



The Alzheimer's Association clinical practice guideline for the Diagnostic Evaluation, Testing, Counseling, and Disclosure of Suspected Alzheimer's Disease and Related Disorders (DETeCD-ADRD)^{1,2}



Note: For a better interactive experience, open in Adobe Acrobat Reader app. If using Mac Preview, go to VIEW and select "Single Page"

Core Elements of Evaluation of Patient with Suspected Cognitive Impairment

CORE 1

Establish shared goals for diagnostic process with patient and care partner.

CORE 2

History of Present Illness from Patient and Care Partner

CORE 3

Structured Multi-Domain Systems Review

- Cognitive
- Behavior/ Neuropsychiatric
- Activities of Daily Living
- Sensorimotor

CORE 4

Biopsychosocial History & Risk Factors

- Risk Factors for Neurodegenerative and Cerebrovascular Diseases
- Other risk factors for cognitive or behavioral symptoms
- Developmental, social, family history
- Health Related Behaviors

CORE 5

ExamMental Status

- Exam using Validated instrument³
- Medical
- Neurologic
- Psychiatric

CORE 6

Diagnostic Steps and Formulation

STEP1: Delineate Cognitive Functional Status

- Cognitively Unimpaired
- Subjective Cognitive Decline
- Mild Cognitive Impairment
- Dementia (Mild, Moderate, Severe, Terminal)

STEP 2 : Characterize Cognitive-Behavioral Syndrome

• (Syndromic Diagnosis e.g. primary memory (amnestic), language (aphasic, etc.)

STEP 3 : Determine likely cause(s) (Etiological Diagnosis)

 (e.g. Alzheimer's disease.
 Vascular. etc) and potential contributing factors (e.g., medications or medical conditions)

CORE 7

Communicate diagnostic findings and implications to patient and care partner.

Develop shared care plan.

Evaluation of Patient with Suspected Cognitive Impairment

Tap on clinical practice setting type to know the respective recommended diagnostic evaluation process.

Primary Care Setting

Specialist Setting

Dementia
Sub-specialist Setting

1. Atri A et al. Alzheimers Dement. 2024;1-32; 2. Dickerson BC et al. Alzheimers Dement. 2024;1-29; 3. Atri A et al. Alzheimer's Dement. 2025;21:e14335.

Tap on the dark blue buttons to see the respective recommendations **Concern for cognitive** YES NO ---- Age ≥ 65 Perform Medicare Annual and/or behavioral Wellness Visit cognitive symptoms? assessment for case finding Promote brain-healthy Initiate evaluation for possible cognitive impairment or behaviors*** dementia (Cores 1-4) Consider referral for brain aging research Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3 Promote brain-healthy Obtain history of present illness from patient & care NO behaviors*** partner (Core 2) Rec 4 Consider referral for brain Perform structured multi-domain systems review aging research (Core 3) Rec 4 Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4) Rec 5 Communicate findings and diagnostic formulation; Perform focused examination, including mental status exam Educate, counsel, and develop using validated instrument (Core 5) care plan with patient and care partner (Core 7) Recs 10-11 Promote brain-healthy Integrate data & findings from history, systems review, & exam behaviors*** for diagnostic formulation (Core 6) Make plan for monitoring of symptoms **High confidence that** May reassess in 12 months YES patient is cognitively or sooner if new or unimpaired? worsening symptoms NO Consider referral for brain aging research Delineate Cognitive Functional Status** (Core 6, Step 1) High confidence in Consult with neuropsychologist, **Cognitive Functional** specialist, or dementia Communicate, counsel, **Status?** subspecialist (Recs 12,14 and make care plan YES* Characterize Cognitive-Behavioral Syndrome (Core 6, Step 2) High confidence in Clinician may proceed with **Cognitive-Behavioral** ordering Tier 1 tests if not Communicate, counsel, Syndrome? yet confident in the and make care plan Cognitive-Behavioral YES* **Syndrome** Determine etiology (Core 6, Step 3) Cognitive lab panel (TSH, B12, CBC, complete metabolic panel, Tier 1 homocysteine, ESR, CRP) Rec 8 tests **Obtain Tier 1 tests** Structural neuroimaging with brain MRI (head CT if MRI not in some patients May obtain some Rec 15 Tier 2 tests possible or contraindicated) Rec 9 Integrate updated clinical history & diagnostic data for formulation (Core 6) Consult with specialist or High confidence in dementia subspecialist Rec 12 etiology? Communicate, counsel, and make care plan YES* Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, counsel, and co-develop monitoring and care plan (Core 7) **Recs 10-11**

Provider action Intermediate step Decision point Consultation/referral Tests

*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia.

Abbreviations: B12, vitamin B12; CBC, complete blood count; CRP, C-reactive protein; CT, computed tomography; ESR, erythrocyte sedimentation rate; MRI, magnetic resonance imaging; Rec, recommendation; TSH, thyroid-stimulating hormone.
References: Atri A et al. Alzheimer's Dement. 2024;1-32; Dickerson BC et al. Alzheimer's Dement. 2024;1-29.

^{**}Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).

***Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

Tap on the dark blue buttons to see the respective recommendations YES **Concern for cognitive** Consider case-finding & and/or behavioral establishing baseline **Age ≥ 65** symptoms? performance on standardized brief cognitive test YES* Promote brain-healthy behaviors*** Initiate process of multi-tiered specialist comprehensive Consider referral for brain evaluation for possible cognitive impairment or dementia aging research with patient & care partner History of present illness, structured multi-systems review, biopsychosocial factors, review of previous data & evaluations (e.g. primary care, neuropsychology, specialists) NO (Cores 1-4) Recs 4-7,13 Promote brain-healthy behaviors*** Consider referral for brain aging research Comprehensive exam (Core 5) Rec 10 Integrate data & findings for formulation of diagnosis (Core 6) Delineate Cognitive Functional Status** (Core 6. Step 1) High confidence in Consult with neuropsychologist. **Cognitive Functional** specialist, or dementia Status? subspecialist Recs 12,14 Communicate, counsel, YES* and make care plan Characterize Cognitive-Behavioral Syndrome (Core 6, Step 2) High confidence in **Cognitive-Behavioral** Syndrome? Clinician may proceed with ordering Tier 1 tests if not yet confident in the YES* Communicate, counsel, Cognitive-Behavioral Syndrome and make care plan Determine etiology (Core 6, Step 3) Tier 1 +/- Tier 2-4 tests as guided by clinical characteristics/profile **Recs 8,9,15** Integrate updated clinical history & diagnostic data for formulation (Core 6) Consult with dementia subspecialist (Core 7) High confidence in Recs 12 etiology? Communicate, counsel, YES* and make care plan

Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, counsel, and co-develop monitoring and care plan (Core 7) **Recs 10-11**



