRGD_SP_MSP
[ASK IF EXAM_FOCAL_MSP = RGD]	
Please describe the rigidity observed in the participant:	
Open text: _____	

EXM_20	EXM_FOCALWKN_SP_MSP
[ASK IF EXAM_FOCAL_MSP = WKN]	
Please describe the weakness observed in the participant:	

Open text: _____

EXM_21	EXM_FOCALSP_SP_MSP
[ASK IF EXAM_FOCAL_MSP = SP]	
Please describe the speech abnormalities observed in the participant:	
Open text: _____	

EXM_22	EXM_FOCALOTSP_SP_MSP
[ASK IF EXAM_FOCAL_MSP = OTSP]	
Please describe any other abnormalities observed in the participant:	
Open text: _____	

EXM_23	EXM_EXPYR_MSP	
[ALWAYS ASK]		
Are there any extrapyramidal signs observed?		
MULTIPLE RESPONSES ALLOWED (EXCEPT IF 96 IS SELECTED), CODE ALL THAT APPLY		
TRM	01	Tremor
RGD	02	Rigidity
BKN	03	Bradykinesia
PST	04	Posture
NONE	96	None
OTSP	97	Other: specify

EXM_24	EXM_EXPYRNOTES_MSP
[ASK IF EXM_EXPYR_MSP = TRM, RGD, BKN, or PST]	
Please describe the extrapyramidal signs if required.	

Open text: _____		
DK_NA	8	[DO NOT READ] Don't know / No answer

EXM_25	EXM_TRANSF_MSP	
[ALWAYS ASK]		
How would you evaluate the participant's ability to do a sit to stand transfer?		
CODE ONLY ONE RESPONSE		
NRM	1	Normal
ABNRM	2	Abnormal
UNSURE	7	Unsure

EXM_26	EXM_BALANCE_MSP	
[ALWAYS ASK]		
How would you evaluate the participant's stability using the Romberg test?		
CLINICIAN NOTES: The Romberg test requires that the participant removes their shoes. Participants will be asked to stand with their feet together on a flat, hard surface. The participant will be asked to cross their arms in front of their body or place them at their sides. The participant will be asked to stand still and keep their eyes open for approximately 30 seconds while the examining clinician observes. The participant will then be asked to close their eyes and stand for an addition 30 seconds. The examining clinician will assess body movement and balance.		
CODE ONLY ONE RESPONSE		
NRM	1	Normal
ABNRM	2	Abnormal
NOTDONE	8	Unable to assess

EXM_27	EXM_GAITSPD_MSP	
[ALWAYS ASK]		
Does the participant have normal or slow gait speed?		

CLINICIAN NOTES: Gait speed may be evaluated by watching the participant move around the Data Collection Site.		
CODE ONLY ONE RESPONSE		
NRM	1	Normal
SLOW	2	Slow
NOTDONE	8	Unable to assess

EXM_28	EXM_GAIT_MSP	
[ALWAYS ASK]		
Did you observe any gait abnormalities?		
MULTIPLE RESPONSES ALLOWED (EXCEPT IF 96 ISSELECTED), CODE ALL THAT APPLY		
NO	01	No gait abnormalities
NN	02	Abnormal gait speed due to non-neurologic cause (e.g. arthritis)
ST	03	Unsteady
FR	04	Frontal
HM	05	Hemiparetic
NR	06	Neuropathic
AT	07	Ataxic
PK	08	Parkinsonian
SP	09	Spastic
NOTDONE	96	Unable to assess

EXM_29	EXM_BALGAITNOTES_MSP	
[ASK IF EXM_TRANSF_MSP = ABNRM, OR EXM_BALANCE_MSP = ABNRM, OR EXM_GAITSPD_MSP = SLOW, OR EXM_GAITMSP = NN, ST, FR, HM, NR, AT, PK, or SP]		
Please describe any abnormalities in transferring, balance, or gait.		

EXM_30	EXM_NOTES_MSP	
[ALWAYS ASK]		
Do you have any additional notes to include for this module? For example, are there any other findings from the physical examination that should be taken into account when interpreting the results of the cognitive testing?		
YES	1	Yes

NO	2	No
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EXM_31	EXM_NOTES_SP_MSP
[ASK IF EXM_NOTES_MSP = YES]	
CLINICIAN NOTE: Please do not enter any identifying information in this section.	
Please provide any notes below:	

EXM_END

Montreal Cognitive Assessment (MoCA)

*Training and certification is required by any clinical, health professional, or worker who wishes to administer, score and interpret the Montreal Cognitive Assessment (MoCA) test. The MoCA © may be used, reproduced, and distributed **WITH** permission for universities/foundations/health professionals/hospitals/clinics/public health institutes.*

