

Supplementary Material

Technical Review of Clinical Outcomes Assessments Across the Continuum of Alzheimer's Disease

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Appendix A: Literature Search Methods

All categories of COAs were considered in the literature review, including the following:

- *Patient-reported outcomes (PROs)*, or outcomes reported directly from the patient
- *Clinician-reported outcomes (ClinROs)*, or outcomes reported by a health care professional after observation of a patient's health condition
- *Observer-reported outcomes (ObsROs)*, or outcomes based on signs or behaviors related to a patient's health condition by someone other than the patient or a clinician (e.g., a caregiver)
- *Performance outcomes (PerfOs)*, or outcomes based on a standardized task or assessment undertaken by a patient according to a set of instructions

**Table A-1. PubMed Literature Search Strategy (Conducted October 10, 2019)
Limits: English; Adults; Humans; Abstract available; No comments,
letters, editorials; Published in the last 5 years**

Search		No. of
No.	Search Terms	Articles
Population		
#1	("Alzheimer Disease"[Mesh] OR "Alzheimer Disease"[Title/Abstract] OR "Alzheimer's Disease"[Title/Abstract] OR "Alzheimers Disease"[Title/Abstract]) AND ("Alzheimer Disease/drug therapy"[Mesh] OR "Drug Therapy"[Mesh] OR "Pharmacology"[Mesh] OR "Pharmaceutical Preparations"[Mesh] OR "Donepezil"[Mesh] OR "Galantamine"[Mesh] OR "Rivastigmine"[Mesh] OR "Cholinesterase Inhibitors"[Pharmacological Action] OR "Cholinesterase Inhibitors"[Mesh] OR "Memantine"[Mesh] OR drug[Title/Abstract] OR drugs[Title/Abstract] OR medication*[Title/Abstract] OR pharmaceutical*[Title/Abstract] OR donepezil[Title/Abstract] OR galantamine[Title/Abstract] OR rivastigmine[Title/Abstract] OR cholinesterase inhibitor*[Title/Abstract] OR memantine[Title/Abstract]) AND ("Clinical Trials as Topic"[Mesh] OR "Clinical Trial"[Publication Type] OR trial*[Title/Abstract] OR interventional[Title/Abstract]) Filters: Abstract; published in the last 5 years; English	1,591

Search No.	Search Terms	No. of Articles
Instruments		
#2	#1 AND ("Interviews as Topic"[Mesh] OR "Patient Reported Outcome Measures"[Mesh] OR "Patient Outcome Assessment"[Mesh] OR "Neuropsychological Tests"[Mesh] OR patient report*[Title/Abstract] OR PRO[Title/Abstract] OR observer report*[Title/Abstract] OR ObsRO[Title/Abstract] OR clinician report*[Title/Abstract] OR physician report*[Title/Abstract] OR ClinRO[Title/Abstract] OR performance outcome*[Title/Abstract] OR Perfo[Title/Abstract] OR self report*[Title/Abstract] OR interview*[Title/Abstract] OR ((neuropsychological[Title/Abstract] OR neurocognition[Title/Abstract] OR neuropsychiatric[Title/Abstract] OR composite[Title/Abstract]) AND (measur*[Title/Abstract] OR assess*[Title/Abstract] OR test*[Title/Abstract] OR tests[Title/Abstract] OR testing[Title/Abstract] OR tested[Title/Abstract] OR instrument*[Title/Abstract] OR survey*[Title/Abstract] OR questionnaire*[Title/Abstract]))) Filters: Abstract; published in the last 5 years; English	329
Exclusions		
#3	"Animals"[Mesh] NOT "Humans"[Mesh] Filters: Abstract; published in the last 5 years; English	497,504
#4	"Comment"[Publication Type] OR "Letter"[Publication Type] OR "Editorial"[Publication Type] Filters: Abstract; published in the last 5 years; English	33,441
#5	#2 NOT (#3 OR #4) Filters: Abstract; published in the last 5 years; English	321
Preclinical		
#6	#5 AND "Prodromal Symptoms"[Mesh] OR preclinical[Title/Abstract] OR "pre-clinical"[Title/Abstract] OR prodromal[Title/Abstract] OR prodromic[Title/Abstract] OR early stage*[Title/Abstract] Filters: Abstract; published in the last 5 years; English	43 (43 unique records)
Moderate/Severe		
#7	#5 AND "Dementia"[Mesh:NoExp] OR moderate[Title/Abstract] OR severe[Title/Abstract] OR late stage*[Title/Abstract] OR dementia[Title] Filters: Abstract; published in the last 5 years; English	161 (148 unique records)

Search No.	Search Terms	No. of Articles
Reviews		
#8	#5 AND "Review"[Publication Type] OR review*[Title] Filters: Abstract; published in the last 5 years; English	58 (24 unique records)
Total		
#9	#6 OR #7 OR #8 Filters: Abstract; published in the last 5 years; English	217 (215 unique records)

Table A-2. Embase Search Strategy (Conducted October 10, 2019)
Limits: English; Adults; Humans; Abstract available; No comments, letters, editorials; Published in the last 5 years

Search No.	Search Terms	No. of Articles
Population		
#1	('Alzheimer disease'/exp/mj OR 'Alzheimer Disease':ti,ab OR 'Alzheimer s Disease':ti,ab OR 'Alzheimers Disease':ti,ab) AND ('alzheimer disease'/exp/mj/dm_dt OR 'drug therapy'/exp/mj OR 'pharmacology'/exp/mj OR 'drug'/exp/mj OR 'donepezil'/exp/mj OR 'galantamine'/exp/mj OR 'rivastigmine'/exp/mj OR 'cholinesterase inhibitor'/exp/mj OR 'memantine'/exp/mj OR drug:ti,ab OR drugs:ti,ab OR medication*:ti,ab OR pharmaceutical*:ti,ab OR donepezil:ti,ab OR galantamine:ti,ab OR rivastigmine:ti,ab OR (cholinesterase NEXT/1 inhibitor*):ti,ab OR memantine:ti,ab) AND ('clinical trial (topic)'/exp/mj OR 'clinical trial'/exp OR trial*:ti,ab OR interventional:ti,ab) AND [english]/lim AND [abstracts]/lim AND [embase]/lim AND [1-10-2014]/sd NOT [1-11-2019]/sd AND [2014-2019]	2,659

Search No.	Search Terms	No. of Articles
Instruments		
#2	#1 AND ('interview'/exp OR 'patient-reported outcome'/exp OR 'neuropsychological test'/exp OR (patient NEXT/1 report*):ti,ab OR PRO:ti,ab OR (observer NEXT/1 report*):ti,ab OR ObsRO:ti,ab OR (clinician NEXT/1 report*):ti,ab OR (physician NEXT/1 report*):ti,ab OR ClinRO:ti,ab OR (performance NEXT/1 outcome*):ti,ab OR Perfo:ti,ab OR (self NEXT/1 report*):ti,ab OR interview*:ti,ab OR ((neuropsychological:ti,ab OR neurocognition:ti,ab OR neuropsychiatric:ti,ab OR composite:ti,ab) AND (measur*:ti,ab OR assess*:ti,ab OR test*:ti,ab OR tests:ti,ab OR testing:ti,ab OR tested:ti,ab OR instrument*:ti,ab OR survey*:ti,ab OR questionnaire*:ti,ab))) AND [english]/lim AND [abstracts]/lim AND [embase]/lim AND [1-10-2014]/sd NOT [1-11-2019]/sd AND [2014-2019]	523
Exclusions		
#3	'animal'/exp NOT 'human'/exp AND [english]/lim AND [abstracts]/lim AND [embase]/lim AND [1-10-2014]/sd NOT [1-11-2019]/sd AND [2014-2019]	667,834
#4	comment*:ti OR letter:it OR editorial:it AND [english]/lim AND [abstracts]/lim AND [embase]/lim AND [1-10-2014]/sd NOT [1-11-2019]/sd AND [2014-2019]	12,496
#5	#2 NOT (#3 OR #4) AND [english]/lim AND [abstracts]/lim AND [embase]/lim AND [1-10-2014]/sd NOT [1-11-2019]/sd AND [2014-2019]/	492
Preclinical		
#6	#5 AND ('prodromal symptom'/exp OR preclinical:ti,ab OR 'pre-clinical':ti,ab OR prodromal:ti,ab OR prodromic:ti,ab OR (early NEXT/1 stage*):ti,ab) AND [english]/lim AND [abstracts]/lim AND [embase]/lim AND [1-10-2014]/sd NOT [1-11-2019]/sd AND [2014-2019]	111 (82 unique records)
Moderate/Severe		
#7	#5 AND ('dementia'/mj OR moderate:ti,ab OR severe:ti,ab OR (late NEXT/1 stage*):ti,ab OR dementia:ti) AND [english]/lim AND [abstracts]/lim AND [embase]/lim AND [1-10-2014]/sd NOT [1-11-2019]/sd AND [2014-2019]/	221 (123 unique records)
Reviews		
#8	#5 AND (review:it OR review*:ti) AND [english]/lim AND [abstracts]/lim AND [embase]/lim AND [1-10-2014]/sd NOT [1-11-2019]/sd AND [2014-2019]	60 (14 unique records)

Search No.	Search Terms	No. of Articles
Total		
#9	(#6 OR #7 OR #8) AND [english]/lim AND [abstracts]/lim AND [embase]/lim AND [1-10-2014]/sd NOT [1-11-2019]/sd AND [2014-2019]	334 (219 unique records)

Table A-3. Inclusion and Exclusion Criteria for Level 1 (Titles and Abstracts) and Level 2 (Full-Text) Screening

Criterion	Included	Excluded
Population	Patients who with any of the following (a clinical diagnosis is not required): Preclinical Alzheimer's Disease (AD) Mild Cognitive Impairment (MCI) Subjective Cognitive Decline Mild, moderate, or severe AD Caregivers to patients with conditions listed above who are providing an ObsRO^a Mixed populations of patients with AD and those with another type of dementia (e.g., Parkinson's dementia or Lewy-body dementia)^b	Pediatric populations (<18 years) Nonhuman populations (e.g., mice) Populations that exclusively have an excluded diagnosis (e.g., non-dementia vascular cognitive impairment [NDVCI] and abnormal glucose metabolism)
Intervention	Any pharmaceutical intervention Mixed pharmaceutical and non-pharmaceutical interventions where at least one arm of the intervention is pharmaceutical only No particular intervention (e.g., for registry/observational studies)	Patients receiving a non-pharmaceutical intervention (e.g., Chinese medicine, curcumin, acupuncture, nutritional or cognitive/behavioral intervention, physical therapy or exercise)
Comparator	N/A	N/A
Outcomes	Review or primary study which include an outcome of interest:	Any other outcomes

Criterion	Included	Excluded
	PRO ClinRO Neurocognitive measures PerfO ObsRO	
Study design	Studies where the majority of the data come from the US or Canada ^c . Specific study types include: Randomized or nonrandomized clinical trials with results ^d Observational research studies Registry studies Consensus reports, guidelines, or position statements (e.g., regulators, FDA, professional groups) regarding COA selection for interventional studies	Nonsystematic reviews Case reports Post-hoc analyses and secondary analyses of clinical trials Pooled analyses of Clinical Trials Study/trial protocols Systematic literature reviews/Meta-Analyses Lectures/Presentations Risk models Qualitative studies Psychometric studies for COAs Case studies/series Editorials Commentaries Letters Qualitative studies without use of COA Treatment guidelines Study of < 25 patients
Other	English	Non-English

ClinRO = clinician-reported outcome; FDA = US Food and Drug Administration; ObsRO = observer report; PerfO = performance outcome; PRO = patient-reported outcome.

^a Studies that only report caregiver burden will be flagged but not included.

^b At level 2, in order to meet inclusion criteria, studies were required to have results reported separately for the clinical samples.

^c More than 50% of data collection should have taken place in North America (United States and Canada). Percentage was estimated based on the frequency of study site locations in the United States and Canada divided by the total number of study sites; for publications, if this information was not available, when available the NCT number was used to refer to the Clinicaltrials.gov record to determine study site locations. If not reported, refer to location of primary author(s) for indication of location.

^d The ClinicalTrials.gov search included trials that: did not include results, were terminated, and were still recruiting.