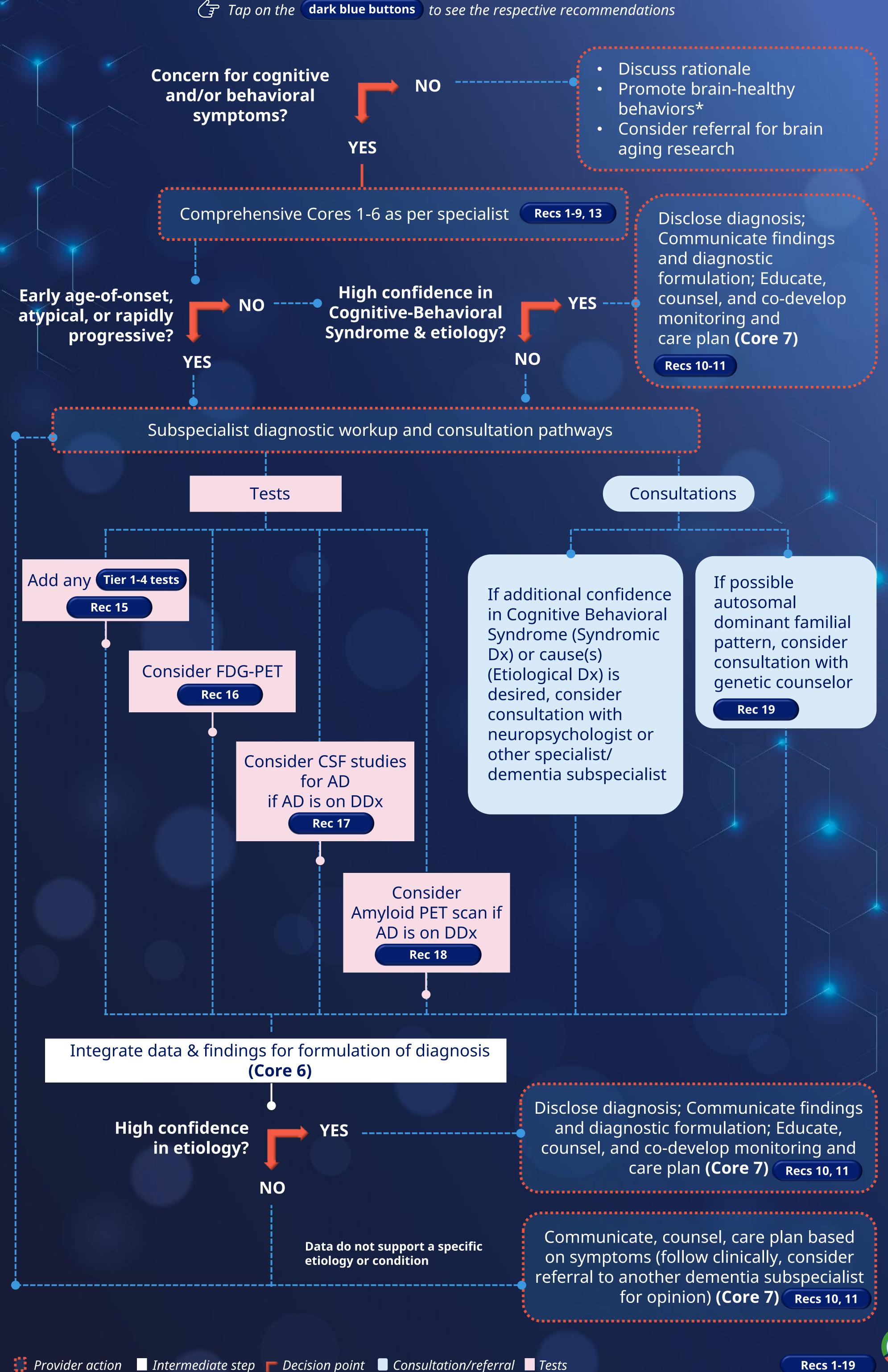
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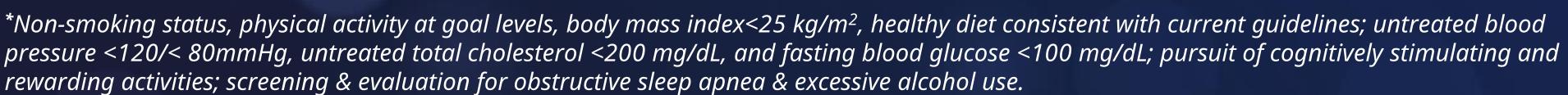


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Abbreviations: AD, Alzheimer's disease; CSF, cerebrospinal fluid; Dx; diagnosis; DDx; differential diagnosis; FDG; fluorodeoxyglucose; PET, positron emission tomography; Rec, recommendation.

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DETeCD-ADRD Recommendations



- **RECOMMENDATION 1:** For patients who self-report or whose care partner or clinician reports cognitive, behavioral, or functional changes, the clinician should initiate a multitiered evaluation focused on the problem.
- **RECOMMENDATION 2:** The clinician should use patient-centered communication to develop a partnership with the patient or with the patient and a care partner to (1) establish shared goals for the evaluation process and (2) assess capacity (understanding and appreciation) to engage in the goal-setting process for the evaluation.
- **RECOMMENDATION 3:** The evaluation process should use tiers of assessments and tests based on individual presentation, risk factors, and profile to establish a diagnostic formulation, including (1) the overall level of impairment, (2) the cognitive-behavioral syndrome, and (3) the likely cause(s) and contributing factors.
- **RECOMMENDATION 4:** During history taking for a patient being evaluated for cognitive or behavioral symptoms, the clinician should obtain reliable information involving an informant regarding changes in (1) cognition, (2) activities of daily living (ADL and instrumental ADL [IADL]), (3) mood and other neuropsychiatric symptoms, and (4) sensory and motor function. Use o structured instruments for assessing each of these domains is helpful.
- **RECOMMENDATION 5:** During history taking for a patient being evaluated for cognitive or behavioral symptoms, the clinician should obtain reliable information about individualized risk factors for cognitive decline.
- **RECOMMENDATION 6:** In a patient being evaluated for cognitive or behavioral symptoms, the primary clinician should perform an examination of cognition, mood, and behavior (mental status exam), and a dementia-focused neurologic examination, aiming to diagnose the cognitive-behavioral syndrome.
- **RECOMMENDATION 7:** In a patient being evaluated for cognitive or behavioral symptoms, clinicians should use validated tools to assess cognition.
- **RECOMMENDATION 8:** Laboratory tests in the evaluation of cognitive or behavioral symptoms should be multi-tiered and individualized to the patient's medical risks and profile. Clinicians should obtain routine Tier 1 laboratory studies in all patients.
- **RECOMMENDATION 9:** In a patient being evaluated for cognitive-behavioral syndrome, the clinician should obtain structural brain imaging to aid in establishing the cause(s). If magnetic resonance imaging (MRI) is not available or is contraindicated, computed tomography (CT) should be obtained.
- **RECOMMENDATION 10:** Throughout the evaluation process, the clinician should establish a dialogue with the patient and care partner about the understanding (knowledge of facts) and appreciation (recognition that facts apply to the person) of the presence and severity of the cognitive–behavioral syndrome. The patient and care partner's understanding and appreciation of the syndrome guide education, diagnostic disclosure, and methods for communicating and documenting diagnostic findings.
- **RECOMMENDATION 11:** In communicating diagnostic findings the clinician should honestly and compassionately inform both the patient and their care partner of the following information using a structured process: the name, characteristics, and severity of the cognitive–behavioral syndrome; the disease(s) likely causing the cognitive–behavioral syndrome; the stage of the disease; what can be reasonably expected in the future; treatment options and expectations; potential safety concerns; and medical, psychosocial and community resources for education, care planning and coordination, and support services.
- **RECOMMENDATION 12:** A patient with atypical findings or in whom there is uncertainty about how to interpret the evaluation, or that is suspected of having an early-onset or rapidly progressive cognitive–behavioral condition, should be further evaluated expeditiously, usually including referral to a specialist.
- **RECOMMENDATION 13:** A specialist evaluating a patient with cognitive or behavioral symptoms should perform a comprehensive history and office-based examination of cognitive, neuropsychiatric, and neurologic functions, aiming to diagnose the cognitive-behavioral syndrome and its cause(s).
- **RECOMMENDATION 14:** Neuropsychological evaluation is recommended when office-based cognitive assessment is not sufficiently informative. Specific examples are when a patient or caregiver report concerning symptoms in daily life, but the patient performs within normal limits on a cognitive examination, or when the examination of cognitive-behavioral function is not normal but there is uncertainty about interpretation of results due to a complex clinical profile or confounding demographic characteristics. The neuropsychological evaluation, at a minimum, should include normed neuropsychological testing of the domains of learning and memory (in particular delayed free and cued recall/recognition); attention, executive function, visuospatial function, and language.
- **RECOMMENDATION 15:** When diagnostic uncertainty remains, the clinician can obtain additional (Tier 2–4) laboratory tests guided by the patient's individual medical, neuropsychiatric, and risk profile.
- **RECOMMENDATION 16:** In a patient with an established cognitive–behavioral syndrome in whom there is continued diagnostic uncertainty regarding cause(s) after structural imaging has been interpreted, a dementia specialist can obtain molecular imaging with fluorodeoxyglucose (FDG) PET to improve diagnostic accuracy.
- **RECOMMENDATION 17:** In a patient with an established cognitive–behavioral syndrome in whom there is continued diagnostic uncertainty regarding cause(s) after structural imaging with or without FDG PET, a dementia specialist can obtain CSF according to appropriate use criteria for analysis of amyloid beta (Aβ)42 and tau/phosphorylated tau (p-tau) profiles to evaluate for AD neuropathologic changes.
- **RECOMMENDATION 18:** If diagnostic uncertainty still exists after obtaining structural imaging with or without FDG PET and/or CSF Aβ42 and tau/p-tau, the dementia specialist can obtain an amyloid PET scan according to the appropriate use criteria to evaluate for cerebral amyloid pathology.
- **RECOMMENDATION 19:** In a patient with an established cognitive–behavioral syndrome and a likely autosomal dominant family history, the dementia specialist should consider whether genetic testing is warranted. A genetic counselor should be involved throughout the process.