Overview	<p>The Montreal Cognitive Assessment (MoCA) was designed as a rapid screening instrument for mild cognitive dysfunction. It assesses different cognitive domains: attention and concentration, executive functions, memory, language, visuoconstructional skills, conceptual thinking, calculations, and orientation. Time to administer the MoCA is approximately 10 minutes. The total possible score is 30 points; a score of 26 or above is considered normal. There is an additional point added to the obtained score if the person being tested has 12 or fewer years of formal education. For the purposes of the CLSA Memory Study, we will categorize participant that did not graduate from secondary school or those who graduated secondary school but did not complete post-secondary education as having 12 or fewer years of formal education.</p> <p>The MoCA memory section provides two trials to learn a word list of five nouns followed by a delay in which subjects are asked questions from other sections of the MoCA (i.e., attention, sentence repetition, letter fluency, similarities). The delay is variable, but estimated at five minutes followed by free recall of the 5-word list. This is followed by a category-cued semantic recall condition, and, finally, a multiple choice-cued recall from presentation of the correct item paired with two items within the same category but not on the list. Only the points earned in the delayed <i>free</i> recall condition of the memory section (1 point per correct word) are added to the MoCA total score. The MoCA-MIS includes points for the free recall condition and the cued conditions (3 points for each word on free recall, 2 for each on category-cued recall, 1 for each on multiple-choice recall).</p> <p>For those with severe visual impairment, the MoCA-BLIND can be utilized. This is scored out of 22 with normal being a score of 18 or higher. The correction for limited formal education described above is also used for the MoCA-BLIND.</p> <p>Clinicians are expected to complete this module using the provided script.</p>
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MOC_1	MOC_SIGHT_MSP	
[ALWAYS ASK]		
Does the participant have any visual impairments that would prevent them from completing the standard MoCA which requires drawing on a piece of paper?		
YES	1	Yes
NO	2	No

1. Alternating Trail Making:

Administration: The examiner instructs the subject: "Please draw a line, going from a number to a letter in ascending order. Begin here [point to (1)] and draw a line from 1 then to A then to 2 and so on. End here [point to (E)]."

MOC_2	MOC_TRAIL_MSP	
[ASK IF MOC_SIGHT_MSP = NO]		
Was the participant able to successfully complete the Alternating Trail Making task?		
CLINICIAN NOTE: Successfully completing the Alternating Trail Making task required the participant to successfully draw the following pattern: 1-A-2-B-3-C-4-D-5-E without drawing any lines that cross		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
REFUSED	9	[DO NOT READ] Participant refused to do task

2. Visuoconstructional Skills (Cube):

Administration: The examiner gives the following instructions, pointing to the cube: "Copy this drawing as accurately as you can, in the space below".

MOC_3	MOC_CUBE_MSP	
[ASK IF MOC_SIGHT_MSP = NO]		
Was the participant able to successfully complete the cube drawing task?		
CODE ONLY ONE RESPONSE		
CLINICIAN NOTE: A successfully executed drawing must be:		
<ul style="list-style-type: none"> • Three-dimensional • All lines are drawn • No line is added • Lines are relatively parallel and their length is similar (rectangular prisms are accepted) 		
If any of the above criteria are not met, the cube was not successfully drawn.		
YES	1	Yes
NO	2	No
REFUSED	9	[DO NOT READ] Participant refused to do task

3. Visuoconstructional Skills (Clock):

Administration: Indicate the right third of the space and give the following instructions: “Draw a clock. Put in all the numbers and set the time to 10 past 11”.

MOC_4	MOC_CLOCKCON_MSP	
[ASK IF MOC_SIGHT_MSP = NO]		
Contour - Did the participant successfully draw the circle of the clock?		
CLINICIAN NOTE: For contour, a clock that has been correctly drawn must meet the following criteria: The clock face must be a circle with only minor distortion acceptable (e.g., slight imperfection on closing the circle).		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
REFUSED	9	[DO NOT READ] Participant refused to do task

MOC_5	MOC_CLOCKNUM_MSP	
[ASK IF MOC_SIGHT_MSP = NO]		
Numbers – Did the participant successfully draw the numbers on the clock?		
CLINICIAN NOTE: For the numbers, a clock that has been correctly drawn must meet the following criteria: All clock numbers must be present with no additional numbers; numbers must be in the correct order and placed in the approximate quadrants on the clock face; Roman numerals are acceptable; numbers can be placed outside the circle contour.		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
REFUSED	9	[DO NOT READ] Participant refused to do task

MOC_6	MOC_CLOCKHAND_MSP	
[ASK IF MOC_SIGHT_MSP = NO]		

Hands - Did the participant successfully draw the hands on the clock?		
CODE ONLY ONE RESPONSE		
CLINICIAN NOTE: For the hands, a clock that has been correctly drawn must meet the following criteria: There must be two hands jointly indicating the correct time; the hour hand must be clearly shorter than the minute hand; hands must be centred within the clock face with their junction close to the clock centre.		
YES	1	Yes
NO	2	No
REFUSED	9	[DO NOT READ] Participant refused to do task

4. Naming:

Administration: Beginning on the left, point to each figure and say: *"Tell me the name of this animal"*.