Appendix B: Included Studies

Table B-1. List of Studies Included From Database Search

#	Citation
1	Abushakra S, Sadowsky CH, Porsteinsson AP, Gauthier S, Vellas B, Power A, et al. Clinical effects of tramiprosate in APOE4 homozygotes with mild to moderate Alzheimer's disease (ad) are sustained over 130 weeks: Results of a phase 3 extension study. <i>Alzheimer's and Dementia</i> . 2017;13(7):P256.
2	Bago Rozankovic P, Badzak J. Impact of donepezil and memantine on behavioral and psychological symptoms in patients with Alzheimer's disease. <i>European Journal of Neurology</i> . 2015;22:579.
3	Bowen RL, Perry G, Xiong C, Smith MA, Atwood CS. A clinical study of lupron depot in the treatment of women with Alzheimer's disease: preservation of cognitive function in patients taking an acetylcholinesterase inhibitor and treated with high dose lupron over 48 weeks. <i>J Alzheimers Dis</i> . 2015;44(2):549-60.
4	Claxton A, Baker LD, Hanson A, Trittschuh EH, Cholerton B, Morgan A, et al. Long-acting intranasal insulin detemir improves cognition for adults with mild cognitive impairment or early-stage Alzheimer's disease dementia. <i>J Alzheimers Dis</i> . 2015;44(3):897-906.
5	Cloutier M, Gauthier-Loiselle M, Gagnon-Sanschagrin P, Guerin A, Sanon M. Level of care dependency and functional status among patients with Alzheimer's disease and agitation/aggression symptoms. <i>American Journal of Geriatric Psychiatry</i> . 2019;27(3):S151-S2.
6	Craft S, Claxton A, Baker LD, Hanson AJ, Cholerton B, Trittschuh EH, et al. Effects of Regular and Long-Acting Insulin on Cognition and Alzheimer's Disease Biomarkers: A Pilot Clinical Trial. <i>J Alzheimers Dis</i> . 2017;57(4):1325-34.
7	Cumbo E, Cumbo S, Torregrossa S, Migliore D. Effects of vortioxetine on cognitive functions in patients with Alzheimer's disease and depressive symptoms: Interim results of an observational study. <i>Journal of Prevention of Alzheimer's Disease</i> . 2018;5(1):S58-S9.
8	Cummings JL, Cohen S, van Dyck CH, Brody M, Curtis C, Cho W, et al. ABBY: A phase 2 randomized trial of crenezumab in mild to moderate Alzheimer disease. <i>Neurology</i> . 2018 May 22;90(21):e1889-e97.
9	Cummings JL, Lyketsos CG, Peskind ER, Porsteinsson AP, Mintzer JE, Scharre DW, et al. Effect of Dextromethorphan-Quinidine on Agitation in Patients With Alzheimer Disease Dementia: A Randomized Clinical Trial. <i>Jama</i> . 2015 Sep 22-29;314(12):1242-54.

#	Citation
10	Fullerton T, Binneman B, David W, Delnomdedieu M, Kupiec J, Lockwood P, et al. A Phase 2 clinical trial of PF-05212377 (SAM-760) in subjects with mild to moderate Alzheimer's disease with existing neuropsychiatric symptoms on a stable daily dose of donepezil. <i>Alzheimers Res Ther.</i> 2018 Apr 5;10(1):38.
11	Gauthier S, Rountree S, Finn B, LaPlante B, Weber E, Oltersdorf T. Effects of the Acetylcholine Release Agent ST101 with Donepezil in Alzheimer's Disease: A Randomized Phase 2 Study. <i>J Alzheimers Dis.</i> 2015;48(2):473-81.
12	Henderson VW, Ala T, Sainani KL, Bernstein AL, Stephenson BS, Rosen AC, et al. Raloxifene for women with Alzheimer disease: A randomized controlled pilot trial. <i>Neurology.</i> 2015 Dec 1;85(22):1937-44.
13	Herrmann N, O'Regan J, Ruthirakuhan M, Kiss A, Eryavec G, Williams E, et al. A Randomized Placebo-Controlled Discontinuation Study of Cholinesterase Inhibitors in Institutionalized Patients With Moderate to Severe Alzheimer Disease. <i>J Am Med Dir Assoc.</i> 2016 Feb;17(2):142-7.
14	Kile S, Au W, Parise C, Rose K, Donnel T, Hankins A, et al. IVIG treatment of mild cognitive impairment due to Alzheimer's disease: a randomised double-blinded exploratory study of the effect on brain atrophy, cognition and conversion to dementia. <i>J Neurol Neurosurg Psychiatry.</i> 2017 Feb;88(2):106-12.
15	Lancôt KL, Ruthirakuhan M, O'Regan JN, Eryavec G, Williams E, Black SE, et al. Cholinesterase inhibitor discontinuation in institutionalized persons with moderate to severe AD: Results of a double-blind, placebo controlled trial. <i>American Journal of Geriatric Psychiatry.</i> 2015;23(3):S172-S3.
16	Nosheny RL, Flennkiken D, Insel PS, Finley S, Mackin S, Camacho M, et al. Internet-based recruitment of subjects for prodromal and secondary prevention Alzheimer's disease trials using the brain health registry. <i>Alzheimer's and Dementia.</i> 2015;11(7):P156.
17	Olsson T, Alexander R, Budd Haeberlein S, Hannesdottir K, Andrews T, Curry L, et al. Use of a telephone interview methodology to identify subjects with cognitive impairment among those reporting subjective memory complaints. <i>Neurodegenerative Diseases.</i> 2015;15:836.
18	Salloway SP, Sperling R, Fox NC, Sabbagh MN, Honig LS, Porsteinsson AP, et al. Long-Term Follow Up of Patients with Mild-to-Moderate Alzheimer's Disease Treated with Bapineuzumab in a Phase III, Open-Label, Extension Study. <i>J Alzheimers Dis.</i> 2018;64(3):689-707.
19	Steinberg MI, Leoutsakos JMS. The association between general medical health and course of cognition, function, and neuropsychiatric symptoms in the cache county dementia progression study. <i>Alzheimer's and Dementia.</i> 2015;11(7):P261.

#	Citation
20	Vandenberghe R, Rinne JO, Boada M, Katayama S, Scheltens P, Vellas B, et al. Bapineuzumab for mild to moderate Alzheimer's disease in two global, randomized, phase 3 trials. <i>Alzheimers Res Ther.</i> 2016 May 12;8(1):18.
21	Wharton W, Goldstein FC, Zhao L, Steenland K, Levey AI, Hajjar L. Modulation of renin-angiotensin system may slow conversion from mild cognitive impairment to Alzheimer's disease. <i>Journal of the American Geriatrics Society.</i> 2015;63(9):1749-56.
22	Yamamoto E, Mourany L, Collieran R, Whitman C, Tousi B. Utility of Montreal Cognitive Assessment in Differentiating Dementia With Lewy Bodies From Alzheimer's Dementia. <i>Am J Alzheimers Dis Other Dement.</i> 2017 Dec;32(8):468-71.

Table B-2. List of Studies Included From ClinicalTrials.gov Search

NCT Identifier	Study Title	Hyperlink
NCT00580931	Safety Study of Nicotinamide to Treat Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT00580931
NCT01126099	Prazosin Treatment for Disruptive Agitation in Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01126099
NCT01127633	Continued Safety Monitoring of Solanezumab (LY2062430) in Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01127633
NCT01145482	Mechanisms of Insulin Facilitation of Memory	https://ClinicalTrials.gov/show/NCT01145482
NCT01255163	A Pilot Clinical Trial of Exendin-4 in Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01255163
NCT01284387	Amyloid Imaging And Safety Study Of ACC-001 In Subjects With Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01284387
NCT01300728	Study of Intravenous Immunoglobulin in Amnesic Mild Cognitive Impairment	https://ClinicalTrials.gov/show/NCT01300728
NCT01354444	Trial of Carvedilol in Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01354444
NCT01362686	Comparative Research of Alzheimer's Disease Drugs	https://ClinicalTrials.gov/show/NCT01362686
NCT01369225	Open Label Extension Study Evaluating Safety and Tolerability of AAB-003 (PF-05236812) in Subject With Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01369225
NCT01397578	A Study to Evaluate the Impact of MABT5102A on Brain Amyloid Load and Related Biomarkers in Patients With Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01397578
NCT01466088	Efficacy, Safety, & Tolerability of AZD3480 Patients With Mild to Moderate Dementia of the Alzheimer's Type (AD)	https://ClinicalTrials.gov/show/NCT01466088
NCT01504854	Resveratrol for Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01504854

NCT Identifier	Study Title	Hyperlink
NCT01554683	Seizure Activity in Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01554683
NCT01560585	Open Label Study of Isotretinoin in Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01560585
NCT01584440	Efficacy, Safety and Tolerability Study of AVP-923 (Dextromethorphan/Quinidine) for Treatment of Symptoms of Agitation in Alzheimer's Patients	https://ClinicalTrials.gov/show/NCT01584440
NCT01595646	Study of Nasal Insulin to Fight Forgetfulness—Long-acting Insulin Detemir—120 Days (SL120)	https://ClinicalTrials.gov/show/NCT01595646
NCT01609348	Venlafaxine for Depression in Alzheimer's Disease (DIADs-3)	https://ClinicalTrials.gov/show/NCT01609348
NCT01636596	Efficacy of Pulsatile IV Insulin on Cognition and Amyloid Burden in Patients With Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01636596
NCT01658228	Combination Treatment Study for Memory Impairment and Depression	https://ClinicalTrials.gov/show/NCT01658228
NCT01677754	A Study of RO4602522 in Participants With Moderate Severity Alzheimer Disease on Background Alzheimer Disease Therapy	https://ClinicalTrials.gov/show/NCT01677754
NCT01689233	Safety and Efficacy Study Evaluating TRx0237 in Subjects With Mild Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01689233
NCT01689246	Safety and Efficacy Study Evaluating TRx0237 in Subjects With Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01689246
NCT01690195	Safety and Tolerability Study Evaluating a New Treatment for Subjects With Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01690195
NCT01716637	Short Term Efficacy and Safety of Perispinal Administration of Etanercept in Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01716637

NCT Identifier	Study Title	Hyperlink
NCT01735630	Efficacy and Safety Study of ELND005 as a Treatment for Agitation and Aggression in Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01735630
NCT01741194	AC-1204 26-Week Long Term Efficacy Response Trial With Optional Open-label Ext	https://ClinicalTrials.gov/show/NCT01741194
NCT01767909	The Study of Nasal Insulin in the Fight Against Forgetfulness (SNIFF)	https://ClinicalTrials.gov/show/NCT01767909
NCT01782742	Bexarotene Amyloid Treatment for Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01782742
NCT01845636	Olfactory Deficits in MCI as Predictor of Improved Cognition on Donepezil	https://ClinicalTrials.gov/show/NCT01845636
NCT01862640	Safety and Tolerability Study of Two Fixed-doses of Brexpiprazole in the Treatment of Subjects With Agitation Associated With Dementia of the Alzheimer's Type	https://ClinicalTrials.gov/show/NCT01862640
NCT01864655	Safety and Tolerability of AZD0530 (Saracatinib) in Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01864655
NCT01900665	Progress of Mild Alzheimer's Disease in Participants on Solanezumab Versus Placebo	https://ClinicalTrials.gov/show/NCT01900665
NCT01902004	Brain Aging and Treatment Response in Geriatric Depression	https://ClinicalTrials.gov/show/NCT01902004
NCT01922258	Safety and Tolerability Study of Flexible Dosing of Brexpiprazole in the Treatment of Subjects With Agitation Associated With Dementia of the Alzheimer's Type	https://ClinicalTrials.gov/show/NCT01922258
NCT01928420	A Single Site, Randomized, Double-blind, Placebo Controlled Trial of NIC5-15 in Subjects With Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01928420