Multiple tiers of tests considered in the evaluation of patients with or suspected of having cognitive impairment.



Tier	Туре	Tests
Tier 1 Tests	Blood	"Cognitive lab panel" - TSH, vitamin B12, homocysteine, CBC with differential, complete metabolic panel (including calcium, magnesium, and liver function tests), ESR, CRP
	Imaging	Brain MRI without gadolinium—if unavailable or contraindicated then obtain non-contrast head CT
Tier 2 Tests	Blood	ANA, HgbA1c, lipid profile, folate, ammonia [^] , lead, Lyme antibody, RPR, HIV, SPEP, MMA, PT, PTT
	Imaging	Chest plain film/x-ray [^]
	Urine	Urinalysis [^] , urine cultured [^]
	Other	Sleep study: for obstructive sleep apnea or REM sleep disorder (LBD)
Tier 3 Tests	Blood	TPO, anti-thyroglobulin antibodies (TGA), FTA-ABS, ACE, ANCA, viral antibody studies (hepatitis B/C, EBV, CMV)
	Urine	UPEP, Bence–Jones proteins
	CSF	AD CSF biomarker panel ($A\beta_{42}$, tau, phospho-tau and ratios)*; consider obtaining cell count, glucose, total protein, and other CSF tests depending on the condition being considered. Lyme PCR; viral PCRs and cultures, VDRL, T.pallidum PCR
	Imaging	MR or CT angiogram of head and neck, carotid ultrasound, Brain MRI with gadolinium or head CT with contrast, Chest films <i>Brain FDG PET (or SPECT) scan**, Brain amyloid PET scan*</i>
	Other	EEG, dopamine transport SPECT or PET imaging (altered in LBD, PDD > PSP, and CBD), cardiac scintigraphy (altered in LBD)
Tier 4 Tests	Blood	Paraneoplastic antibody panel, autoimmune antibody panel, anti-VGKC antibody, non-Lyme tick-borne disease panel (ehrlichiosis, babesiosis, anaplasmosis, rickettsiosis, Powassan), copper & ceruloplasmin, tumor markers, rheumatological studies
	Urine	24-hour urine collection for heavy metals, porphyria, and/or copper
	CSF	Protein 14-3-3, NSE, T. whipplei PCR, paraneoplastic antibody panel, autoimmune antibody panel, anti-VGKC antibody, cytology, flow cytometry, other stains and cultures for infectious agents (bacterial, fungal, AFB)
	Other	CT of chest, abdomen, and pelvis; cerebral angiogram; whole body PET scan
	Biopsy	Biopsies: Brain and/or meningeal vessels; temporal artery; skin; small intestine; or muscle biopsy
	Genetic	Autosomal dominant AD or ADRD genetic mutations*** (PSEN2, PSEN1, APP) (Rec. 19), FTLD Genetic mutations (MAPT, GRN, C9orf72), Huntington genetic mutation
Clinically emerging tests#	Blood	A $β$, hyperphosphorylated tau, NfL, GFAP, etc.
	CSF	skin Imaging - alpha-synuclein
	Imaging	Brain tau PET scan

Note: Tier 1 tests involve a blood cognitive lab panel and structural brain imaging that should be obtained in all or almost all individuals to establish likely etiology(-ies).

^Delirium work-up first tier - in addition to Tier 1 labs, these tests should also be considered in all, or nearly all individuals being assessed for delirium or an acute change in mental status.

Tests listed in Tier 2–4 are representative of tests that could be ordered with increasing selectively based on an individual's clinical characteristics.

#Clinically emerging in specialist/subspecialist settings but may not be validated in diverse real-world populations and clinical settings, widely accessible, reimbursed or readily interpreted without high proficiency.

*When AD is a possibility and high confidence is desired consider analysis of specific in vivo AD biomarkers such as CSF AD panel (Rec. 17) or amyloid PET (Rec. 18). Diagnostic confirmation with molecular biomarkers is required for anti-amyloid therapies.

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***When there is a 2 or more generational history of AD or dementia syndrome suggestive of autosomal dominant pattern or in early age-of-onset. All genetic tests should be performed and disclosed with involvement of genetic counseling when possible (Rec. 19). Abbreviations: AA, Alzheimer's Association; Aβ, amyloid beta; ACE, angiotensin converting enzyme; AD, Alzheimer's disease; ADRD, Alzheimer's disease and related disorders; AFB, acid-fast bacillus; ANA, antinuclear antibody; CBC, complete blood count; CBD, corticobasal degeneration; CMV, cytomegalovirus; CRP, C-reactive protein; CSF, cerebrospinal fluid; CT, computed tomography; EBV, Epstein–Barr virus; EEG, electroencephalogram; FDA, US Food and Drug Administration; FTA-ABS, fluorescent treponemal antibody absorption; FTLD, frontotemporal lobar degeneration; GFAP, glial fibrillary acidic protein; HgbA1c, glycated hemoglobin; HIV, human immunodeficiency virus; LBD, Lewy body disease; MMA, methylmalonic acid; NfL, neurofilament light chain; NSE, neuron-specific enolase; PCR, polymerase chain reaction; PDD, Parkinson's disease dementia; PET, positron emission tomography; PSP, progressive supranuclear palsy; PT, prothrombin time; PTT, partial thromboplastin time; Rec, recommendation; RPR, rapid plasma reagin; SPECT, single-photon emission computed tomography; TGA, thyroglobulin antibodies; TPO, thyroid peroxidase antibodies; TSH, thyroid-stimulating hormone; VGKC, voltage-gated potassium channel.