MOC_7	MOC_ANIMALS_MSP	
[ASK IF MOC_SIGHT_MSP = NO]		
How many animals were correctly named by the participant?		
CLINICIAN NOTES: One point is given for the following responses: (1) lion (2) rhinoceros or rhino (3) camel or dromedary.		
CODE ONLY ONE RESPONSE		
ONE	1	One
TWO	2	Two
THREE	3	Three
NONE	4	None of the animals were correctly named
REFUSED	9	[DO NOT READ] Participant refused to do task

5. Memory:

Administration: The examiner reads a list of 5 words at a rate of one per second, giving the following instructions: *"This is a memory test. I am going to read a list of words that you will have to remember now"*

and later on. Listen carefully. When I am through, tell me as many words as you can remember. It doesn't matter in what order you say them".

"Face, velvet, church, daisy, red"

Administration: When the subject indicates that (s)he has finished (has recalled all words), or can recall no more words, read the list a second time with the following instructions: "I am going to read the same list for a second time. Try to remember and tell me as many words as you can, including words you said the first time."

"Face, velvet, church, daisy, red"

Administration: At the end of the second trial, inform the participant that he/she will be asked to recall these words again by saying: "I will ask you to recall these words again at the end of the test."

6. Attention:

Forward Digit Span: Administration: Give the following instruction: "I am going to say some numbers and when I am through, repeat them to me exactly as I said them". Read the five number sequence at the rate of one digit per second.

"2, 1, 8, 5, 4"

MOC_8	MOC_NUMFORW_MSP	
[ALWAYS ASK]		
Was the participant able to repeat the numbers "2, 1, 8, 5, 4" in the forward order?		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
REFUSED	9	[DO NOT READ] Participant refused to do task

Attention. Backward Digit Span: Administration: Give the following instruction: "Now I am going to say some more numbers, but when I am through you must repeat them to me in the backwards order."

"7, 4, 2."

MOC_9	MOC_NUMBACK_MSP	
[ALWAYS ASK]		
Was the participant able to repeat the numbers "7, 4, 2" in the backward order?		
CODE ONLY ONE RESPONSE		
YES	1	Yes
NO	2	No
REFUSED	9	[DO NOT READ] Participant refused to do task

Vigilance: The examiner reads the list of letters at a rate of one per second, after giving the following instruction: “I am going to read a sequence of letters. Every time I say the letter A, tap your hand once. If a say a different letter, do not tap your hand”.

“F B A C M N A A J K L B A F A K D E A A A J A M O F A A B”

MOC_10	MOC_LETTER_MSP	
[ALWAYS ASK]		
Did the participant make zero to one errors (an error is a tap on a wrong letter or a failure to tap on letter A)?		
CODE ONLY ONE RESPONSE		
YES	1	Yes, the participant made 0 or one errors
NO	2	No, the participant made two or more errors
REFUSED	9	[DO NOT READ] Participant refused to do task

Serial 7s: The examiner gives the following instruction: “Now, I will ask you to count by subtracting seven from 100, and then, keep subtracting seven from your answer until I tell you to stop”. Give this instruction twice if necessary.

MOC_11	MOC_SUBS_MSP	
[ALWAYS ASK]		
How many correct subtractions did the participant make?		
CLINICIAN NOTES: This item is scored out of 3 points. Give no (0) points for no correct subtractions, 1 point for one correct subtraction, 2 points for two-to-three correct subtractions, and 3 points if the participant successfully makes four or five correct subtractions. Count each correct subtraction of 7 beginning at 100. Each subtraction is evaluated independently; that is, if the participant responds with an incorrect number but continues to correctly subtract 7 from it, give a point for each correct subtraction. For example, a participant may respond “92 – 85 – 78 – 71 – 64” where the “92” is incorrect, but all subsequent numbers are subtracted correctly. This is one error and the item would be given a score of 3.		
CODE ONLY ONE RESPONSE		
ZERO	0	Zero
ONE	1	One
TWO_THREE	2	Two or three
FOUR_FIVE	3	Four or five
REFUSED	9	[DO NOT READ] Participant refused to do task

7. Sentence repetition:

Administration: The examiner gives the following instructions: “I am going to read you a sentence. Repeat it after me, exactly as I say it [pause]: I only know that John is the one to help today.”. Following the response, say: “Now I am going to read you another sentence. Repeat it after me, exactly as I say it [pause]: The cat always hid under the couch when dogs were in the room”.

MOC_12	MOC_REPET_MSP	
[ALWAYS ASK]		
How many of the sentences did the participant correctly repeat?		
CLINICIAN NOTES: Repetition must be exact. Be alert for errors that are omissions (e.g., omitting "only", "always") and substitutions/additions (e.g., "John is the one who helped today;" substituting "hides" for "hid", altering plurals, etc.).		
CODE ONLY ONE RESPONSE		
ZERO	0	Zero
ONE	1	One
TWO	2	Two
REFUSED	9	[DO NOT READ] Participant refused to do task

8. Verbal fluency:

Administration: The examiner gives the following instruction: “Tell me as many words as you can think of that begin with a certain letter of the alphabet that I will tell you in a moment. You can say any kind of word you want, except for proper nouns (like Bob or Boston), numbers, or words that begin with the same sound but have a different suffix, for example, love, lover, loving. I will tell you to stop after one minute. Are you ready? [Pause] Now, tell me as many words as you can think of that begin with the letter F. [time for 60 sec]. Stop.”