NCT Identifier	Study Title	Hyperlink
NCT01931566	Biomarker Qualification for Risk of Mild Cognitive Impairment (MCI) Due to Alzheimer's Disease (AD) and Safety and Efficacy Evaluation of Pioglitazone in Delaying Its Onset	https://ClinicalTrials.gov/show/NCT01931566
NCT01951118	Olfactory Deficits and Donepezil Treatment in Cognitively Impaired Elderly	https://ClinicalTrials.gov/show/NCT01951118
NCT01955161	Study of Idalopirdine in Patients With Mild–Moderate Alzheimer's Disease Treated With Donepezil	https://ClinicalTrials.gov/show/NCT01955161
NCT01965756	Effect of Insulin Sensitizer Metformin on AD Biomarkers	https://ClinicalTrials.gov/show/NCT01965756
NCT01969123	Study of the Safety and Effectiveness of Two Doses of Investigational Study Drug EVP-6124 in Subjects With Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01969123
NCT01969136	Study of the Safety and Effectiveness of Two Doses of Investigational Study Drug EVP-6124 in Subjects With Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT01969136
NCT02004392	Study of the Safety and Clinical Effects of 2 Doses of EVP-6124 in Subjects With Alzheimer's Disease Who Complete Study EVP-6124-024 or EVP-6124-025	https://ClinicalTrials.gov/show/NCT02004392
NCT02006641	Idalopirdine in Patients With Mild-moderate Alzheimer's Disease Treated With Donepezil	https://ClinicalTrials.gov/show/NCT02006641
NCT02006654	Study of Idalopirdine in Patients With Mild–Moderate Alzheimer's Disease Treated With an Acetylcholinesterase Inhibitor	https://ClinicalTrials.gov/show/NCT02006654
NCT02045056	Modulation of Micro-RNA Pathways by Gemfibrozil in Predementia Alzheimer Disease	https://ClinicalTrials.gov/show/NCT02045056

NCT Identifier	Study Title	Hyperlink
NCT02079246	Long-term Safety and Tolerability of Idalopirdine (Lu AE58054) as Adjunctive Treatment to Donepezil in Patients With Mild-moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT02079246
NCT02079909	Efficacy and Safety of T-817MA in Patients With Mild to Moderate Alzheimer's Disease (US202)	https://ClinicalTrials.gov/show/NCT02079909
NCT02080364	Evaluation of the Efficacy and Safety of Azeliragon (TTP488) in Patients With Mild Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT02080364
NCT02167256	A Phase IIa Multi-Center Study of 18F-FDG PET, Safety, and Tolerability of AZD0530 in Mild Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT02167256
NCT02221622	Allopregnanolone for Mild Cognitive Impairment Due to Alzheimer's Disease or Mild AD	https://ClinicalTrials.gov/show/NCT02221622
NCT02240693	Alzheimer Disease Proof of Concept Study With BI 409306 Versus Placebo	https://ClinicalTrials.gov/show/NCT02240693
NCT02245737	An Efficacy and Safety Study of Lanabecestat (LY3314814) in Early Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT02245737
NCT02246075	Study of the Safety of Two Doses of Investigational Study Drug EVP-6124 in Subjects With Alzheimer's Disease Currently Receiving Memantine	https://ClinicalTrials.gov/show/NCT02246075
NCT02284906	AD-4833/TOMM40_303 Extension Study of the Safety and Efficacy of Pioglitazone to Slow Cognitive Decline in Participants With Mild Cognitive Impairment Due to Alzheimer Disease	https://ClinicalTrials.gov/show/NCT02284906
NCT02337907	BI 409306 in Patients With Cognitive Impairment Due to Alzheimer's Disease.	https://ClinicalTrials.gov/show/NCT02337907

NCT Identifier	Study Title	Hyperlink
NCT02353598	A Study of Crenezumab in Participants With Mild to Moderate Alzheimer Disease	https://ClinicalTrials.gov/show/NCT02353598
NCT02431468	A Study Assessing Bryostatin in the Treatment of Moderately Severe to Severe Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT02431468
NCT02442765	Efficacy, Safety and Tolerability of AVP-786 for the Treatment of Agitation in Patients With Dementia of the Alzheimer's Type	https://ClinicalTrials.gov/show/NCT02442765
NCT02442778	Efficacy, Safety, and Tolerability of AVP-786 for the Treatment of Agitation in Patients With Dementia of the Alzheimer's Type	https://ClinicalTrials.gov/show/NCT02442778
NCT02560753	Feasibility Study in Subjects With Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT02560753
NCT02569398	An Efficacy and Safety Study of Atabecestat in Participants Who Are Asymptomatic at Risk for Developing Alzheimer's Dementia	https://ClinicalTrials.gov/show/NCT02569398
NCT02580305	SUVN-502 With Donepezil and Memantine for the Treatment of Moderate Alzheimer's Disease- Phase 2a Study	https://ClinicalTrials.gov/show/NCT02580305
NCT02585934	Study Evaluating Intepirdine (RVT-101) in Subjects With Mild to Moderate Alzheimer's Disease on Donepezil: MINDSET Study	https://ClinicalTrials.gov/show/NCT02585934
NCT02590874	The Use of Duloxetine for Cognition Improvement in Individuals With Mild Cognitive Impairment	https://ClinicalTrials.gov/show/NCT02590874
NCT02593318	Trial of Oxaloacetate in Alzheimer's Disease (TOAD)	https://ClinicalTrials.gov/show/NCT02593318

NCT Identifier	Study Title	Hyperlink
NCT02670083	CREAD Study: A Study of Crenezumab Versus Placebo to Evaluate the Efficacy and Safety in Participants With Prodromal to Mild Alzheimer's Disease (AD)	https://ClinicalTrials.gov/show/NCT02670083
NCT02727699	A Phase II Study to Assess the Safety, Tolerability and Efficacy of Xanamem™ in Subjects With Mild Dementia Due to AD (XanADu)	https://ClinicalTrials.gov/show/NCT02727699
NCT02760602	A Study of Solanezumab (LY2062430) in Participants With Prodromal Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT02760602
NCT02783573	A Study of Lanabecestat (LY3314814) in Participants With Mild Alzheimer's Disease Dementia	https://ClinicalTrials.gov/show/NCT02783573
NCT02788513	BI 425809 in Patients With Cognitive Impairment Due to Alzheimer's Disease.	https://ClinicalTrials.gov/show/NCT02788513
NCT02791191	A Study of LY3202626 on Disease Progression in Participants With Mild Alzheimer's Disease Dementia	https://ClinicalTrials.gov/show/NCT02791191
NCT02817906	ITI-007 for the Treatment of Agitation in Patients With Dementia, Including Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT02817906
NCT02820896	A Study of RO7105705 in Healthy Participants and Participants With Mild-to-Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT02820896
NCT02835716	Pre-Clinical (Alzheimers) Diagnosis PCD = Optimum Outcomes OO	https://ClinicalTrials.gov/show/NCT02835716
NCT02886494	A Study to Evaluate Efficacy and Safety of BAC in Patient With Alzheimer's Disease or Vascular Dementia	https://ClinicalTrials.gov/show/NCT02886494
NCT02916056	2-Year Extension Study of Azeliragon in Subjects With Alzheimer's Disease (STEADFAST Extension)	https://ClinicalTrials.gov/show/NCT02916056

NCT Identifier	Study Title	Hyperlink
NCT02972658	A Study of Lanabecestat (LY3314814) in Early Alzheimer's Disease Dementia	https://ClinicalTrials.gov/show/NCT02972658
NCT02992132	Study to Examine the Safety and Efficacy of Pimavanserin for the Treatment of Agitation and Aggression in Alzheimer's Disease (SERENE)	https://ClinicalTrials.gov/show/NCT02992132
NCT03114657	A Study of Crenezumab Versus Placebo to Evaluate the Efficacy and Safety in Participants With Prodromal to Mild Alzheimer's Disease (AD)	https://ClinicalTrials.gov/show/NCT03114657
NCT03117738	A Study to Evaluate the Safety and Efficacy of AstroStem in Treatment of Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT03117738
NCT03226522	Addressing Dementia Via Agitation-Centered Evaluation	https://ClinicalTrials.gov/show/NCT03226522
NCT03316898	A FDG-PET Study of AGN-242071 Added to Standard-of-Care (Donepezil ± Memantine) for the Treatment of Participants With Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT03316898
NCT03402659	Proof-of-Concept Study of a Selective p38 MAPK Alpha Inhibitor, Neflamapimod, in Subjects With Mild Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT03402659
NCT03520998	A Randomized Study to Assess the Safety of GRF6019 Infusions in Subjects With Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT03520998
NCT03560245	A Study of Bryostatins in Moderately Severe to Severe Alzheimer's Disease Subjects Not On Memantine	https://ClinicalTrials.gov/show/NCT03560245
NCT03625401	Efficacy and Safety of AD-35 in Treatment of Subjects With Mild to Moderate Alzheimer's Disease	https://ClinicalTrials.gov/show/NCT03625401

Appendix C: Detailed Concept Mapping Results

Green cells indicate an exact match between the WMM concept and an item in the COA. Yellow cells indicate a close but not exact match between the WMM concept and an item in the COA.

Any WMM concepts that contained both green and yellow codes for a COA were ultimately coded green.

Cognitive Assessments

Table C-1. Mapping of Items in the ADAS-Cog to the What Matters Most Concepts

WMM Item/Concept	ADAS-Cog (Alzheimer's Disease Assessment Scale–Cognitive Subscale)
1. Remembers names of people you/they just met	▪ Measure includes item (Item 1) asking for immediate recall of word list and delayed recall of same list (optional item)
2. Remembers things on a list or a reminder	▪ Measure includes items asking for immediate recall of word list (Item 1) and delayed recall of same list (optional item) ▪ Item 7 assess ability to recognize target words vs. distractor words
3. Remembers what someone just told you/them	▪ Item 8 assesses recall of (word recognition) test instructions
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ Item 4 assesses naming of real objects with high, medium, and low frequency values and naming fingers of dominant hand ▪ Item 10 assesses word-finding difficulties in spontaneous speech
9. Remembers names of people you/they have known for a long time	▪ Optional item assesses delayed recall of word list from item 1
10. Recognize people you/they have known for a long time	
11. Knows the date and time	▪ Item 6 assesses orientation to person, time, and place
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	

WMM Item/Concept	ADAS-Cog (Alzheimer's Disease Assessment Scale–Cognitive Subscale)
14. Takes your/their medications correctly	▪ Item 5 (ideational praxis) assesses ability to follow commands and ability to perform familiar but complex sequence of actions
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	▪ Optional item assessing concentration/distractibility, including loss of train of thought
17. Understands what other people are saying in conversations	▪ Item 9 assesses patient's ability to understand spoken language (misunderstanding, need for repetition or rephrasing, appropriate responses to questions)
18. Understands what you/they are reading	
19. Can follow a TV show or movie	▪ Item 9 assesses patient's ability to understand spoken language (misunderstanding, need for repetition or rephrasing, appropriate responses to questions)
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	
22. Learns new information, tasks, or procedures	▪ Measure includes item (Item 1) asking for immediate recall of word list ▪ Item 7 assess ability to recognize target words vs. distractor words ▪ Item 8 assesses recall of (word recognition) test instructions ▪ Optional item assesses delayed recall of word list from item 1
23. Follows instructions or steps to do something	▪ Item 2 assesses ability to follow commands ▪ Item 5 (ideational praxis) assesses ability follow commands and ability to perform familiar but complex sequence of actions
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	▪ Item 5 (ideational praxis) assesses ability to follow commands and ability to perform familiar but complex sequence of actions
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	

WMM Item/Concept	ADAS-Cog (Alzheimer's Disease Assessment Scale–Cognitive Subscale)
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

ADAS-Cog = Alzheimer's Disease Assessment Scale–Cognitive Subscale; WMM = What Matters Most.

Note: Item numbering may differ depending on version used.

Source:

Mohs R. The Administration and Scoring Manual for the Alzheimer's Disease Assessment Scale – Cognitive (ADAS-Cog). 2015.