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- **RECOMMENDATION 11:** In communicating diagnostic findings the clinician should honestly and compassionately inform both the patient and their care partner of the following information using a structured process: the name, characteristics, and severity of the cognitive–behavioral syndrome; the disease(s) likely causing the cognitive–behavioral syndrome; the stage of the disease; what can be reasonably expected in the future; treatment options and expectations; potential safety concerns; and medical, psychosocial and community resources for education, care planning and coordination, and support services.
- **RECOMMENDATION 12:** A patient with atypical findings or in whom there is uncertainty about how to interpret the evaluation, or that is suspected of having an early-onset or rapidly progressive cognitive–behavioral condition, should be further evaluated expeditiously, usually including referral to a specialist.
- **RECOMMENDATION 13:** A specialist evaluating a patient with cognitive or behavioral symptoms should perform a comprehensive history and office-based examination of cognitive, neuropsychiatric, and neurologic functions, aiming to diagnose the cognitive-behavioral syndrome and its cause(s).
- **RECOMMENDATION 14:** Neuropsychological evaluation is recommended when office-based cognitive assessment is not sufficiently informative. Specific examples are when a patient or caregiver report concerning symptoms in daily life, but the patient performs within normal limits on a cognitive examination, or when the examination of cognitive-behavioral function is not normal but there is uncertainty about interpretation of results due to a complex clinical profile or confounding demographic characteristics. The neuropsychological evaluation, at a minimum, should include normed neuropsychological testing of the domains of learning and memory (in particular delayed free and cued recall/recognition); attention, executive function, visuospatial function, and language.
- **RECOMMENDATION 15:** When diagnostic uncertainty remains, the clinician can obtain additional (Tier 2–4) laboratory tests guided by the patient's individual medical, neuropsychiatric, and risk profile.
- **RECOMMENDATION 16:** In a patient with an established cognitive–behavioral syndrome in whom there is continued diagnostic uncertainty regarding cause(s) after structural imaging has been interpreted, a dementia specialist can obtain molecular imaging with fluorodeoxyglucose (FDG) PET to improve diagnostic accuracy.
- **RECOMMENDATION 17:** In a patient with an established cognitive–behavioral syndrome in whom there is continued diagnostic uncertainty regarding cause(s) after structural imaging with or without FDG PET, a dementia specialist can obtain CSF according to appropriate use criteria for analysis of amyloid beta (Aβ)42 and tau/phosphorylated tau (p-tau) profiles to evaluate for AD neuropathologic changes.
- **RECOMMENDATION 18:** If diagnostic uncertainty still exists after obtaining structural imaging with or without FDG PET and/or CSF Aβ42 and tau/p-tau, the dementia specialist can obtain an amyloid PET scan according to the appropriate use criteria to evaluate for cerebral amyloid pathology.
- **RECOMMENDATION 19:** In a patient with an established cognitive–behavioral syndrome and a likely autosomal dominant family history, the dementia specialist should consider whether genetic testing is warranted. A genetic counselor should be involved throughout the process.



Multiple tiers of tests considered in the evaluation of patients with or suspected of having cognitive impairment.



Tier	Туре	Tests
Tier 1 Tests	Blood	"Cognitive lab panel" - TSH, vitamin B12, homocysteine, CBC with differential, complete metabolic panel (including calcium, magnesium, and liver function tests), ESR, CRP
	Imaging	Brain MRI without gadolinium—if unavailable or contraindicated then obtain non-contrast head CT
Tier 2 Tests	Blood	ANA, HgbA1c, lipid profile, folate, ammonia [^] , lead, Lyme antibody, RPR, HIV, SPEP, MMA, PT, PTT
	Imaging	Chest plain film/x-ray [^]
	Urine	Urinalysis [^] , urine cultured [^]
	Other	Sleep study: for obstructive sleep apnea or REM sleep disorder (LBD)
Tier 3 Tests	Blood	TPO, anti-thyroglobulin antibodies (TGA), FTA-ABS, ACE, ANCA, viral antibody studies (hepatitis B/C, EBV, CMV)
	Urine	UPEP, Bence–Jones proteins
	CSF	AD CSF biomarker panel ($A\beta_{42}$, tau, phospho-tau and ratios)*; consider obtaining cell count, glucose, total protein, and other CSF tests depending on the condition being considered. Lyme PCR; viral PCRs and cultures, VDRL, T.pallidum PCR
	Imaging	MR or CT angiogram of head and neck, carotid ultrasound, Brain MRI with gadolinium or head CT with contrast, Chest films <i>Brain FDG PET (or SPECT) scan**, Brain amyloid PET scan*</i>
	Other	EEG, dopamine transport SPECT or PET imaging (altered in LBD, PDD > PSP, and CBD), cardiac scintigraphy (altered in LBD)
Tier 4 Tests	Blood	Paraneoplastic antibody panel, autoimmune antibody panel, anti-VGKC antibody, non-Lyme tick-borne disease panel (ehrlichiosis, babesiosis, anaplasmosis, rickettsiosis, Powassan), copper & ceruloplasmin, tumor markers, rheumatological studies
	Urine	24-hour urine collection for heavy metals, porphyria, and/or copper
	CSF	Protein 14-3-3, NSE, T. whipplei PCR, paraneoplastic antibody panel, autoimmune antibody panel, anti-VGKC antibody, cytology, flow cytometry, other stains and cultures for infectious agents (bacterial, fungal, AFB)
	Other	CT of chest, abdomen, and pelvis; cerebral angiogram; whole body PET scan
	Biopsy	Biopsies: Brain and/or meningeal vessels; temporal artery; skin; small intestine; or muscle biopsy
	Genetic	Autosomal dominant AD or ADRD genetic mutations*** (PSEN2, PSEN1, APP) (Rec. 19), FTLD Genetic mutations (MAPT, GRN, C9orf72), Huntington genetic mutation
Clinically emerging tests#	Blood	A $β$, hyperphosphorylated tau, NfL, GFAP, etc.
	CSF	skin Imaging - alpha-synuclein
	Imaging	Brain tau PET scan

Note: Tier 1 tests involve a blood cognitive lab panel and structural brain imaging that should be obtained in all or almost all individuals to establish likely etiology(-ies).

^Delirium work-up first tier - in addition to Tier 1 labs, these tests should also be considered in all, or nearly all individuals being assessed for delirium or an acute change in mental status.

Tests listed in Tier 2–4 are representative of tests that could be ordered with increasing selectively based on an individual's clinical characteristics.

#Clinically emerging in specialist/subspecialist settings but may not be validated in diverse real-world populations and clinical settings, widely accessible, reimbursed or readily interpreted without high proficiency.

*When AD is a possibility and high confidence is desired consider analysis of specific in vivo AD biomarkers such as CSF AD panel (Rec. 17) or amyloid PET (Rec. 18). Diagnostic confirmation with molecular biomarkers is required for anti-amyloid therapies.

AD panel (Rec. 17) or amyloid PET (Rec. 18). Diagnostic confirmation with molecular biomarkers is required for anti-amyloid therapies **Assessment of possible early age-of-onset or atypical AD or ADRD may include brain FDG-PET (or SPECT) scan (Rec. 16).