MOC_13	MOC_WORDSF_MSP	
[ALWAYS ASK]		
Please record the words that the participant says		
REFUSED	9	[DO NOT READ] Participant refused to do task

MOC_14	MOC_WORDSFNUM_MSP	
[ASK IF MOC_WORDSF ≠ REFUSED]		
How many words did the participant say in one minute that begin with the letter “F”?		
CODE ONLY ONE RESPONSE		
10_LESS	00	Less than 11 words
11_MORE	01	11 or more words
REFUSED	99	[DO NOT READ] Participant refused to do task

9. **Abstraction:**

Administration: The examiner asks the subject to explain what each pair of words has in common, starting with the example: “*Tell me how an orange and a banana are alike*”. If the subject answers in a concrete manner, then say only one additional time: “*Tell me another way in which those items are alike*”. If the subject does not give the appropriate response (fruit), say, “*Yes, and they are also both fruit.*” Do not give any additional instructions or clarification. After the practice trial, say: “*Now, tell me how a train and a bicycle are alike*”. Following the response, administer the second trial, saying: “*Now tell me how a ruler and a watch are alike*”. Do not give any additional instructions or prompts.

MOC_15	MOC_WORDSIM_MSP	
[ALWAYS ASK]		
How many combinations of words did the participant identify the similarity between?		
CLINICIAN NOTES: Only the last two item pairs are scored. Give 1 point to each item pair correctly answered. The following responses are acceptable: Train-bicycle = means of transportation, means of travelling, you take trips in both; Ruler-watch = measuring instruments, used to measure. The following responses are not acceptable: Train-bicycle = they have wheels; Ruler-watch = they have numbers.		
CODE ONLY ONE RESPONSE		
NONE	0	None
ONE	1	One
TWO	2	Two
REFUSED	9	[DO NOT READ] Participant refused to do task

10. Delayed recall:

Administration: The examiner gives the following instruction: “I read some words to you earlier, which I asked you to remember. Tell me as many of those words as you can remember.”

MOC_16	MOC_MEM3_MSP	
[ALWAYS ASK]		
.Please record which words the participant is able to spontaneously recall.		
MULTIPLE RESPONSES ALLOWED (EXCEPT IF 96, OR 99 ARE SELECTED), CODE ALL THAT APPLY		
FACE	01	Face
VELVET	02	Velvet
CHURCH	03	Church
DAISY	04	Daisy
RED	05	Red
NONE	96	Did not remember any of the words
REFUSED	99	[DO NOT READ] Participant refused to do task

10b. Delayed recall – optional component:

Administration: Following the delayed free recall trial, prompt the subject with the semantic category cue provided below for any word not recalled. Prompt all non-recalled words in this manner.

Word	Category cue
Face	Part of the body
Velvet	Type of fabric
Church	Type of building
Daisy	Type of flower
Red	A colour

MOC_17	MOC_MISCUE1_MSP
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[SKIP IF MOC_MEM3_MSP = FACE AND VELVET AND CHURCH AND DAISY AND RED]		
Please indicate which words the participant produces on this third trial.		
CLINICIAN NOTE: Please select each word that the participant correctly recalled with the category cue provided. Do not select words that the participant correctly remembered spontaneously.		
A cue is used for clinical information purposes only and can give the test interpreter additional information about the type of memory disorder. For memory deficits due to retrieval failures, performance can be improved with a cue. For memory deficits due to encoding failures, performance does not improve with a cue.		
MULTIPLE RESPONSES ALLOWED (EXCEPT IF 96 OR 99 ARE SELECTED), CODE ALL THAT APPLY		
FACE	01	Face
VELVET	02	Velvet
CHURCH	03	Church
DAISY	04	Daisy
RED	05	Red
NONE	96	Did not remember any of the words
REFUSED	99	[DO NOT READ] Participant refused to do task

If the subject does not recall the word after the category cue, give him/her a multiple choice trial, using the following example instruction, "*Which of the following words do you think it was, NOSE, FACE, or HAND?*"

Word	Multiple choice cue
Face	Nose, face, hand
Velvet	Denim, cotton, velvet
Church	Church, school, hospital
Daisy	Rose, daisy, tulip
Red	Red, blue, green

MOC_18	MOC_MISCUE2_MSP
[SKIP IF MOC_MEM3_MSP OR MOC_MISCUE1_MSP = FACE AND VELVET AND CHURCH AND DAISY AND RED]	

Please indicate which words the participant produces on this third trial.		
CLINICIAN NOTE: Please select each word that the participant correctly recalled with the category cue provided. Do not select words that the participant correctly remembered spontaneously or using the category cues.		
MULTIPLE RESPONSES ALLOWED (EXCEPT IF 96 OR 99 ARE SELECTED), CODE ALL THAT APPLY		
FACE	01	Face
VELVET	02	Velvet
CHURCH	03	Church
DAISY	04	Daisy
RED	05	Red
NONE	96	Did not remember any of the words
REFUSED	99	[DO NOT READ] Participant refused to do task