Table C-2. Mapping of Items in the CDR/CDR-SB to the What Matters Most Concepts

WMM Item/Concept	CDR/CDR-SB (Clinical Dementia Rating; Clinical Dementia Rating-Sum of Boxes)
1. Remembers names of people you/they just met	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
2. Remembers things on a list or a reminder	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
3. Remembers what someone just told you/them	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
4. Remembers why you/they walked into a room	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
5. Remembers where you/they placed things	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
6. Remembers appointments	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
9. Remembers names of people you/they have known for a long time	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
10. Recognize people you/they have known for a long time	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
11. Knows the date and time	▪ A single item assessing orientation to person, time, and place
12. Not get lost in familiar places	▪ Orientation items assessing ability to navigate familiar streets, getting around from one place to another outside of own neighborhood, navigating indoors
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	

WMM Item/Concept	CDR/CDR-SB (Clinical Dementia Rating; Clinical Dementia Rating-Sum of Boxes)
15. Manages money or pay bills correctly	▪ Items assessing judgment and problem-solving, including ability to cope with small sums of money and handle complicated financial or business transactions ▪ Questions in community affairs item assessing level of functioning in job, shopping, volunteer, social groups; ability to function independently; ability to function outside of family home)
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	▪ Questions in community affairs item assessing level of functioning in job, shopping, volunteer, social groups; ability to function independently; ability to function outside of family home)
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ Questions in home and hobbies item including patient's ability to function at home, perform household chores
22. Learns new information, tasks, or procedures	▪ A single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
23. Follows instructions or steps to do something	▪ Questions in home and hobbies item including patient's ability to function at home, perform household chores, etc. including level of supervision needed
24. Can use household objects (e.g., TV remote, can opener)	▪ A single item assessing life at home and hobbies (e.g., ability to function at home, complete chores)
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	▪ Questions in community affairs item assessing level of functioning in job, shopping, volunteer, social groups; ability to function independently; ability to function outside of family home)
27. Socializes with family or friends	▪ Questions in community affairs item assessing level of functioning in job, shopping, volunteer, social groups; ability to function independently; ability to function outside of family home)
28. Keeps an interest in doing things you/they enjoy	▪ A single item assessing life at home and hobbies (ability to function at home, complete chores) and interest in hobbies
29. Not have difficulty doing your/their hobbies or leisure activities	▪ A single item assessing life at home and hobbies (ability to function at home, complete chores) and interest in hobbies
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	▪ Item assessing judgement/problem solving including assessment of patient's ability to behave appropriately in social situations and interactions with others
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	

WMM Item/Concept	CDR/CDR-SB (Clinical Dementia Rating; Clinical Dementia Rating-Sum of Boxes)
36. Drives	▪ Questions in community affairs item assessing driving issues due to memory/thinking problems
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	▪ A question in the judgement and problem-solving item assessing patient's ability to handle household emergencies ▪ Questions in home and hobbies item including patient's ability to function at home, perform household chores, etc. including level of supervision needed
38. Washes, dresses, or grooms yourself/themselves	▪ Questions in the personal care item assessing patient's ability to care for self (i.e., independently, with prompting, with assistance, with much help)
39. Uses the bathroom on your/their own	▪ Questions in the personal care item assessing patient's ability to care for self (i.e., independently, with prompting, with assistance, with much help)
40. Is able to live on your/their own	▪ A question in the judgement and problem-solving item assessing patient's ability to handle household emergencies ▪ Questions in home and hobbies item including patient's ability to function at home, perform household chores, etc. including level of supervision needed ▪ Questions in the personal care item assessing patient's ability to care for self (i.e., independently, with prompting, with assistance, with much help)
41. Is able to be left alone (unsupervised)	▪ A question in the judgement and problem-solving item assessing patient's ability to handle household emergencies ▪ Questions in home and hobbies item including patient's ability to function at home, perform household chores, etc. including level of supervision needed ▪ Questions in the personal care item assessing patient's ability to care for self (i.e., independently, with prompting, with assistance, with much help)
42. Not feel as if you/they are a burden to others	

CDR/CDR-SB = Clinical Dementia Rating; Clinical Dementia Rating-Sum of Boxes; WMM = What Matters Most.

Sources:

Knight Alzheimer's Disease Research Center. The Clinical Dementia Rating Worksheet. Available at:

<https://knightadrc.wustl.edu/cdr/PDFs/Translations/English%20United%20States.pdf>.

Morris JC. The clinical dementia rating (CDR): Current version and scoring rules. *Neurol.* 1993;43(11):2412-4.

Table C-3. Mapping of Items in the DSST to the What Matters Most Concepts

WMM Item/Concept	Digit Symbol–Coding (or Digit Symbol Substitution Test [DSST])
1. Remembers names of people you/they just met	▪ Timed test that measures an individual’s ability to rapidly learn a code and assesses speed and accuracy of eye-hand coordination, short-term memory, attention, motor persistence, sustained attention, response speed, scanning, visuomotor coordination
2. Remembers things on a list or a reminder	
3. Remembers what someone just told you/them	
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	
11. Knows the date and time	
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	
22. Learns new information, tasks, or procedures	▪ Timed test that measures an individual’s ability to rapidly learn a code and assesses speed and accuracy of eye-hand coordination, short-term memory, attention, motor persistence, sustained attention, response speed, scanning, visuomotor coordination
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	

WMM Item/Concept	Digit Symbol–Coding (or Digit Symbol Substitution Test [DSST])
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

DSST = Digit Symbol Substitution Test; WMM = What Matters Most.

Sources:

Sattler JM. Assessment of children: revised and updated third edition. San Diego, CA: Jerome M. Sattler, Publisher, Inc.; 1992.

Wechsler D. Wechsler Adult Intelligence Scale ®—3rd Edition. 1997a. Available at:

http://www.concordspedpac.org/WAIS_III.html.

Wechsler D. Wechsler Adult Intelligence Scale ®—Fourth edition. 2008. Available at:

https://downloads.pearsonassessments.com/images/assets/WAIS-IV/WAISIV2_6_08.pdf.

Table C-4. Mapping of Items in the MMSE to the What Matters Most Concepts

WMM Item/Concept	MMSE (Mini-Mental State Examination)
1. Remembers names of people you/they just met	▪ Item measures immediate recall of 3 unrelated objects and another item to measure delayed recall of same objects
2. Remembers things on a list or a reminder	▪ Item measures immediate recall of 3 unrelated objects and another item to measure delayed recall of same objects
3. Remembers what someone just told you/them	▪ Item on language repetition on patient ability to repeat a phrase said to him/her ▪ Item assessing delayed recall of 3 unrelated objects
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ Items measuring immediate and then delayed recall of 3 unrelated objects ▪ Item measuring patient's ability to recognize and name 2 simple objects
9. Remembers names of people you/they have known for a long time	▪ Item assessing delayed recall of 3 unrelated objects
10. Recognize people you/they have known for a long time	
11. Knows the date and time	▪ Items assessing orientation to year, season, date, day of the week, and month
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	▪ Item measuring of attention/calculation—count backward by 7s or spell WORLD backwards
17. Understands what other people are saying in conversations	▪ Item assessing patients' ability to follow a 3-stage command
18. Understands what you/they are reading	▪ Item assessing patients' ability to follow written instructions
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	
22. Learns new information, tasks, or procedures	▪ Items measuring immediate and then delayed recall of 3 unrelated objects
23. Follows instructions or steps to do something	▪ Item assessing patient's ability to follow a 3-stage command ▪ Item assessing patient's ability to follow written instructions ▪ Item assessing patient's ability to repeat a phrase
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	

WMM Item/Concept	MMSE (Mini-Mental State Examination)
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

MMSE = Mini-Mental State Examination; WMM = What Matters Most.

Source:

Folstein MF, Folstein SE, McHugh PR. Mini-Mental State: A practical method for grading the state of patients for the clinician. J Psychiat Res. 1975;12:189-98.

Table C-5. Mapping of Items in the MoCA to the What Matters Most Concepts

WMM Item/Concept	MoCA (Montreal Cognitive Assessment)
1. Remembers names of people you/they just met	▪ Memory item measuring delayed recall of 5 unrelated words (category and multiple-choice cues allowed)
2. Remembers things on a list or a reminder	▪ Memory item measuring delayed recall of 5 unrelated words (category and multiple-choice cues allowed) ▪ Attention item measuring repetition of list of digits forward and then backwards
3. Remembers what someone just told you/them	▪ Memory item measuring delayed recall of 5 unrelated words (category and multiple-choice cues allowed) ▪ Attention item measuring repetition of list of digits forward and then backwards ▪ Language item measuring sentence repetition
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ Naming item assessing patient's ability to recognize and name animals ▪ Delayed Recall memory item measuring delayed recall of 5 unrelated things (category and multiple-choice cues allowed) ▪ Language item on verbal fluency: generate as many words as possible that begin with letter "F" ▪ Item on verbal fluency: generate the name of as many "fruits" as possible in 60 seconds**
9. Remembers names of people you/they have known for a long time	▪ Memory item measuring delayed recall of 5 unrelated words (category and multiple-choice cues allowed)
10. Recognize people you/they have known for a long time	
11. Knows the date and time	▪ Items assessing orientation to date, month, year, and day ▪ Item on orientation to time**
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	▪ Item on calculation. How many combinations of \$1, \$5, and \$10 bills to pay for a \$13 item without change**
16. Not lose your/their train of thought in conversations	▪ Several items measure attention (trail making task; repeat digits forwards and backwards; count backward by 7s)
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	

WMM Item/Concept	MoCA (Montreal Cognitive Assessment)
22. Learns new information, tasks, or procedures	▪ Item measuring delayed recall of 5 unrelated things (category and multiple-choice cues allowed) ▪ Attention item measuring repetition of list of digits forward and then backwards ▪ Item measuring sentence repetition
23. Follows instructions or steps to do something	▪ Items assessing executive functioning/visual spatial skills (alternating trail making; copy a cube; draw a clock) ▪ Attention item assessing vigilance and ability to follow directions
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

MoCA = Montreal Cognitive Assessment; WMM = What Matters Most.

** Item appears in the BASIC MoCA.

Source:

MoCA: Montreal Cognitive Assessment. Available at: <https://www.mocatest.org/>.

Memory Tests

Table C-6. Mapping of Items in the FCSRT to the What Matters Most Concepts

WMM Item/Concept	FCSRT (Free and Cued Selective Reminding Test)
1. Remembers names of people you/they just met	▪ Form A, B, or C: Measure includes assessment of immediate (controlled learning), free or cued, and delayed free or cued recall of items by a category cue (e.g., picture of a "bird" is an "owl")
2. Remembers things on a list or a reminder	▪ Form A, B, or C: Measure includes assessment of immediate (controlled learning), free or cued, and delayed free or cued recall of items by a category cue (e.g., picture of a "bird" is an "owl")
3. Remembers what someone just told you/them	▪ Form A, B, or C: Measure includes assessment of immediate (controlled learning), free or cued, and delayed free or cued recall of items by a category cue (e.g., picture of a "bird" is an "owl")
4. Remembers why you/they walked into a room	▪ Form A, B, or C: Measure includes assessment of immediate (controlled learning), free or cued, and delayed free or cued recall of items by a category cue (e.g., picture of a "bird" is an "owl")
5. Remembers where you/they placed things	▪ Form A, B, or C: Measure includes assessment of immediate (controlled learning), free or cued, and delayed free or cued recall of items by a category cue (e.g., picture of a "bird" is an "owl")
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ Form A, B, or C: Measure includes assessment of immediate (controlled learning), free or cued, and delayed free or cued recall of items by a category cue (e.g., picture of a "bird" is an "owl")
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	
11. Knows the date and time	
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	

WMM Item/Concept	FCSRT (Free and Cued Selective Reminding Test)
22. Learns new information, tasks, or procedures	Form A, B, or C: Measure includes asking for immediate (controlled learning), free or cued, and delayed free or cued recall of items by a category cue (e.g., picture of a "bird" is an "owl")
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

FCSRT = Free and Cued Selective Reminding Test; WMM = What Matters Most.

Sources:

Grober E, Buschke H, Crystal H, Bang S, Dresner R. Screening for dementia by memory testing. *Neurology*. 1988;38(6):900-3.

RTI-HS internal repository.

Table C-7. Mapping of Items in the RAVLT to the What Matters Most Concepts

WMM Item/Concept	RAVLT (Rey Auditory Verbal Learning Test)
1. Remembers names of people you/they just met	Measures immediate and delayed recall of a word list (with distractor words)
2. Remembers things on a list or a reminder	Measures immediate and delayed recall of a word list (with distractor words)
3. Remembers what someone just told you/them	Measures immediate and delayed recall of a word list (with distractor words)
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	Measures delayed recall of a word list (with distractor words)
11. Knows the date and time	
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	
22. Learns new information, tasks, or procedures	Measures immediate and delayed recall of a word list (with distractor words)
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	

WMM Item/Concept	RAVLT (Rey Auditory Verbal Learning Test)
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

RAVLT = Rey Auditory Verbal Learning Test; WMM = What Matters Most.

Source:

Schmidt M. Rey Auditory and Verbal Learning Test: A handbook. Los Angeles, CA: Western Psychological Services; 1996.