***When there is a 2 or more generational history of AD or dementia syndrome suggestive of autosomal dominant pattern or in early age-of-onset. All genetic tests should be performed and disclosed with involvement of genetic counseling when possible (Rec. 19). Abbreviations: AA, Alzheimer's Association; Aβ, amyloid beta; ACE, angiotensin converting enzyme; AD, Alzheimer's disease; ADRD, Alzheimer's disease and related disorders; AFB, acid-fast bacillus; ANA, antinuclear antibody; CBC, complete blood count; CBD, corticobasal degeneration; CMV, cytomegalovirus; CRP, C-reactive protein; CSF, cerebrospinal fluid; CT, computed tomography; EBV, Epstein–Barr virus; EEG, electroencephalogram; FDA, US Food and Drug Administration; FTA-ABS, fluorescent treponemal antibody absorption; FTLD, frontotemporal lobar degeneration; GFAP, glial fibrillary acidic protein; HgbA1c, glycated hemoglobin; HIV, human immunodeficiency virus; LBD, Lewy body disease; MMA, methylmalonic acid; NfL, neurofilament light chain; NSE, neuron-specific enolase; PCR, polymerase chain reaction; PDD, Parkinson's disease dementia; PET, positron emission tomography; PSP, progressive supranuclear palsy; PT, prothrombin time; PTT, partial thromboplastin time; Rec, recommendation; RPR, rapid plasma reagin; SPECT, single-photon emission computed tomography; TGA, thyroglobulin antibodies; TPO, thyroid peroxidase antibodies; TSH, thyroid-stimulating hormone; VGKC, voltage-gated potassium channel.



Tap on the dark blue buttons to see the respective recommendations Concern for cognitive YES NO ---- Age ≥ 65 and/or behavioral

Initiate evaluation for possible cognitive impairment or dementia (Cores 1-4)

symptoms?

- Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3
- Obtain history of present illness from patient & care partner (Core 2) Rec 4
- Perform structured multi-domain systems review (Core 3) Rec 4
- Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4)

Perform focused examination, including mental status exam using validated instrument (Core 5)

Integrate data & findings from history, systems review, & exam for diagnostic formulation (Core 6)

 Perform Medicare Annual Wellness Visit cognitive assessment for case finding

- Promote brain-healthy behaviors***
- Consider referral for brain aging research

 Promote brain-healthy behaviors***

NO

Consider referral for brain aging research

Communicate findings and diagnostic formulation; Educate, counsel, and develop care plan with patient and care partner (Core 7) Recs 10-11

 Promote brain-healthy behaviors***



- **RECOMMENDATION 1:** For patients who self-report or whose care partner or clinician reports cognitive, behavioral, or functional changes, the clinician should initiate a multitiered evaluation focused on the problem.
- **RECOMMENDATION 2:** The clinician should use patient-centered communication to develop a partnership with the patient or with the patient and a care partner to (1) establish shared goals for the evaluation process and (2) assess capacity (under-standing and appreciation) to engage in the goal-setting process for the evaluation.
- **RECOMMENDATION 3:** The evaluation process should use tiers of assessments and tests based on individual presentation, risk factors, and profile to establish a diagnostic formulation, including (1) the overall level of impairment, (2) the cognitive-behavioral syndrome, and (3) the likely cause(s) and contributing factors.

Communicate, counsel, yet confident in the Syndrome? and make care plan Cognitive-Behavioral Syndrome Determine etiology (Core 6, Step 3) Cognitive lab panel (TSH, B12, CBC, complete metabolic panel, Tier 1 homocysteine, ESR, CRP) Rec 8 tests Obtain Tier 1 tests Structural neuroimaging with brain MRI (head CT if MRI not in some patients (May obtain some Tier 2 tests possible or contraindicated) Rec 9 Integrate updated clinical history & diagnostic data for formulation (Core 6) Consult with specialist or NO High confidence in dementia subspecialist Rec 12 etiology? Communicate, counsel, and make care plan

Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, counsel, and co-develop monitoring and care plan (Core 7) **Recs 10-11**

Provider action Intermediate step

Decision point 🔲 Consultation/referral 🔲 Tests

Recs 1-19

*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia. **Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).

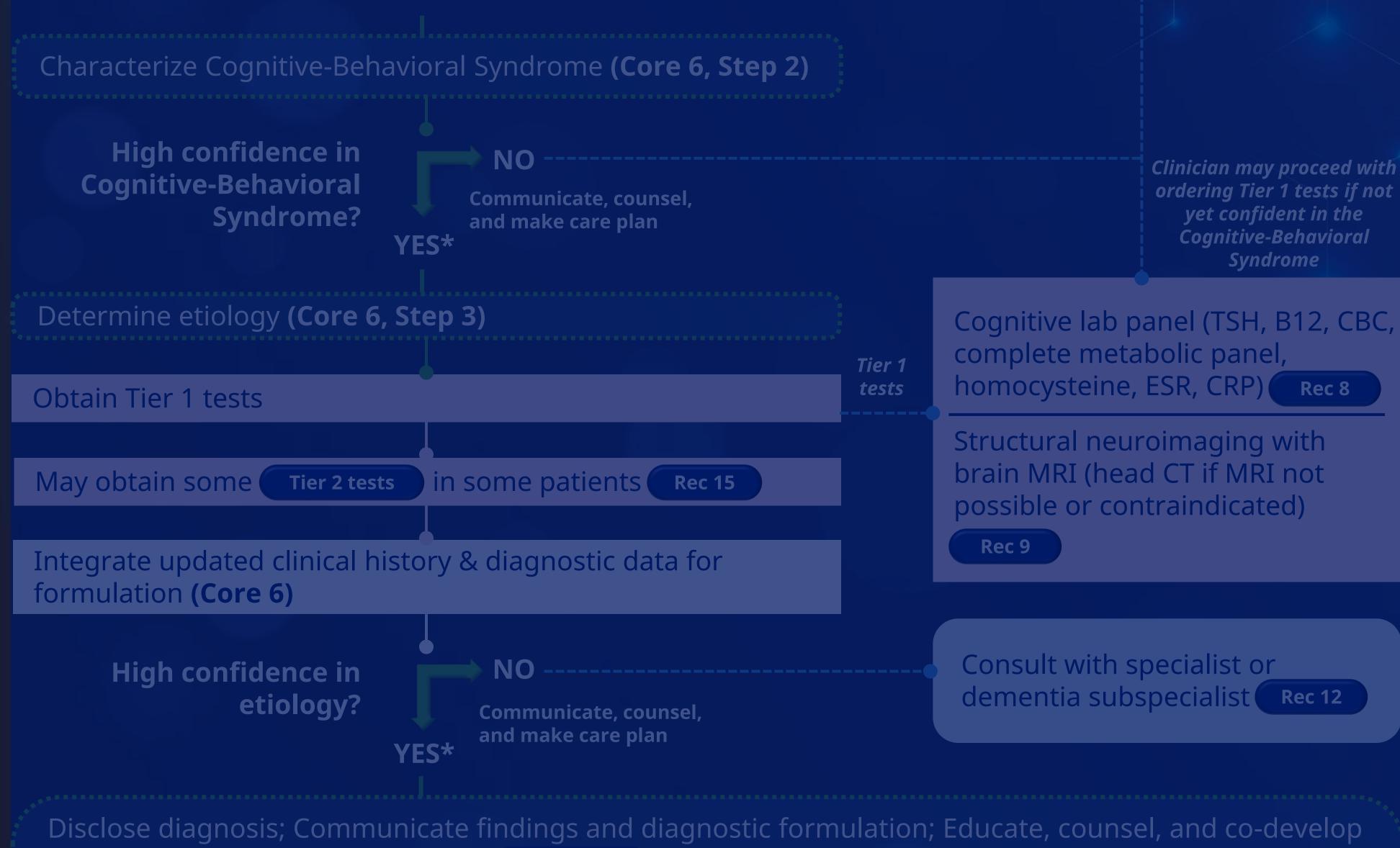
***Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

Abbreviations: B12, vitamin B12; CBC, complete blood count; CRP, C-reactive protein; CT, computed tomography; ESR, erythrocyte sedimentation rate; MRI, magnetic resonance imaging; Rec, recommendation; TSH, thyroid-stimulating hormone.