11. Orientation:

Administration: The examiner gives the following instructions: “*Tell me the date today*”. If the subject does not give a complete answer, then prompt accordingly by saying: “*Tell me the [year, month, exact date, and day of the week]*.” Then say: “*Now, tell me the name of this place, and which city it is in.*”

MOC_19	MOC_ORIENT_MSP	
[ALWAYS ASK]		
Which of the following orientation features did the participant correctly identify?		
CLINICIAN NOTES: The subject must tell the exact date and the exact place (name of hospital, clinic, office). No points are allocated if subject makes an error (even of one day) for the day and date.		
MULTIPLE RESPONSES ALLOWED (EXCEPT IF 96 OR 99 ARE SELECTED), CODE ALL THAT APPLY		
DATE	01	Date
MONTH	02	Month
YEAR	03	Year
DAY	04	Day
PLACE	05	Place
CITY	06	City
NONE	96	None – the participant did not correctly identify any of the orientation features
REFUSED	99	[DO NOT READ] Participant refused to do task

MOC_20	MOC_TOTALSCORE0_MSP	
[CALCULATE IF MOC_SIGHT_MSP = NO]		

<p>The Montreal Cognitive Assessment (MoCA) is scored out of a maximum of 30 points. A final total score of 26 and above is considered normal. Total score on the MoCA: 0</p>
<p>CLINICIAN NOTES: One point has been added for individuals who have 12 years or fewer of formal education.</p>
<p>[CALCULATED VARIABLE: MOC_TRAIL + MOC_CUBE + MOC_CLOCKCON + MOC_CLOCKNUM + MOC_CLOCKHAND + MOC_ANIMALS:ONE + MOC_ANIMALS:TWO + MOC_ANIMALS:TWO + MOC_ANIMALS:THREE + MOC_ANIMALS:THREE + MOC_ANIMALS:THREE + MOC_NUMFORW + MOC_NUMBACK + MOC_LETTER:YES + MOC_SUBS:ONE + \$MOC_SUBS:TWO_THREE + MOC_SUBS:TWO_THREE + MOC_SUBS:FOUR_FIVE + MOC_SUBS:FOUR_FIVE + MOC_SUBS:FOUR_FIVE + MOC_REPET:ONE + MOC_REPET:TWO + MOC_REPET:TWO + MOC_WORDSFNUM:11_MORE + MOC_WORDSIM:ONE + MOC_WORDSIM:TWO + MOC_WORDSIM:TWO + MOC_MEM3:FACE + MOC_MEM3:VELVET + MOC_MEM3:CHURCH + MOC_MEM3:DAISY + MOC_MEM3:RED + MOC_ORIENT:DATE + MOC_ORIENT:MONTH + MOC_ORIENT:YEAR + MOC_ORIENT:DAY + MOC_ORIENT:PLACE + MOC_ORIENT:CITY + 1 IF BASELINE EDUCATION WAS 12 YEARS OR LESS == 0]</p>

VARIABLES MOC_21 TO MOC_51 SHOULD BE CALCULATED AS FOLLOWED:

VARIABLE NAME: MOC_TOTALSCORE[NUMBER] SHOULD INCREASE SEQUENTIALLY FROM 1 TO 30.

VARIABLE DESCRIPTION: TOTAL SCORE ON MONTREAL COGNITIVE ASSESSMENT (MOCA): [NUMBER] SHOULD INCREASE SEQUENTIALLY FROM 1 TO 30.

VARIABLE CALCULATION: THE TOTAL SCORE THAT THE VARIABLE CALCULATION EQUALS SHOULD INCREASE SEQUENTIALLY FROM 1 TO 30

MOC_52	MOC_TOTALMIS0_MSP
[CALCULATE IF MOC_SIGHT_MSP = NO]	
CLINICIAN NOTES: There were not any skipped items on the Montreal Cognitive Assessment (MoCA).	
<p>[CALCULATED VARIABLE, (\$MOC_TRAIL.refuse()\$? 1 : 0) + (\$MOC_CUBE.refuse()\$? 1 : 0) + (\$MOC_CLOCKCON.refuse()\$? 1 : 0) + (\$MOC_CLOCKNUM.refuse()\$? 1 : 0) + \$MOC_CLOCKHAND.refuse()\$? 1 : 0) + (\$MOC_ANIMALS.refuse()\$? 1 : 0) + \$MOC_ANIMALS.refuse()\$? 1 : 0) + (\$MOC_ANIMALS.refuse()\$? 1 : 0) + (\$MOC_NUMFORW.refuse()\$? 1 : 0) + (\$MOC_NUMBACK.refuse()\$? 1 : 0) + (\$MOC_LETTER.refuse()\$? 1 : 0) + (\$MOC_SUBS.refuse()\$? 1 : 0) + (\$MOC_SUBS.refuse()\$? 1 : 0) + (\$MOC_SUBS.refuse()\$? 1 : 0) + (\$MOC_REPET.refuse()\$? 1 : 0) + (\$MOC_REPET.refuse()\$? 1 : 0) + (\$MOC_WORDSFNUM.refuse()\$? 1 : 0) + (\$MOC_WORDSIM.refuse()\$? 1 : 0) + (\$MOC_WORDSIM.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) == 0]</p>	