Table C-8. Mapping of Items in the WMS to the What Matters Most Concepts

WMM Item/Concept	WMS (Wechsler Memory Scale)
1. Remembers names of people you/they just met	▪ Subtests on WMS-IV that measure immediate and delayed recall (Logical Memory I and II)
2. Remembers things on a list or a reminder	▪ Subtests that measure immediate and delayed semantic and auditory verbal recall (Verbal Paired Associates I and II)
3. Remembers what someone just told you/them	▪ Subtests on WMS-IV that measure immediate and delayed recall (Logical Memory I and II) ▪ Subtests that measure immediate and delayed semantic and auditory verbal recall (Verbal Paired Associates I and II)
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	▪ WMS-IV Visual Memory Index includes subtasks assessing spatial immediate and delayed memory for unfamiliar visual material (Designs I and II, respectively) as well as visual recognition (Designs II)
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ Subtests on WMS-IV that measure immediate and delayed recall (Logical Memory I and II) ▪ Subtests that measure immediate and delayed semantic and auditory verbal recall (Verbal Paired Associates I and II)
9. Remembers names of people you/they have known for a long time	▪ Subtests on WMS-IV that measure delayed recall (Logical Memory II) ▪ Subtests that measure delayed semantic and auditory verbal recall (Verbal Paired Associates II)
10. Recognize people you/they have known for a long time	
11. Knows the date and time	▪ WMS-IV optional Brief Cognitive Status Exam (BCSE) subtest contains a single item assessing orientation to time
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	▪ Subtests on WMS-IV that measure immediate and delayed recall (Logical Memory I and II)
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	
22. Learns new information, tasks, or procedures	▪ Subtests on WMS-IV that measure immediate and delayed recall (Logical Memory I and II) ▪ Subtests that measure immediate and delayed semantic and auditory verbal recall (Verbal Paired Associates I and II)

WMM Item/Concept	WMS (Weschler Memory Scale)
23. Follows instructions or steps to do something	▪ Subtests on WMS-IV that measure immediate and delayed recall (Logical Memory I and II)
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

BCSE = Brief Cognitive Status Exam; WMM = What Matters Most; WMS = Weschler Memory Scale.

Source:

Pearson, Inc. WMS-IV administration, scoring, and basic interpretation. 2011. Available at https://images.pearsonclinical.com/images/products/WMS-IV/WMS-IV_Webinar_September_2011_Handout.pdf.

Functional Activities Assessments

Table C-9. Mapping of Items in the ADCS-ADL to the What Matters Most Concepts

WMM Item/Concept	ADCS-ADL (Alzheimer's Disease Cooperative Study–Activities of Daily Living Inventory)
1. Remembers names of people you/they just met	
2. Remembers things on a list or a reminder	▪ Item 17 on remembering important dates and times, such as appointments or meetings
3. Remembers what someone just told you/them	
4. Remembers why you/they walked into a room	▪ Item 11 on finding personal belongings at home
5. Remembers where you/they placed things	▪ Item 11 on finding personal belongings at home
6. Remembers appointments	▪ Item 17 on remembering important dates and times, such as appointments or meetings
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	
11. Knows the date and time	
12. Not get lost in familiar places	▪ Item 15 getting around (or traveling) outside of the home
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	▪ Item 11 on difficulty finding personal belongings at home
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	▪ Item 16b on paying for items when shopping
16. Not lose your/their train of thought in conversations	▪ Item 9 on attending to conversation or small talk ▪ Item 19 on talking about current events
17. Understands what other people are saying in conversations	▪ Item 9 on attending to conversation or small talk ▪ Item 19 on talking about current events
18. Understands what you/they are reading	▪ Item 20 on talking about what one reads
19. Can follow a TV show or movie	▪ Item 8 on selecting and talking about TV programs
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ Item 10 on clearing dishes after meal/snack ▪ Item 12 on obtaining a beverage ▪ Item 13 on preparing a meal or snack ▪ Item 14 on disposing of garbage/litter in appropriate places
22. Learns new information, tasks, or procedures	
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	▪ Item 23 on using household appliances to do chores
25. Plans or schedules appointments	▪ Item 17 on keeping appointments and meetings
26. Plans or organizes activities (e.g., social events, trip)	▪ Item 17 on keeping appointments and meeting (including preplanned outings or excursions)
27. Socializes with family or friends	▪ Item 7 on telephone usage ▪ Item 19 on current events, including those with others outside the home

WMM Item/Concept	ADCS-ADL (Alzheimer's Disease Cooperative Study–Activities of Daily Living Inventory)
28. Keeps an interest in doing things you/they enjoy	▪ Item 22 on performing common pastime, hobby, or game
29. Not have difficulty doing your/their hobbies or leisure activities	▪ Item 22 on performing common pastime, hobby, or game
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	▪ Item 4 on bathing self ▪ Item 5 on grooming self ▪ Item 6 on selecting own clothes and dressing self
39. Uses the bathroom on your/their own	▪ Item 3 on bowel and bladder function at the toilet
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	▪ Item 18 on ability to be left alone
42. Not feel as if you/they are a burden to others	

ADCS-ADL = Alzheimer's Disease Cooperative Study–Activities of Daily Living Inventory; ATM = automated teller machine; bADL = basic activities of daily living; iADL = instrumental activities of daily living; OTC = over the counter; WMM = What Matters Most.

** Item appears in one or more references but not on the primary instrument reviewed.

Notes: Item numbering may differ depending on version used. The instrumental ADL (iADL) items are part of the overall ADCS-ADL scale.

Sources:

Galasko D, Bennett D, Sano M, Ernesto C, Thomas R, Grundman M, et al. An inventory to assess activities of daily living for clinical trials in Alzheimer's disease. The Alzheimer's Disease Cooperative Study. *Alzheimer Dis Assoc Disord.* 1997;11 Suppl 2:S33-9.

Kahle-Wroblewski K, Coley N, Lepage B, Cantet C, Vellas B, Andrieu S, et al. Understanding the complexities of functional ability in Alzheimer's disease: more than just basic and instrumental factors. *Curr Alzheimer Res.* 2014 May;11(4):357-66.

RTI-HS internal repository.

Table C-10. Mapping of Items in the ADCS-ADL-MCI to the What Matters Most Concepts

WMM Item/Concept	ADCS-ADL-MCI (Alzheimer's Disease Cooperative Study–Activities of Daily Living Inventory–MCI [specific])
1. Remembers names of people you/they just met	▪ Item 8 (iADL) item on keeping appointments (with level of reminders)
2. Remembers things on a list or a reminder	
3. Remembers what someone just told you/them	
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	▪ Item 1 assessing patient's ability to manage to find his/her personal belonging at home
6. Remembers appointments	▪ Item 8 (iADL) item on keeping appointments
7. Not repeat yourself/themselves frequently	▪ Item 12d–item on conversing about current events without repeating him/herself or asking the same questions repeatedly
8. Remembers words or names of familiar objects	
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	
11. Knows the date and time	
12. Not get lost in familiar places	▪ Item 11 (iADL) item on getting around or traveling outside of the home
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	▪ Item 20 on taking medications regularly and level of help
15. Manages money or pay bills correctly	▪ Item 5 (iADL) assessing patient's ability to balance checkbook or credit card statement ▪ Items 15 and 15b–items on shopping and whether person pays on his/her own
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	▪ Item 13–series of items on reading and whether the person talked about the content after the reading
19. Can follow a TV show or movie	▪ Item 14–series of items on watching TV and whether the person talked about the content afterwards
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ Item 4 (iADL) item on patient's ability to clean a room ▪ Item 7 (iADL) item on cleaning a load of laundry ▪ Item 10 (iADL) item on making a meal or snack at home ▪ Items 17 and 17a items on using household appliances (and type) and level of supervision to do chores (excludes TV)
22. Learns new information, tasks, or procedures	▪ Item 12 item on talking about current events
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	▪ Items 17 and 17a items on using household appliances (and type) and level of supervision to do chores (excludes TV)

WMM Item/Concept	ADCS-ADL-MCI (Alzheimer's Disease Cooperative Study–Activities of Daily Living Inventory–MCI [specific])
25. Plans or schedules appointments	▪ Item 21 item on carrying through complex or time-consuming activities to completion and level of reminders needed ▪ Item 22 item on extent of initiating complex daily activities or projects
26. Plans or organizes activities (e.g., social events, trip)	▪ Item 21 item on carrying through complex or time-consuming activities to completion and level of reminders needed ▪ Item 22 item on extent of initiating complex daily activities or projects ▪ Item 23 item on how long it took the person to complete complex or time-consuming activities or tasks
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	▪ Items 18 and 18a assess patient's participation in a pastime, hobby or game and level of supervision required
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	▪ Item 11 (iADL) item on getting around or traveling outside of the home ▪ Item 19 (iADL) item on driving a car
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	▪ Items 17 and 17a items on using household appliances and level of supervision
38. Washes, dresses, or grooms yourself/themselves	▪ Item 2 (iADL) on selecting first set of clothes for the day ▪ Item 3 (ADL) on patient's ability to physically getting dressed
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	▪ Item 16 on person being left alone and for what amount of time
42. Not feel as if you/they are a burden to others	

ADCS-ADL-MCI = Alzheimer's Disease Cooperative Study–Activities of Daily Living Inventory–MCI (specific); ADL = activities of daily living; iADL = instrumental activities of daily living; MCI = mild cognitive impairment; WMM = What Matters Most.

Note: Item numbering may differ depending on version used.

Sources:

Pedrosa H, De Sa A, Guerreiro M, Maroco J, Simoes MR, Galasko D, et al. Functional evaluation distinguishes MCI patients from healthy elderly people—the ADCS/MCI/ADL scale. J Nutr Health Aging. 2010 Oct;14(8):703-9. RTI-HS internal repository.

Table C-11. Mapping of Items in the ADCS-CGIC to the What Matters Most Concepts

WMM Item/Concept	ADCS-CGIC (Alzheimer's Disease Cooperative Study–Clinical Global Impression of Change)
1. Remembers names of people you/they just met	Memory item (Probes: Registration, recall, long term/remote, recall for past events) is a factor considered in the single rating of change score
2. Remembers things on a list or a reminder	Memory item (Probes: Registration, recall, long term/remote, recall for past events) is a factor considered in the single rating of change score
3. Remembers what someone just told you/them	Memory item (Probes: Registration, recall, long term/remote, recall for past events) is a factor considered in the single rating of change score
4. Remembers why you/they walked into a room	Memory item (Probes: Registration, recall, long term/remote, recall for past events) is a factor considered in the single rating of change score
5. Remembers where you/they placed things	Memory item (Probes: Registration, recall, long term/remote, recall for past events) is a factor considered in the single rating of change score
6. Remembers appointments	Memory item (Probes: Registration, recall, long term/remote, recall for past events) is a factor considered in the single rating of change score
7. Not repeat yourself/themselves frequently	Language/Speech item (Probes: fluency/expressive language, receptive language, comprehension, paraphasia word finding, naming, amount repetition, follows directions) is a factor considered in the single rating of change score
8. Remembers words or names of familiar objects	- Memory item (Probes: Registration, recall, long term/remote, recall for past events) is a factor considered in the single rating of change score - Language/Speech item (Probes: fluency/expressive language, receptive language, comprehension, paraphasia word finding, naming, amount repetition, follows directions) is a factor considered in the single rating of change score
9. Remembers names of people you/they have known for a long time	- Memory item (Probes: Registration, recall, long term/remote, recall for past events) is a factor considered in the single rating of change score - Language/Speech item (Probes: fluency/expressive language, receptive language, comprehension, paraphasia word finding, naming, amount repetition, follows directions) is a factor considered in the single rating of change score
10. Recognize people you/they have known for a long time	Memory item (Probes: Registration, recall, long term/remote, recall for past events) is a factor considered in the single rating of change score
11. Knows the date and time	Orientation item (probes: time, place, person) is a factor considered in the single rating of change score