Tap on the dark blue buttons to see the respective recommendations Concern for cognitive YES NO ---- Age ≥ 65 Perform Medicare Annual and/or behavioral Wellness Visit cognitive symptoms? assessment for case finding Promote brain-healthy Initiate evaluation for possible cognitive impairment or behaviors*** dementia (Cores 1-4) Consider referral for brain aging research Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3 Promote brain-healthy Obtain history of present illness from patient & care NO behaviors*** partner (Core 2) Rec 4 Consider referral for brain Perform structured multi-domain systems review aging research (Core 3) Rec 4 Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4) Communicate findings and diagnostic formulation; Perform focused examination, including mental status exam Educate, counsel, and develop using validated instrument (Core 5) care plan with patient and care partner (Core 7) Recs 10-11 Promote brain-healthy Integrate data & findings from history, systems review, & exam behaviors*** for diagnostic formulation (Core 6) Make plan for monitoring of symptoms High confidence that May reassess in 12 months YES patient is cognitively or sooner if new or unimpaired? worsening symptoms NO Consider referral for brain **RECOMMENDATION 4:** During history taking for a patient being evaluated for cognitive or

behavioral symptoms, the clinician should obtain reliable information involving an informant regarding changes in (1) cognition, (2) activities of daily living (ADL and instrumental ADL [IADL]), (3) mood and other neuropsychiatric symptoms, and (4) sensory and motor function. Use o structured instruments for assessing each of these domains is helpful.



monitoring and care plan (Core 7) **Recs 10-11**

Provider action Intermediate step Decision point 🔲 Consultation/referral 🔲 Tests *Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia.

Abbreviations: B12, vitamin B12; CBC, complete blood count; CRP, C-reactive protein; CT, computed tomography; ESR, erythrocyte sedimentation rate; MRI, magnetic resonance imaging; Rec, recommendation; TSH, thyroid-stimulating hormone.

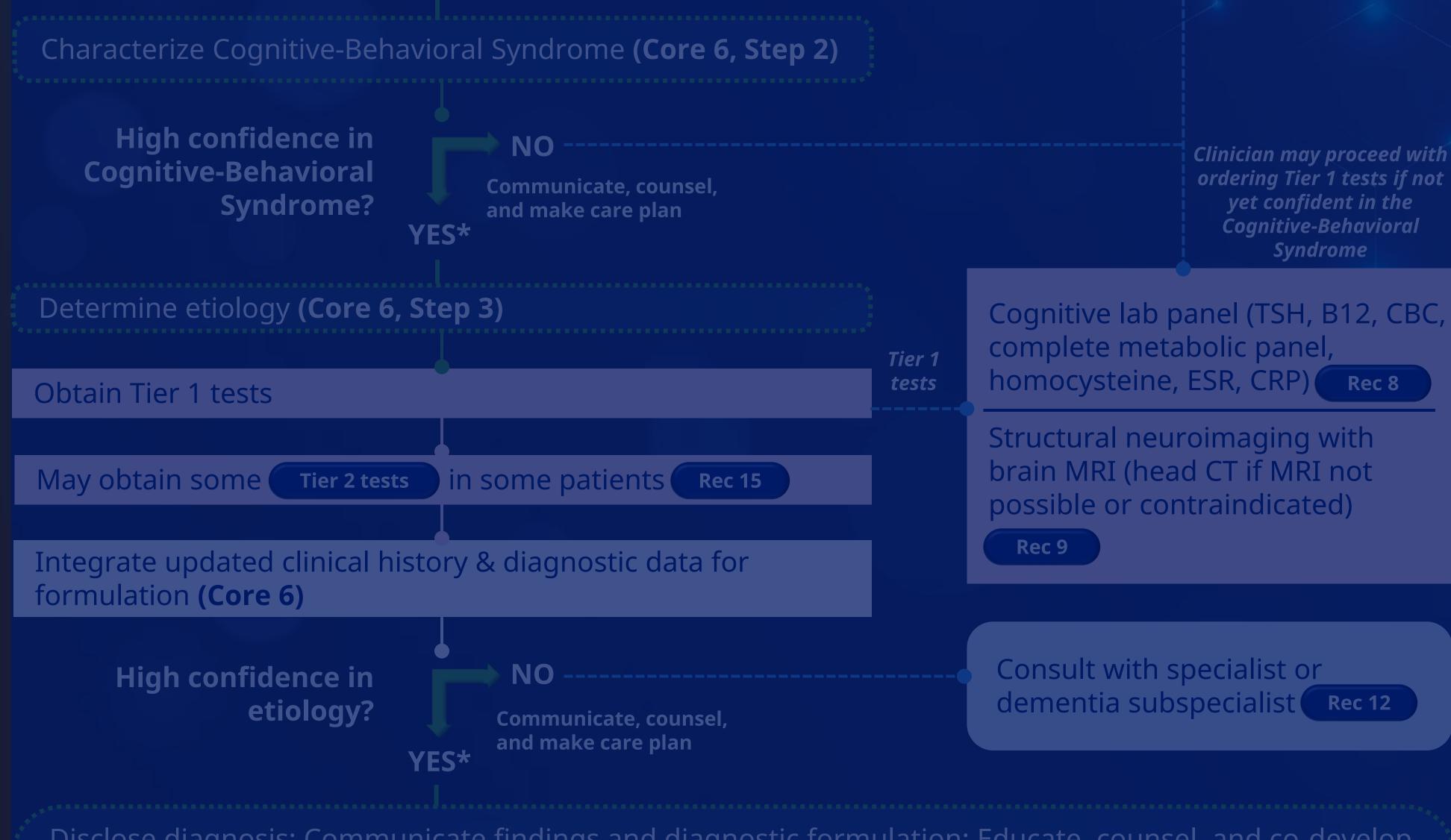
References: Atri A et al. Alzheimer's Dement. 2024;1-32; Dickerson BC et al. Alzheimer's Dement. 2024;1-29.





^{**}Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions). ***Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

Tap on the dark blue buttons to see the respective recommendations Concern for cognitive YES NO ---- Age ≥ 65 Perform Medicare Annual and/or behavioral Wellness Visit cognitive symptoms? assessment for case finding Promote brain-healthy Initiate evaluation for possible cognitive impairment or behaviors*** dementia (Cores 1-4) Consider referral for brain aging research Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3 Promote brain-healthy Obtain history of present illness from patient & care NO behaviors*** partner (Core 2) Rec 4 Consider referral for brain Perform structured multi-domain systems review aging research (Core 3) Rec 4 Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4) Communicate findings and diagnostic formulation; Perform focused examination, including mental status exam Educate, counsel, and develop using validated instrument (Core 5) care plan with patient and care partner (Core 7) Recs 10-11 Promote brain-healthy Integrate data & findings from history, systems review, & exam behaviors*** for diagnostic formulation (Core 6) Make plan for monitoring of symptoms High confidence that May reassess in 12 months YES patient is cognitively or sooner if new or unimpaired? worsening symptoms NO Consider referral for brain **RECOMMENDATION 5:** During history taking for a patient being evaluated for cognitive or behavioral symptoms, the clinician should obtain reliable information about individualized risk factors for cognitive decline. Characterize Cognitive-Behavioral Syndrome (Core 6, Step 2)



Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, counsel, and co-develop monitoring and care plan (Core 7) **Recs 10-11**

*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia. **Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).