MOC_53	MOC_TOTALMIS1_MSP
[CALCULATE IF MOC_SIGHT_MSP = NO]	
CLINICIAN NOTES: Not all components of the Montreal Cognitive Assessment (MoCA) may have been completed. This variable identifies the number of points out of the total score of 30 that the participant did not receive due to skipping tasks on the MoCA and should be considered when interpreting the total score of the MoCA. Number of points: 1	

[CALCULATED VARIABLE, (\$MOC_TRAIL.refuse()\$? 1 : 0) + (\$MOC_CUBE.refuse()\$? 1 : 0) + (\$MOC_CLOCKCON.refuse()\$? 1 : 0) + (\$MOC_CLOCKNUM.refuse()\$? 1 : 0) + (\$MOC_CLOCKHAND.refuse()\$? 1 : 0) + (\$MOC_ANIMALS.refuse()\$? 1 : 0) + (\$MOC_ANIMALS.refuse()\$? 1 : 0) + (\$MOC_ANIMALS.refuse()\$? 1 : 0) + (\$MOC_NUMFORW.refuse()\$? 1 : 0) + (\$MOC_NUMBACK.refuse()\$? 1 : 0) + (\$MOC_LETTER.refuse()\$? 1 : 0) + (\$MOC_SUBS.refuse()\$? 1 : 0) + (\$MOC_SUBS.refuse()\$? 1 : 0) + (\$MOC_SUBS.refuse()\$? 1 : 0) + (\$MOC_REPET.refuse()\$? 1 : 0) + (\$MOC_REPET.refuse()\$? 1 : 0) + (\$MOC_WORDSFNUM.refuse()\$? 1 : 0) + (\$MOC_WORDSIM.refuse()\$? 1 : 0) + (\$MOC_WORDSIM.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) == 1]

VARIABLES MOC_54 TO MOC_62 SHOULD BE CALCULATED AS FOLLOVED:

VARIABLE NAME: MOC_TOTALMIS[NUMBER] SHOULD INCREASE SEQUENTIALLY FROM 2 TO 10 OR MORE.

VARIABLE DESCRIPTION: TOTAL NUMBER OF MISSING POINTS ON MONTREAL COGNITIVE ASSESSMENT (MOCA): [NUMBER] SHOULD INCREASE SEQUENTIALLY FROM 1 TO 10 OR MORE.

VARIABLE CALCULATION: THE TOTAL SCORE THAT THE VARIABLE CALCULATION EQUALS SHOULD INCREASE SEQUENTIALLY FROM 1 TO 10 OR MORE

MOC_63	MOC_BLINDTSCORE0_MSP
[CALCULATE IF MOC_SIGHT_MSP = YES]	
Total score on the Montreal Cognitive Assessment (MoCA) Blind version : 0	
CLINICIAN NOTES: One point has been added for individuals who have 12 years or fewer of formal education, for a possible maximum of 22 points. A final total score of 18 and above is considered normal.	
[CALCULATED VARIABLE: MOC_NUMFORW + MOC_NUMBACK + MOC_LETTER:YES + MOC_SUBS:ONE + \$MOC_SUBS:TWO_THREE + MOC_SUBS:TWO_THREE + MOC_SUBS:FOUR_FIVE + MOC_SUBS:FOUR_FIVE + MOC_SUBS:FOUR_FIVE + MOC_REPET:ONE + MOC_REPET:TWO + MOC_REPET:TWO + MOC_WORDSFNUM:11_MORE + MOC_WORDSIM:ONE + MOC_WORDSIM:TWO + MOC_WORDSIM:TWO + MOC_MEM3:FACE + MOC_MEM3:VELVET + MOC_MEM3:CHURCH + MOC_MEM3:DAISY + MOC_MEM3:RED + MOC_ORIENT:DATE + MOC_ORIENT:MONTH + MOC_ORIENT:YEAR + MOC_ORIENT:DAY + MOC_ORIENT:PLACE + MOC_ORIENT:CITY + 1 IF BASELINE EDUCATION WAS 12 YEARS OR LESS == 0]	

VARIABLES MOC_64 TO MOC_86 SHOULD BE CALCULATED AS FOLLOVED:

VARIABLE NAME: MOC_BLINDTSCORE [NUMBER] SHOULD INCREASE SEQUENTIALLY FROM 1 TO 22.

VARIABLE DESCRIPTION: TOTAL SCORE ON MONTREAL COGNITIVE ASSESSMENT (MOCA) BLIND VERSION: [NUMBER] SHOULD INCREASE SEQUENTIALLY FROM 1 TO 22.