WMM Item/Concept	ADCS-CGIC (Alzheimer's Disease Cooperative Study–Clinical Global Impression of Change)
12. Not get lost in familiar places	▪ Orientation item (probes: time, place, person) is a factor considered in the single rating of change score ▪ Behavior/Mood item (probes: affect/lability, unusual/bizarre, uninhibited, motivation/energy, wandering/getting lost, agitation/aggression hostility, depression-related, anxiety-related, appropriateness, cooperativeness) is a factor considered in the single rating of change score
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	▪ Basic and complex item (instrumental) functional ability (probes: mobility, hygiene/grooming, dressing, self-feeding, shopping, household chores/hobbies, finances, driving) is a factor considered in the single rating of change score
16. Not lose your/their train of thought in conversations	▪ Arousal/Alertness/Attention/Concentration item (probes: confusion/clarity/excitement/reactivity/state of consciousness) is a factor considered in the single rating of change score ▪ Thought content item (probes: hostile expression/Organization/Appropriateness) is a factor considered in the single rating of change score
17. Understands what other people are saying in conversations	▪ Arousal/Alertness/Attention/Concentration item (probes: confusion/clarity/excitement/reactivity/state of consciousness) is a factor considered in the single rating of change score ▪ Language/Speech item (Probes: fluency/expressive language, receptive language, comprehension, paraphasia word finding, naming, amount repetition, follows directions) is a factor considered in the single rating of change score
18. Understands what you/they are reading	▪ Arousal/Alertness/Attention/Concentration item (probes: confusion/clarity/excitement/reactivity/state of consciousness) is a factor considered in the single rating of change score
19. Can follow a TV show or movie	▪ Arousal/Alertness/Attention/Concentration item (probes: confusion/clarity/excitement/reactivity/state of consciousness) is a factor considered in the single rating of change score
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ Basic and complex (instrumental) functional ability item (probes: mobility, hygiene/grooming, dressing, self-feeding, shopping, household chores/hobbies, finances, driving) is a factor considered in the single rating of change score
22. Learns new information, tasks, or procedures	
23. Follows instructions or steps to do something	▪ Language/Speech item (Probes: fluency/expressive language, receptive language, comprehension, paraphasia word finding, naming, amount repetition, follows directions) is a factor considered in the single rating of change score

WMM Item/Concept	ADCS-CGIC (Alzheimer's Disease Cooperative Study–Clinical Global Impression of Change)
24. Can use household objects (e.g., TV remote, can opener)	Basic and complex (instrumental) functional ability item (probes: mobility, hygiene/grooming, dressing, self-feeding, shopping, household chores/hobbies, finances, driving) is a factor considered in the single rating of change score
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	Social Function item (probes: participation in social interactions, community activities, independence, helplessness) is a factor considered in the single rating of change score
27. Socializes with family or friends	Social Function item (probes: participation in social interactions, community activities, independence, helplessness) is a factor considered in the single rating of change score
28. Keeps an interest in doing things you/they enjoy	- Behavior/Mood item (probes: affect/lability, unusual/bizarre, uninhibited, motivation/energy, wandering/getting lost, agitation/aggression hostility, depression-related, anxiety-related, appropriateness, cooperativeness) is a factor considered in the single rating of change score - Social Function item (probes: participation in social interactions, community activities, independence, helplessness) is a factor considered in the single rating of change score
29. Not have difficulty doing your/their hobbies or leisure activities	- Basic and complex (instrumental) functional ability item (probes: mobility, hygiene/grooming, dressing, self-feeding, shopping, household chores/hobbies, finances, driving) is a factor considered in the single rating of change score - Social Function item (probes: participation in social interactions, community activities, independence, helplessness) is a factor considered in the single rating of change score
30. Not feel down or depressed	Behavior/Mood item (probes: affect/lability, unusual/bizarre, uninhibited, motivation/energy, wandering/getting lost, agitation/aggression hostility, depression-related, anxiety-related, appropriateness, cooperativeness) is a factor considered in the single rating of change score
31. Not feel anxious, worried, stressed	Behavior/Mood item (probes: affect/lability, unusual/bizarre, uninhibited, motivation/energy, wandering/getting lost, agitation/aggression hostility, depression-related, anxiety-related, appropriateness, cooperativeness) is a factor considered in the single rating of change score
32. Feels like you/they have a sense of purpose (self-worth)	Behavior/Mood item (probes: affect/lability, unusual/bizarre, uninhibited, motivation/energy, wandering/getting lost, agitation/aggression hostility, depression-related, anxiety-related, appropriateness, cooperativeness) is a factor considered in the single rating of change score

WMM Item/Concept	ADCS-CGIC (Alzheimer's Disease Cooperative Study–Clinical Global Impression of Change)
33. Not be irritable, frustrated, or agitated	Behavior/Mood item (probes: affect/lability, unusual/bizarre, uninhibited, motivation/energy, wandering/getting lost, agitation/aggression hostility, depression-related, anxiety-related, appropriateness, cooperativeness) is a factor considered in the single rating of change score
34. Not have angry outbursts	Behavior/Mood item (probes: affect/lability, unusual/bizarre, uninhibited, motivation/energy, wandering/getting lost, agitation/aggression hostility, depression-related, anxiety-related, appropriateness, cooperativeness) is a factor considered in the single rating of change score
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	Hallucinations/Delusions/Illusions item (Probes: Auditory/visual misperceptions systematized/developed) is a factor considered in the single rating of change score
36. Drives	Basic and complex (instrumental) functional ability item (probes: mobility, hygiene/grooming, dressing, self-feeding, shopping, household chores/hobbies, finances, driving) is a factor considered in the single rating of change score
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	Basic and complex (instrumental) functional ability item (probes: mobility, hygiene/grooming, dressing, self-feeding, shopping, household chores/hobbies, finances, driving) is a factor considered in the single rating of change score
39. Uses the bathroom on your/their own	Basic and complex (instrumental) functional ability item (probes: mobility, hygiene/grooming, dressing, self-feeding, shopping, household chores/hobbies, finances, driving) is a factor considered in the single rating of change score
40. Is able to live on your/their own	- Basic and complex (instrumental) functional ability item (probes: mobility, hygiene/grooming, dressing, self-feeding, shopping, household chores/hobbies, finances, driving) is a factor considered in the single rating of change score - Social Function item (probes: participation in social interactions, community activities, independence, helplessness) is a factor considered in the single rating of change score
41. Is able to be left alone (unsupervised)	Social Function item (probes: participation in social interactions, community activities, independence, helplessness) is a factor considered in the single rating of change score
42. Not feel as if you/they are a burden to others	

ADCS-CGIC = Alzheimer's Disease Cooperative Study–Clinical Global Impression of Change; WMM = What Matters Most.

Note: Item numbering may differ depending on version used.

Source:

Schneider LS, Olin JT, Clark CM, Doody RS, Ferris S, Morris JC, et al. A new clinical global rating scale for Alzheimer's clinical trials. 2013. Available at: <http://adrc.usc.edu/cgic/>.

Table C-12. Mapping of Items in the FAQ to the What Matters Most Concepts

WMM Item/Concept	FAQ ([Pfeffer] Functional Activities Questionnaire)
1. Remembers names of people you/they just met	▪ Item 9 assessing remembering appointments, family occasions, holidays, medications
2. Remembers things on a list or a reminder	
3. Remembers what someone just told you/them	
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	▪ Item 9 assessing remembering appointments, family occasions, holidays, medications
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	
11. Knows the date and time	
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	▪ Item 9 assessing remembering appointments, family occasions, holidays, medications
15. Manages money or pay bills correctly	▪ Item 1 assessing writing checks, paying bills, balancing checkbook ▪ Item 20 assessing assembling tax records, business affairs, or papers
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	▪ Item 8 assessing paying attention to, understanding, discussing TV, book, magazine
18. Understands what you/they are reading	▪ Item 8 paying attention to, understanding, discussing TV, book, magazine
19. Can follow a TV show or movie	▪ Item 8 paying attention to, understanding, discussing TV, book, magazine
20. Not have difficulty with work	▪ Item 20 assessing assembling tax records, business affairs, or papers
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ Item 5 assessing heating water, making a cup of coffee, turning off stove after use ▪ Item 6 assessing preparing a balanced meal
22. Learns new information, tasks, or procedures	▪ Item 7 assessing keeping track of current events
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	▪ Item 10 assessing traveling out of neighborhood, driving, arranging to take buses
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	▪ Item 4 assessing playing a game of skill, working on a hobby

WMM Item/Concept	FAQ ([Pfeffer] Functional Activities Questionnaire)
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	▪ Item 10 assessing traveling out of neighborhood, driving, arranging to take buses
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	▪ Item 5 assessing heating water, making a cup of coffee, turning off stove after use
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

FAQ = (Pfeffer) Functional Activities Questionnaire; WMM = What Matters Most.

Note: Item numbering may differ depending on version used.

Sources:

Mayo AM. Use of the Functional Activities Questionnaire in older adults with dementia. Available at:

<https://www.alz.org/careplanning/downloads/functional-activities-questionnaire.pdf>.

Pfeffer RI, Kurosaki TT, Harrah CH Jr, Chance JM, Filos S. Measurement of functional activities in older adults in the community. J Gerontol. 1982;37(3):323–9.

Composite Cognitive/Functional Assessments

Table C-13. Mapping of Items in the ADCOMS to the What Matters Most Concepts

WMM Item/Concept	ADCOMS (Alzheimer's Disease Composite Scores)
1. Remembers names of people you/they just met	▪ ADAS-Cog optional item asking for delayed recall of word list in item 1 ▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
2. Remembers things on a list or a reminder	▪ ADAS-Cog item 7 assess ability to recognize target words vs. distractor words ▪ ADAS-Cog optional item asking for delayed recall of word list in item 1 ▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
3. Remembers what someone just told you/them	▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
4. Remembers why you/they walked into a room	▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
5. Remembers where you/they placed things	▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
6. Remembers appointments	▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ ADAS-Cog item 10 assesses word-finding difficulties in spontaneous speech ▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
9. Remembers names of people you/they have known for a long time	▪ ADAS-Cog optional item asking for delayed recall of word list in item 1 ▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
10. Recognize people you/they have known for a long time	▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)

WMM Item/Concept	ADCOMS (Alzheimer's Disease Composite Scores)
11. Knows the date and time	▪ ADAS-Cog item 6 assesses orientation to person, time, and place ▪ MMSE items assessing orientation to year, season, date, day of the week, and month ▪ CDR-SB item assessing orientation to person, time, and place
12. Not get lost in familiar places	▪ CDR-SB orientation items assessing ability to navigate familiar streets, getting around from one place to another outside of own neighborhood, navigating indoors
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	▪ CDR-SB items assessing judgment and problem-solving, including ability to cope with small sums of money and handle complicated financial or business transactions ▪ CDR-SB questions in community affairs item assessing level of functioning in job, shopping, volunteer, social groups; ability to function independently; ability to function outside of family home)
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	▪ CDR-SB questions in community affairs item assessing level of functioning in job, shopping, volunteer, social groups; ability to function independently; ability to function outside of family home)
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ CDR-SB questions in home and hobbies item including patient's ability to function at home, perform household chores
22. Learns new information, tasks, or procedures	▪ ADAS-Cog item 7 assess ability to recognize target words vs. distractor words ▪ ADAS-Cog optional item asking for delayed recall of word list in item 1 ▪ CDR-SB single memory item assessing presence of any memory loss or forgetfulness, recollection of event, memory interference with everyday activities, ability to retain newly learned material)
23. Follows instructions or steps to do something	▪ CDR-SB questions in home and hobbies item including patient's ability to function at home, perform household chores, etc. including level of supervision needed
24. Can use household objects (e.g., TV remote, can opener)	▪ CDR-SB single item assessing life at home and hobbies (e.g., ability to function at home, complete chores)
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	▪ CDR-SB questions in community affairs item assessing level of functioning in job, shopping, volunteer, social groups; ability to function independently; ability to function outside of family home)

WMM Item/Concept	ADCOMS (Alzheimer's Disease Composite Scores)
27. Socializes with family or friends	CDR-SB questions in community affairs item assessing level of functioning in job, shopping, volunteer, social groups; ability to function independently; ability to function outside of family home)
28. Keeps an interest in doing things you/they enjoy	CDR-SB single item assessing life at home and hobbies (ability to function at home, complete chores) and interest in hobbies
29. Not have difficulty doing your/their hobbies or leisure activities	CDR-SB single item assessing life at home and hobbies (ability to function at home, complete chores) and interest in hobbies
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	CDR-SB item assessing judgement/problem solving including assessment of patient's ability to behave appropriately in social situations and interactions with others
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	CDR-SB questions in community affairs item assessing driving issues due to memory/thinking problems
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	- CDR-SB question in the judgement and problem-solving item assessing patient's ability to handle household emergencies - CDR-SB questions in home and hobbies item including patient's ability to function at home, perform household chores, etc. including level of supervision needed
38. Washes, dresses, or grooms yourself/themselves	CDR-SB questions in the personal care item assessing patient's ability to care for self (i.e., independently, with prompting, with assistance, with much help)
39. Uses the bathroom on your/their own	CDR-SB questions in the personal care item assessing patient's ability to care for self (i.e., independently, with prompting, with assistance, with much help)
40. Is able to live on your/their own	- CDR-SB question in the judgement and problem-solving item assessing patient's ability to handle household emergencies - CDR-SB questions in home and hobbies item including patient's ability to function at home, perform household chores, etc. including level of supervision needed - CDR-SB questions in the personal care item assessing patient's ability to care for self (i.e., independently, with prompting, with assistance, with much help)

WMM Item/Concept	ADCOMS (Alzheimer's Disease Composite Scores)
41. Is able to be left alone (unsupervised)	▪ CDR-SB question in the judgement and problem-solving item assessing patient's ability to handle household emergencies ▪ CDR-SB questions in home and hobbies item including patient's ability to function at home, perform household chores, etc. including level of supervision needed ▪ CDR-SB questions in the personal care item assessing patient's ability to care for self (i.e., independently, with prompting, with assistance, with much help)
42. Not feel as if you/they are a burden to others	

ADAS-Cog = Alzheimer's Disease Assessment Scale–Cognitive Subscale; ADCOMS = Alzheimer's Disease Composite Scores; CDR = Clinical Dementia Rating; CDR-SB = Clinical Dementia Rating–Sum of Boxes; MMSE = Mini-Mental State Examination; WMM = What Matters Most.