Decision point 🔲 Consultation/referral 🔲 Tests

Abbreviations: B12, vitamin B12; CBC, complete blood count; CRP, C-reactive protein; CT, computed tomography; ESR, erythrocyte sedimentation rate; MRI, magnetic resonance imaging; Rec, recommendation; TSH, thyroid-stimulating hormone.

References: Atri A et al. Alzheimer's Dement. 2024;1-32; Dickerson BC et al. Alzheimer's Dement. 2024;1-29.

Provider action Intermediate step

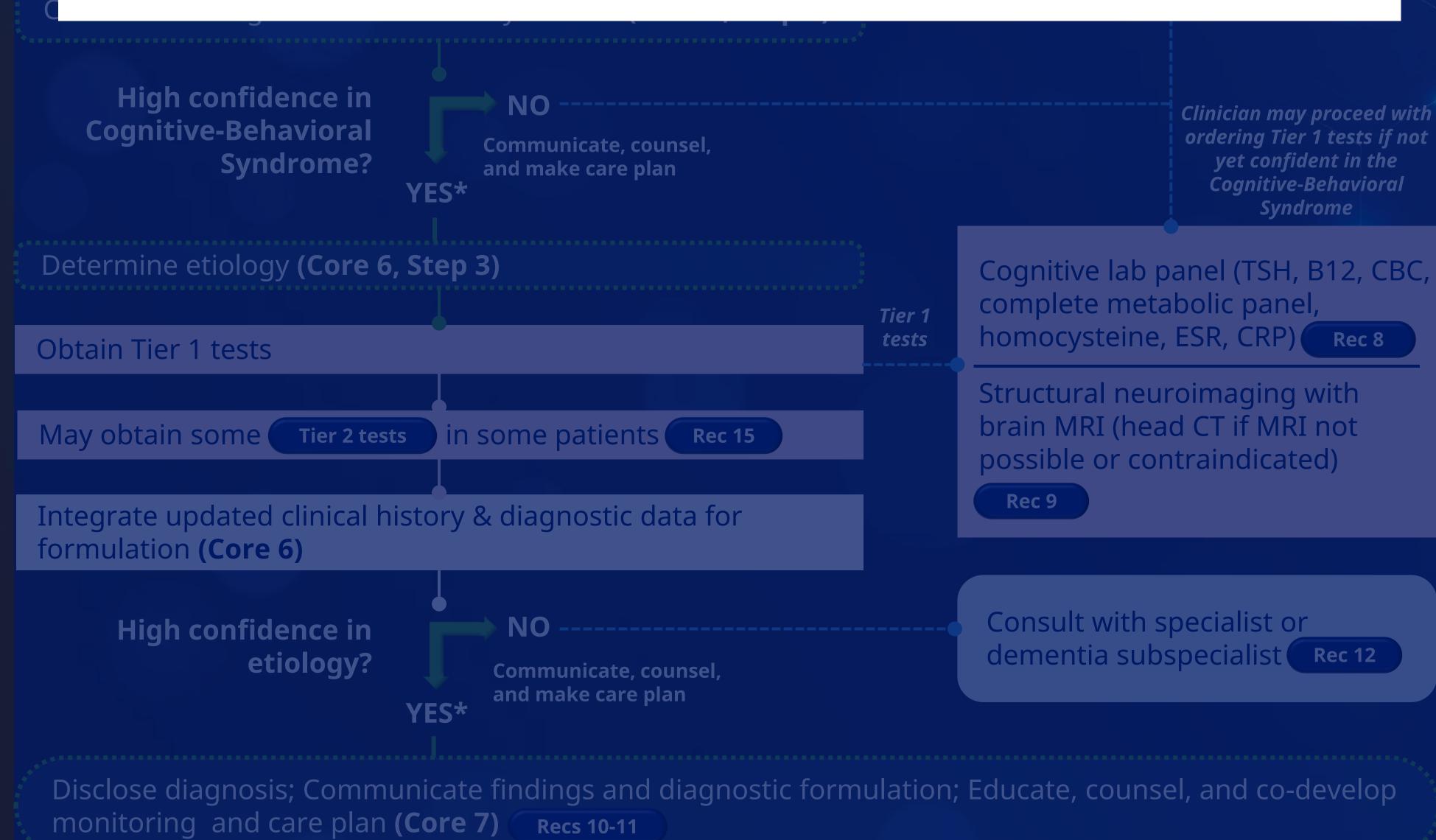




^{***}Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

Tap on the dark blue buttons to see the respective recommendations Concern for cognitive YES NO ---- Age ≥ 65 Perform Medicare Annual and/or behavioral Wellness Visit cognitive symptoms? assessment for case finding Promote brain-healthy Initiate evaluation for possible cognitive impairment or behaviors*** dementia (Cores 1-4) Consider referral for brain aging research Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3 Promote brain-healthy Obtain history of present illness from patient & care NO behaviors*** partner (Core 2) Rec 4 Consider referral for brain Perform structured multi-domain systems review aging research (Core 3) Rec 4 Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4) Communicate findings and diagnostic formulation; Perform focused examination, including mental status exam Educate, counsel, and develop using validated instrument (Core 5) care plan with patient and care partner (Core 7) Recs 10-11 Promote brain-healthy Integrate data & findings from history, systems review, & exam behaviors*** for diagnostic formulation (Core 6) Make plan for monitorin symptoms High confidence that May reassess in 12 months YES patient is cognitively **RECOMMENDATION 6:** In a patient being evaluated for cognitive or behavioral symptoms, the primary clinician should per-form an examination of cognition, mood, and behavior (mental status exam), and a dementia-focused neurologic examination, aiming to diagnose the cognitive-

- behavioral syndrome.
- **RECOMMENDATION 7:** In a patient being evaluated for cognitive or behavioral symptoms, clinicians should use validated tools to assess cognition.



*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia. **Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).

Decision point 🔲 Consultation/referral 🔲 Tests

***Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

Abbreviations: B12, vitamin B12; CBC, complete blood count; CRP, C-reactive protein; CT, computed tomography; ESR, erythrocyte sedimentation rate; MRI, magnetic resonance imaging; Rec, recommendation; TSH, thyroid-stimulating hormone.

References: Atri A et al. Alzheimer's Dement. 2024;1-32; Dickerson BC et al. Alzheimer's Dement. 2024;1-29.

Provider action Intermediate step





Tap on the dark blue buttons to see the respective recommendations

Concern for cognitive and/or behavioral symptoms?