VARIABLE CALCULATION: THE TOTAL SCORE THAT THE VARIABLE CALCULATION EQUALS SHOULD INCREASE SEQUENTIALLY FROM 1 TO 22

MOC_87	MOC_BLINDMIS0_MSP
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[CALCULATE IF MOC_SIGHT_MSP = YES]
CLINICIAN NOTES: There were not any skipped items on the Montreal Cognitive Assessment (MoCA) Blind version..
[CALCULATED VARIABLE, (\$MOC_NUMFORW.refuse()\$? 1 : 0) + (\$MOC_NUMBACK.refuse()\$? 1 : 0) + (\$MOC_LETTER.refuse()\$? 1 : 0) + (\$MOC_SUBS.refuse()\$? 1 : 0) + (\$MOC_SUBS.refuse()\$? 1 : 0) + (\$MOC_REPET.refuse()\$? 1 : 0) + (\$MOC_REPET.refuse()\$? 1 : 0) + (\$MOC_WORDSFNUM.refuse()\$? 1 : 0) + (\$MOC_WORDSIM.refuse()\$? 1 : 0) + (\$MOC_WORDSIM.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_MEM3.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) + (\$MOC_ORIENT.refuse()\$? 1 : 0) == 0]

MOC_88	MOC_BLINDMIS1_MSP
[CALCULATE IF MOC_SIGHT_MSP = YES]	
CLINICIAN NOTES: Not all components of the Montreal Cognitive Assessment (MoCA) Blind version may have been completed. This variable identifies the number of points out of the total score of 22 that the participant did not receive due to skipping tasks on the MoCA-BLIND which is administered to participants with severe visual impairment. Number of points: 1	
[CALCULATED VARIABLE, MOC_LETTER_MSP (REFUSED) + MOC_NUMFORW_MSP (REFUSED) + MOC_NUMBACK_MSP (REFUSED) + MOC_SUBS_MSP (REFUSED) + MOC_REPET_MSP (REFUSED) + MOC_WORDSFNUM_MSP (REFUSED), MOC_WORDSIM_MSP (REFUSED), MOC_MEM3_MSP (REFUSED), MOC_ORIENT_MSP (REFUSED)]	

VARIABLES MOC_89 TO MOC_98 SHOULD BE CALCULATED AS FOLLOWED:

VARIABLE NAME: MOC_TOTALMIS[NUMBER] SHOULD INCREASE SEQUENTIALLY FROM 2 TO 10 OR MORE.

VARIABLE DESCRIPTION: TOTAL NUMBER OF MISSING POINTS ON MONTREAL COGNITIVE ASSESSMENT (MOCA): [NUMBER] SHOULD INCREASE SEQUENTIALLY FROM 1 TO 10 OR MORE.

VARIABLE CALCULATION: THE TOTAL SCORE THAT THE VARIABLE CALCULATION EQUALS SHOULD INCREASE SEQUENTIALLY FROM 1 TO 10 OR MORE

MOC_99	MOC_MISSCORE0_MSP
The Memory Score Index (MIS) is scored out of a maximum of 15. A score of 8 and above is considered normal. The participant's score on the MIS is: 0	
[CALCULATED VARIABLE, SUM OF (MOC_MEM3_MSP = FACE, VELVET, CHURCH, DAISY, AND/OR RED * 3) + (MOC_MISCUE1_MSP = FACE, VELVET, CHURCH, DAISY, AND/OR RED * 2) + (MOC_MISCUE2_MSP = FACE, VELVET, CHURCH, DAISY, AND/OR RED)]	

VARIABLES MOC_100 TO MOC_115 SHOULD BE CALCULATED AS FOLLOWED:

VARIABLE NAME: MOC_MISSCORE[NUMBER] SHOULD INCREASE SEQUENTIALLY FROM 1 TO 15.

VARIABLE DESCRIPTION: TOTAL SCORE MEMORY SCORE INDEX SHOULD INCREASE SEQUENTIALLY FROM 1 TO 15.

VARIABLE CALCULATION: THE TOTAL SCORE THAT THE VARIABLE CALCULATION EQUALS SHOULD INCREASE SEQUENTIALLY FROM 1 TO 15

MOC_116	MOC_MISSCOREMIS_MSP
CLINICIAN NOTES: Not all components of the Montreal Cognitive Assessment (MoCA) Memory Impairment Section (MIS) were completed. Please take this into consideration when interpreting the total score of the MIS.	
[CALCULATED VARIABLE, MOC_MEM3_MSP (REFUSED) OR MOC_MISCUE1_MSP (REFUSED) OR MOC_MISCUE2_MSP (REFUSED)]	

MOC_117	MOC_NOTES_MSP
[ALWAYS ASK]	
Do you have any additional notes to include for this module? For example, were there any issues with the testing environment that should be taken into account when interpreting the results of the cognitive testing?	
YES	1 Yes
NO	2 No

MOC_118	MOC_NOTES_SP_MSP
[ASK IF MOC_NOTES_MSP = YES]	
CLINICIAN NOTE: Please do not enter any identifying information in this section.	
Please provide any notes below:	

MOC_END

Preliminary Diagnosis of Neurocognitive Disorder (NCD)