Note: Item numbering may differ depending on version used.

Source:

Wang J, Logovinsky V, Hendrix SB, Stanworth SH, Perdomo C, Xu L, et al. ADCOMS: a composite clinical outcome for prodromal Alzheimer's disease trials. J Neurol Neurosurg Psychiatry. 2016;87(9):993-9.

Table C-14. Mapping of Items in the iADRS to the What Matters Most Concepts

WMM Item/Concept	iADRS (Integrated Alzheimer's Disease Rating Scale)
1. Remembers names of people you/they just met	▪ ADAS-Cog includes item (Item 1) asking for immediate recall of word list and delayed recall of same list (optional item)
2. Remembers things on a list or a reminder	▪ ADAS-Cog Measure includes items asking for immediate recall of word list (Item 1) and delayed recall of same list (optional item) ▪ ADAS-Cog Item 7 assess ability to recognize target words vs. distractor words ▪ ADCS-ADL Item 17 on remembering important dates and times, such as appointments or meetings
3. Remembers what someone just told you/them	▪ ADAS-Cog Item 8 assesses recall of (word recognition) test instructions
4. Remembers why you/they walked into a room	▪ ADCS-ADL Item 11 on finding personal belongings at home
5. Remembers where you/they placed things	▪ ADCS-ADL Item 11 on finding personal belongings at home
6. Remembers appointments	▪ ADCS-ADL Item 17 on remembering important dates and times, such as appointments or meetings
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ ADAS-Cog Item 4 assesses naming of real objects with high, medium, and low frequency values and naming fingers of dominant hand ▪ ADAS-Cog Item 10 assesses word-finding difficulties in spontaneous speech
9. Remembers names of people you/they have known for a long time	▪ ADAS-Cog Optional item assesses delayed recall of word list from item 1
10. Recognize people you/they have known for a long time	
11. Knows the date and time	▪ ADAS-Cog Item 6 assesses orientation to person, time, and place
12. Not get lost in familiar places	▪ ADCS-ADL Item 15 getting around (or traveling) outside of the home
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	▪ ADCS-ADL Item 11 on difficulty finding personal belongings at home
14. Takes your/their medications correctly	▪ ADAS-Cog Item 5 (ideational praxis) assesses ability to follow commands and ability to perform familiar but complex sequence of actions
15. Manages money or pay bills correctly	▪ ADCS-ADL Item 16b on paying for items when shopping
16. Not lose your/their train of thought in conversations	▪ ADCS-ADL Item 9 on attending to conversation or small talk ▪ ADCS-ADL Item 19 on talking about current events
17. Understands what other people are saying in conversations	▪ ADAS-Cog Item 9 assesses patient's ability to understand spoken language (misunderstanding, need for repetition or rephrasing, appropriate responses to questions) ▪ ADCS-ADL Item 9 on attending to conversation or small talk ▪ ADCS-ADL Item 19 on talking about current events
18. Understands what you/they are reading	▪ ADCS-ADL Item 20 on talking about what one reads,

WMM Item/Concept	iADRS (Integrated Alzheimer's Disease Rating Scale)
19. Can follow a TV show or movie	▪ ADAS-Cog Item 9 assesses patient's ability to understand spoken language (misunderstanding, need for repetition or rephrasing, appropriate responses to questions) ▪ ADCS-ADL Item 8 on selecting and talking about TV programs
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ ADCS-ADL Item 10 on clearing dishes after meal/snack ▪ ADCS-ADL Item 12 on obtaining a beverage ▪ ADCS-ADL Item 13 on preparing a meal or snack ▪ ADCS-ADL Item 14 on disposing of garbage/litter in appropriate
22. Learns new information, tasks, or procedures	▪ ADAS-Cog Measure includes item (Item 1) asking for immediate recall of word list ▪ ADAS-Cog Item 7 assess ability to recognize target words vs. distractor words ▪ ADAS-Cog Item 8 assesses recall of (word recognition) test instructions ▪ ADAS-Cog Optional item assesses delayed recall of word list from item 1
23. Follows instructions or steps to do something	▪ ADAS-Cog Item 2 assesses ability to follow commands ▪ ADAS-Cog Item 5 (ideational praxis) assesses ability follow commands and ability to perform familiar but complex sequence of actions
24. Can use household objects (e.g., TV remote, can opener)	▪ ADCS-ADL Item 23 on using household appliances to do chores
25. Plans or schedules appointments	▪ ADAS-Cog Item 5 (ideational praxis) assesses ability to follow commands and ability to perform familiar but complex sequence of actions ▪ ADCS-ADL Item 17 on keeping appointments and meetings
26. Plans or organizes activities (e.g., social events, trip)	▪ IADCS-ADL Item 17 on keeping appointments and meeting (including preplanned outings or excursions)
27. Socializes with family or friends	▪ ADCS-ADL Item 7 on telephone usage ▪ ADCS-ADL Item 19 on current events, including those with others outside the home
28. Keeps an interest in doing things you/they enjoy	▪ ADCS-ADL Item 22 on performing common pastime, hobby, or game
29. Not have difficulty doing your/their hobbies or leisure activities	▪ ADCS-ADL Item 22 on performing common pastime, hobby, or game
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	

WMM Item/Concept	iADRS (Integrated Alzheimer's Disease Rating Scale)
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	▪ ADCS-ADL Item 6a on selecting own clothes for the day
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	▪ ADCS-ADL Item 18 on ability to be left alone
42. Not feel as if you/they are a burden to others	

ADAS-Cog = Alzheimer's Disease Assessment Scale-Cognitive Subscale; iADRS = Integrated Alzheimer's Disease Rating Scale; WMM = What Matters Most.

** Item appears on one or more references but not in the primary instrument reviewed

Note: Item numbering may differ depending on version used.

Sources:

Galasko D, Bennett D, Sano M, Ernesto C, Thomas R, Grundman M, et al. An inventory to assess activities of daily living for clinical trials in Alzheimer's disease. The Alzheimer's Disease Cooperative Study. Alzheimer Dis Assoc Disord. 1997;11 Suppl 2:S33-9.

Kueper JK, Speechley M, Montero-Odasso M. The Alzheimer's Disease Assessment Scale-Cognitive Subscale (ADAS-Cog): Modifications and Responsiveness in Pre-Dementia Populations. A Narrative Review. J Alzheimers Dis. 2018;63(2):423-44.

Wessels AM, Siemers ER, Yu P, Andersen SW, Holdridge KC, Sims JR, et al. A Combined Measure of Cognition and Function for Clinical Trials: The Integrated Alzheimer's Disease Rating Scale (iADRS). J Prev Alzheimers Dis. 2015 Dec 1;2(4):227-41.

RTI-HS internal repository.

Personal communication with author (Wessels).

Table C-15. Mapping of Items in the PACC to the What Matters Most Concepts

WMM Item/Concept	PACC (Preclinical Alzheimer Cognitive Composite)
1. Remembers names of people you/they just met	▪ MMSE item measures immediate recall of 3 unrelated objects and another item to measure delayed recall of same objects ▪ FCSRT total recall score (sum free and cued recall) ▪ WMS-IV measure of delayed recall (Logical Memory II)
2. Remembers things on a list or a reminder	▪ MMSE item measures immediate recall of 3 unrelated objects and another item to measure delayed recall of same objects ▪ FCSRT total recall score (sum free and cued recall) ▪ DSST timed test that measures an individual's ability to rapidly learn a code and assesses speed and accuracy of eye-hand coordination, short-term memory, attention, motor persistence, sustained attention, response speed, scanning, visuomotor coordination
3. Remembers what someone just told you/them	▪ MMSE item on language repetition on patient ability to repeat a phrase said to him/her ▪ MMSE item assessing delayed recall of 3 unrelated objects ▪ FCSRT total recall score (sum free and cued recall) ▪ WMS-IV measure of delayed recall (Logical Memory II)
4. Remembers why you/they walked into a room	▪ FCSRT total recall score (sum free and cued recall)
5. Remembers where you/they placed things	▪ FCSRT total recall score (sum free and cued recall)
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ MMSE items measuring immediate and then delayed recall of 3 unrelated objects ▪ MMSE item measuring patient's ability to recognize and name 2 simple objects ▪ FCSRT total recall score (sum free and cued recall) ▪ WMS-IV measure of delayed recall (Logical Memory II)
9. Remembers names of people you/they have known for a long time	▪ MMSE item assessing delayed recall of 3 unrelated objects ▪ WMS-IV measure of delayed recall (Logical Memory II)
10. Recognize people you/they have known for a long time	
11. Knows the date and time	▪ MMSE items assessing orientation to year, season, date, day of the week, and month
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	▪ MMSE item measuring of attention/calculation—count backward by 7s or spell WORLD backwards
17. Understands what other people are saying in conversations	▪ MMSE item assessing patients' ability to follow a 3-stage command ▪ WMS-IV measure of delayed recall (Logical Memory II)
18. Understands what you/they are reading	▪ MMSE item assessing patients' ability to follow written instructions

WMM Item/Concept	PACC (Preclinical Alzheimer Cognitive Composite)
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	
22. Learns new information, tasks, or procedures	▪ MMSE items measuring immediate and then delayed recall of 3 unrelated objects ▪ FCSRT total recall score (sum free and cued recall) ▪ WMS-IV measure of delayed recall (Logical Memory II) ▪ DSST timed test that measures an individual's ability to rapidly learn a code and assesses speed and accuracy of eye-hand coordination, short-term memory, attention, motor persistence, sustained attention, response speed, scanning, visuomotor coordination
23. Follows instructions or steps to do something	▪ MMSE item assessing patient's ability to follow a 3-stage command ▪ MMSE item assessing patient's ability to follow written instructions ▪ MMSE item assessing patient's ability to repeat a phrase ▪ WMS-IV measure of delayed recall (Logical Memory II)
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

DSST = Digit Symbol Substitution Test; FCSRT = Free and Cued Selective Reminding Test; MMSE = Mini-Mental State Examination; PACC = Preclinical Alzheimer Cognitive Composite; WMM = What Matters Most; WMS-IV = Weschler Memory Scale 4th edition.

Source:

Donohue MC, Sperling RA, Salmon DP, Rentz DM, Raman R, Thomas RG, et al. The preclinical Alzheimer cognitive composite: measuring amyloid-related decline. JAMA Neurol. 2014;71(8):961-70.