Overview	Please use this module to document your preliminary diagnosis of the participant's cognitive status based on the clinical assessment and informant interview. This module does not contain questions related to planning the care of individuals diagnosed with neurocognitive disorder.
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NCD_1	NCD_DIA_MSP	
[ALWAYS ASK]		
Based on the clinical evaluation and informant interview, what is your diagnosis of the participant?		
CLINICIAN NOTE: The category of "no significant cognitive concerns" also includes participants without any cognitive complaints that performed poorly on the Montreal Cognitive Assessment (MoCA) if confounders such as language or education are thought to explain the poor performance.		
CODE ONLY ONE RESPONSE		
NORMAL	1	No significant cognitive concerns
SUB	2	Normal cognition but with subjective cognitive decline (self-reported confusion or memory problems happening more often and getting worse over last year but not meeting the criteria for either mild or major neurocognitive disorder)
DELIRIUM	3	Delirium
MILD	4	Mild neurocognitive disorder
MAJOR	5	Major neurocognitive disorder

NCD_2	NCD_CONF_MSP	
[ALWAYS ASK]		
How confident are you in your diagnosis? Please rate on an 11-point scale (0-10; with the anchors of 0, indicating the lowest confidence rating, and 10, the highest confidence rating)		
NUMBER	Number	_____ [MASK: MIN=0, MAX=10]

NCD_3	NCD_DOM_MSP	
[ASK IF NCD_DIA_MSP = SUB, MILD ,OR MAJOR]		
What cognitive domains have been impacted by cognitive decline?		
MULTIPLE RESPONSES ALLOWED (EXCEPT IF 96 IS SELECTED), CODE ALL THAT APPLY		
AT	01	Attention
EF	02	Executive function
LM	03	Learning and memory
LG_	04	Language
PC	05	Perceptual/motor
SC	06	Social cognition
NONE	96	No cognitive domains appear to be impacted

NCD_4	NCD_INFO_MSP	
[ALWAYS ASK]		
What additional information or resources would increase your confidence in your diagnosis?		
MULTIPLE RESPONSES ALLOWED, CODE ALL THAT APPLY		
NONE	1	None
LAB	2	Laboratory investigations
IMG	3	Neuroimaging
REF	4	Referral to a consultant
TIM	5	Opportunity to follow the participant over time
OTSP	7	Other (please specify: _____)

NCD_5	NCD_TYPE_MSP	
[ASK IF NCD_DIA_MSP = MILD OR MAJOR]		
Based on the clinical evaluation and informant interview, what is your diagnosis of the participant?		
CODE ONLY ONE RESPONSE		
ALZ	1	Alzheimer's Disease
LWY	2	Lewy Body Disease
PKD	3	Parkinson's Disease
VSC	4	Vascular Cognitive Impairment
FRT	5	Frontotemporal Degeneration
TBI	6	Traumatic Brain Injury (Including Chronic Traumatic Encephalopathy)
MLT	7	Multiple (or Mixed) etiologies
OTSP	8	Other (please specify: _____)
UNK	9	Unknown

NCD_6	NCD_TYPCONF_MSP	
[ASK IF NCD_DIA_MSP = MILD OR MAJOR]		
How confident are you in your diagnosis of the underlying cause of the mild or major neurocognitive disorder? Please rate on an 11-point scale (0-10; with the anchors of 0, indicating the lowest confidence rating, and 10, the highest confidence rating)		
NUMBER	Number	_____ [MASK: MIN=0, MAX=10]

NCD_7	NCD_TYPINF_MSP	
[ASK IF NCD_DIA_MSP = MILD OR MAJOR]		
What additional information or resources would increase your confidence in your diagnosis?		
MULTIPLE RESPONSES ALLOWED, CODE ALL THAT APPLY		
NONE	1	None
LAB	2	Laboratory investigations
IMG	3	Neuroimaging
REF	4	Referral to a consultant
TIM	5	Opportunity to follow the participant over time
OTSP	7	Other (please specify: _____)

NCD_8	NCD_NOTES_MSP	
[ALWAYS ASK]		
Do you have any additional notes? For example, are there any other details regarding your clinical assessment with the participant that you have not previously recorded that impacted the diagnosis you provided to the participant?		
YES	1	Yes
NO	2	No

NCD_9	NCD_NOTES_SP_MSP	
[ASK IF NCD_NOTES_MSP = YES]		
CLINICIAN NOTE: Please do not enter any identifying information in this section.		
Please provide any notes below:		

NCD_10	NCD_LETTER1_MSP	
ALWAYS ASK		
DO NOT READ: If your clinical assessment of the participant indicates that there may be a concern about the participant's memory, please fill out the CLSA Memory Study Participant Letter Template – Potential Cognitive Concerns template with the participant's name and MoCA score.		
If your clinical assessment of the participant indicates that there are not any concerns about the participant's memory, please fill out the CLSA Memory Study Participant Letter Template – No Cognitive Concerns template with the participant's name and MoCA score.		
Give the letter to the participant and verbally discuss the content.		

NCD_11	NCD_LETTER2_MSP	
ALWAYS ASK		
Did you give the letter to the participant?		
YES	1	Yes
NO	2	No

NCD_12	NCD_LETTER3_MSP	
[ASK IF NCD_LETTER_MSP = NO]		
Why did you not give the letter to the participant? _____		
NCD_END		