Neuropsychiatric Symptom Measures

Table C-16. Mapping of Items in the C-SDD to the What Matters Most Concepts

WMM Item/Concept	C-SDD (Cornell Scale for Depression and Dementia)
1. Remembers names of people you/they just met	
2. Remembers things on a list or a reminder	
3. Remembers what someone just told you/they	
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	
11. Knows the date and time	
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	
22. Learns new information, tasks, or procedures	
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	Behavioral Disturbance item B8 assessing loss of interest; less involved in usual activities
29. Not have difficulty doing your/their hobbies or leisure activities	- Behavioral Disturbance item B8: loss of interest; less involved in usual activities - Physical Signs item C11: Lack of energy; fatigues easily, unable to sustain activities

WMM Item/Concept	C-SDD (Cornell Scale for Depression and Dementia)
30. Not feel down or depressed	▪ Mood-Related Signs item A2: Sadness; Sad Expression, Sad Voice, Tearfulness ▪ Mood-Related Signs item A3: Lack of reaction to pleasant events ▪ Behavioral Disturbance item B8: loss of interest; less involved in usual activities ▪ Ideational Disturbance item E16: Suicidal; feels life is not worth living ▪ Ideational Disturbance item E17: Poor self-esteem; self-blame, self-deprecation, feelings of failure ▪ Ideational Disturbance item E18: Pessimism; anticipation of the worst
31. Not feel anxious, worried, stressed	▪ Mood-Related Signs item A1: Anxiety; Anxious Expression, Rumination, Worrying
32. Feels like you/they have a sense of purpose (self-worth)	▪ Ideational Disturbance item E16: Suicidal; feels life is not worth living ▪ Ideational Disturbance item E17: Poor self-esteem; self-blame, self-deprecation, feelings of failure
33. Not be irritable, frustrated, or agitated	▪ Mood-Related Signs item A4: Irritability; annoyed, short tempered ▪ Behavioral Disturbance item B5: Agitation; restlessness, hand wringing, hair pulling
34. Not have angry outbursts	▪ Mood-Related Signs item A4: Irritability; annoyed, short tempered ▪ Behavioral Disturbance item B5: Agitation; restlessness, hand wringing, hair pulling
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	▪ Ideational Disturbance item E19; Mood congruent delusions; delusions of poverty, illness or loss
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

C-SDD = Cornell Scale for Depression and Dementia; WMM = What Matters Most.

Note: Item numbering may differ depending on version used.

Source:

Alexopoulos GS, Abrams RC, Young RC, Shamoian CA. Cornell Scale for Depression in Dementia. Biol Psychiatry. 1988 Feb 1;23(3):271-84.

Table C-17. Mapping of Items in the NPI/NPI-Q to the What Matters Most Concepts

WMM Item/Concept	NPI (Neuropsychiatric Inventory); NPI-Q (Neuropsychiatric Inventory–Questionnaire)
1. Remembers names of people you/they just met	
2. Remembers things on a list or a reminder	
3. Remembers what someone just told you/them	
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	
11. Knows the date and time	
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ Section G includes 8 items assessing frequency and severity of apathy/indifference, including an item on whether patient contributes to household chores
22. Learns new information, tasks, or procedures	
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	▪ Section G includes 8 items assessing frequency and severity of apathy/indifference, including interest in family and friends
28. Keeps an interest in doing things you/they enjoy	▪ Section G includes 8 items assessing frequency and severity of apathy/indifference, including several items on usual interests
29. Not have difficulty doing your/their hobbies or leisure activities	▪ Section G includes 8 items assessing frequency and severity of apathy/indifference, including several items on usual interests
30. Not feel down or depressed	▪ Section D contains 8 items assessing frequency and severity of depression/dysphoria
31. Not feel anxious, worried, stressed	▪ Section E contains 7 items assessing frequency and severity of anxiety

WMM Item/Concept	NPI (Neuropsychiatric Inventory); NPI-Q (Neuropsychiatric Inventory–Questionnaire)
32. Feels like you/they have a sense of purpose (self-worth)	▪ Section D contains 8 items assessing frequency and severity of depression/dysphoria
33. Not be irritable, frustrated, or agitated	▪ Section C contains 8 items assessing frequency and severity of agitation/aggression ▪ Section I contains 7 items assessing frequency and severity of irritability/lability
34. Not have angry outbursts	▪ Section C contains 8 items assessing frequency and severity of agitation/aggression ▪ Section I contains 7 items assessing frequency and severity of irritability/lability
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	▪ Section A contains 9 items assessing delusions
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	▪ Section K (Sleep and Nighttime Behavior Disorders) contains several items in nighttime wandering and activities
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	▪ Section D contains 8 items assessing depression/dysphoria, including one item (D-6) assessing thoughts that patient is burden to family

NPI = Neuropsychiatric Inventory; NPI-Q = Neuropsychiatric Inventory–Questionnaire; WMM = What Matters Most.
Source:

Cummings JL. Neuropsychiatric inventory (NPI): instructions for use and administration. 2009. Available at: <http://npitest.net>.

Well-being Measures

Table C-18. Mapping of Items in the EQ-5D to the What Matters Most Concepts

WMM Item/Concept	EQ-5D Health-Related Quality of Life Scale
1. Remembers names of people you/they just met	
2. Remembers things on a list or a reminder	
3. Remembers what someone just told you/them	
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	
11. Knows the date and time	
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	▪ Item on problems with "usual activities (e.g., work, study, housework, family, or leisure activities)"
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ Item on problems with "usual activities (e.g., work, study, housework, family, or leisure activities)"
22. Learns new information, tasks, or procedures	
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	▪ Item on problems with "usual activities (e.g., work, study, housework, family, or leisure activities)"
26. Plans or organizes activities (e.g., social events, trip)	▪ Item on problems with "usual activities (e.g., work, study, housework, family, or leisure activities)"
27. Socializes with family or friends	▪ Item on problems with "usual activities (e.g., work, study, housework, family, or leisure activities)"
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	▪ Item on problems with "usual activities (e.g., work, study, housework, family, or leisure activities)"
30. Not feel down or depressed	▪ Item on feelings of "anxiety/depression"
31. Not feel anxious, worried, stressed	▪ Item on feelings of "anxiety/depression"
32. Feels like you/they have a sense of purpose (self-worth)	

WMM Item/Concept	EQ-5D Health-Related Quality of Life Scale
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	▪ Item on problems with "self-care," which includes "washing or dressing" self
39. Uses the bathroom on your/their own	▪ Item on problems with "self-care," which includes "washing or dressing"
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

WMM = What Matters Most.

Source:

EuroQol Research Foundation. EQ-5D-5L User Guide. 2019. Available at: https://euroqol.org/wp-content/uploads/2019/09/EQ-5D-5L-English-User-Guide_version-3.0-Sept-2019-secured.pdf.

Table C-19. Mapping of Items in the QoL-AD to the What Matters Most Concepts

WMM Item/Concept	QoL-AD (Quality of Life in Alzheimer's Disease Scale)
1. Remembers names of people you/they just met	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
2. Remembers things on a list or a reminder	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
3. Remembers what someone just told you/they	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
4. Remembers why you/they walked into a room	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
5. Remembers where you/they placed things	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
6. Remembers appointments	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
9. Remembers names of people you/they have known for a long time	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
10. Recognize people you/they have known for a long time	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
11. Knows the date and time	
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ Item assessing ability to do chores around the house: "How do you feel about your ability to do things like chores around the house or other things you need to do? Would you say It's poor, fair, good, or excellent?"
22. Learns new information, tasks, or procedures	▪ Memory item: "How about your memory? Would you say It Is poor, fair, good, or excellent?"
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	▪ Item assessing ability to do chores around the house: "How do you feel about your ability to do things like chores around the house or other things you need to do? Would you say It's poor, fair, good, or excellent?"
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	

WMM Item/Concept	QoL-AD (Quality of Life in Alzheimer's Disease Scale)
27. Socializes with family or friends	- Item assessing relationship with family members: "How about your family and your relationship with family members? Would you describe it as poor, fair, good, or excellent?" - Item assessing marital relationship: "How do you feel about your marriage? How is your relationship with (spouse's name). Do you feel it's poor, fair, good, or excellent?" - Item assessing current relationships with friends: "How would you describe your current relationship with your friends? Would you say it's poor, fair, good, or excellent?"
28. Keeps an interest in doing things you/they enjoy	- Item assessing ability to do things for fun: "How about your ability to do things for fun, that you enjoy? Would you say it's poor, fair, good, or excellent?" - Item assessing current relationships with friends: "How would you describe your current relationship with your friends? Would you say it's poor, fair, good, or excellent?"
29. Not have difficulty doing your/their hobbies or leisure activities	Item assessing ability to do things for fun: "How about your ability to do things for fun, that you enjoy? Would you say it's poor, fair, good, or excellent?"
30. Not feel down or depressed	- Item assessing mood: "How has your mood been lately? Have your spirits been good, or have you been feeling down? Would you rate your mood as poor, fair, good, or excellent?" - Item assessing energy level: "How do you feel about your energy level? Do you think it is poor, fair, good, or excellent?"
31. Not feel anxious, worried, stressed	- Item assessing mood: "How has your mood been lately? Have your spirits been good, or have you been feeling down? Would you rate your mood as poor, fair, good, or excellent?" - Item assessing energy level: "How do you feel about your energy level? Do you think it is poor, fair, good, or excellent?"
32. Feels like you/they have a sense of purpose (self-worth)	- Item assessing feelings about self: "How do you feel about yourself – when you think of your whole self, and all the different things about you, would you say it's poor, fair, good, or excellent?" - Item assessing perceptions of life as a whole: "How would you describe your life as a whole. When you think about your life as a whole, everything together, how do you feel about your life? Would you say it's poor, fair, good, or excellent?"
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	

WMM Item/Concept	QoL-AD (Quality of Life in Alzheimer's Disease Scale)
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

QoL-AD = Quality of Life in Alzheimer's Disease Scale; WMM = What Matters Most.

Sources:

Logsdon RG, Gibbons LE, McCurry SM, Teri L. Quality of life in Alzheimer's disease: Patient and caregiver reports. J Ment Health Aging (Lond). 1999;5(1), 21-32.

Logsdon RG, Gibbons LE, McCurry SM, Teri L. Assessing quality of life in older adults with cognitive impairment. Psychosom Med. 2002;64, 510-9.

Table C-20. Mapping of Items in the ZBI to the What Matters Most Concepts

WMM Item/Concept	ZBI (Zarit Burden Interview) ^a
1. Remembers names of people you/they just met	
2. Remembers things on a list or a reminder	
3. Remembers what someone just told you/them	
4. Remembers why you/they walked into a room	
5. Remembers where you/they placed things	
6. Remembers appointments	
7. Not repeat yourself/themselves frequently	
8. Remembers words or names of familiar objects	
9. Remembers names of people you/they have known for a long time	
10. Recognize people you/they have known for a long time	
11. Knows the date and time	
12. Not get lost in familiar places	
13. Not put things in obviously wrong places (e.g., a shoe in the refrigerator)	
14. Takes your/their medications correctly	
15. Manages money or pay bills correctly	
16. Not lose your/their train of thought in conversations	
17. Understands what other people are saying in conversations	
18. Understands what you/they are reading	
19. Can follow a TV show or movie	
20. Not have difficulty with work	
21. Can complete basic household chores (e.g., preparing a meal, laundry, cleaning, caring for a pet)	▪ Item 8 assesses caregiver's feeling that relative is dependent upon them
22. Learns new information, tasks, or procedures	
23. Follows instructions or steps to do something	
24. Can use household objects (e.g., TV remote, can opener)	
25. Plans or schedules appointments	
26. Plans or organizes activities (e.g., social events, trip)	
27. Socializes with family or friends	
28. Keeps an interest in doing things you/they enjoy	
29. Not have difficulty doing your/their hobbies or leisure activities	
30. Not feel down or depressed	
31. Not feel anxious, worried, stressed	
32. Feels like you/they have a sense of purpose (self-worth)	
33. Not be irritable, frustrated, or agitated	
34. Not have angry outbursts	
35. Not be suspicious, or not trust family, friends, or care partner/caregiver	
36. Drives	

WMM Item/Concept	ZBI (Zarit Burden Interview) ^a
37. Is able to stay safe (e.g., remembers to turn off appliances or running water, does not wander, is not taken advantage of)	
38. Washes, dresses, or grooms yourself/themselves	
39. Uses the bathroom on your/their own	
40. Is able to live on your/their own	▪ Item 8 assesses caregiver's feeling that relative is dependent upon them
41. Is able to be left alone (unsupervised)	
42. Not feel as if you/they are a burden to others	

WMM = What Matters Most; ZBI = Zarit Burden Interview.

^a Name of measure modified for accuracy from initial development of this table.

Note: Item numbering may differ depending on version used.

Source:

Zarit SH, Zarit JM. The Memory and Behavior Problems Checklist and the Burden Interview. Gerontology Center, Penn State University. 1990.