NO ---- Age ≥ 65

YES

NO

 Perform Medicare Annual Wellness Visit cognitive assessment for case finding

Promote brain-healthy behaviors***

 Consider referral for brain aging research

Initiate evaluation for possible cognitive impairment or dementia (Cores 1-4)

- Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3
- Obtain history of present illness from patient & care partner (Core 2) Rec 4
- Perform structured multi-domain systems review (Core 3) Rec 4
- Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4)

Perform focused examination, including mental status exam using validated instrument (Core 5)

Integrate data & findings from history, systems review, & exam for diagnostic formulation (Core 6)

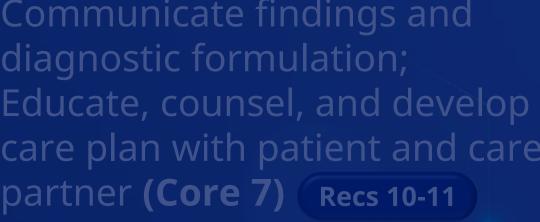
 Promote brain-healthy behaviors***

Consider referral for brain aging research

Communicate findings and diagnostic formulation; Educate, counsel, and develop care plan with patient and care partner (Core 7) Recs 10-11

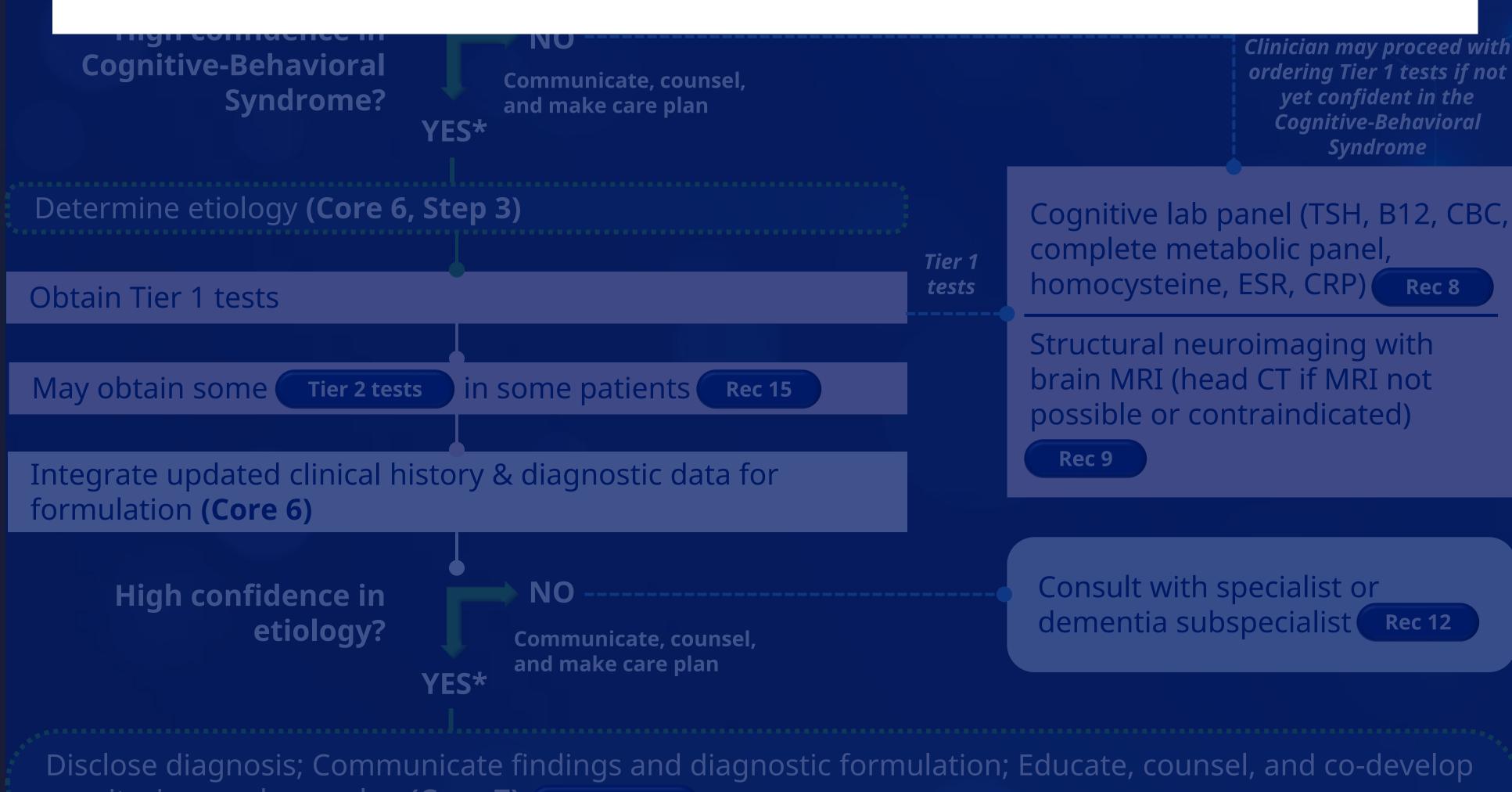
 Promote brain-healthy behaviors***

Make plan for monitoring of





- **RECOMMENDATION 10:** Throughout the evaluation process, the clinician should establish a dialogue with the patient and care partner about the understanding (knowledge of facts) and appreciation (recognition that facts apply to the person) of the presence and severity of the cognitive-behavioral syndrome. The patient and care partner's understanding and appreciation of the syndrome guide education, diagnostic disclosure, and methods for communicating and documenting diagnostic findings.
- **RECOMMENDATION 11:** In communicating diagnostic findings the clinician should honestly and compassionately inform both the patient and their care partner of the following information using a structured process: the name, characteristics, and severity of the cognitive-behavioral syndrome; the disease(s) likely causing the cognitive-behavioral syndrome; the stage of the disease; what can be reasonably expected in the future; treatment options and expectations; potential safety concerns; and medical, psychosocial and community resources for education, care planning and coordination, and support services.



monitoring and care plan (Core 7) **Recs 10-11**

*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia.

Decision point 🔲 Consultation/referral 🔲 Tests

Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions). *Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

Abbreviations: B12, vitamin B12; CBC, complete blood count; CRP, C-reactive protein; CT, computed tomography; ESR, erythrocyte sedimentation rate; MRI, magnetic resonance imaging; Rec, recommendation; TSH, thyroid-stimulating hormone.

References: Atri A et al. Alzheimer's Dement. 2024;1-32; Dickerson BC et al. Alzheimer's Dement. 2024;1-29.

Provider action Intermediate step





Tap on the dark blue buttons to see the respective recommendations

Concern for cognitive and/or behavioral symptoms?

NO ---- Age ≥ 65

YES

NO

 Perform Medicare Annual Wellness Visit cognitive assessment for case finding

Promote brain-healthy behaviors***

 Consider referral for brain aging research

Initiate evaluation for possible cognitive impairment or dementia (Cores 1-4)

- Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3
- Obtain history of present illness from patient & care partner (Core 2) Rec 4
- Perform structured multi-domain systems review (Core 3) Rec 4
- Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4)

Perform focused examination, including mental status exam using validated instrument (Core 5)

Integrate data & findings from history, systems review, & exam for diagnostic formulation (Core 6)

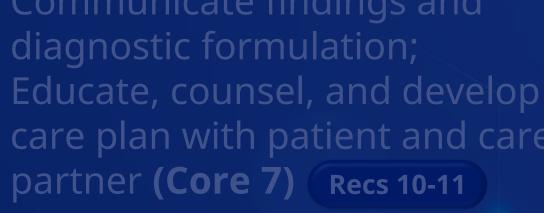
 Promote brain-healthy behaviors***

Consider referral for brain aging research

Communicate findings and Educate, counsel, and develop care plan with patient and care partner (Core 7) Recs 10-11

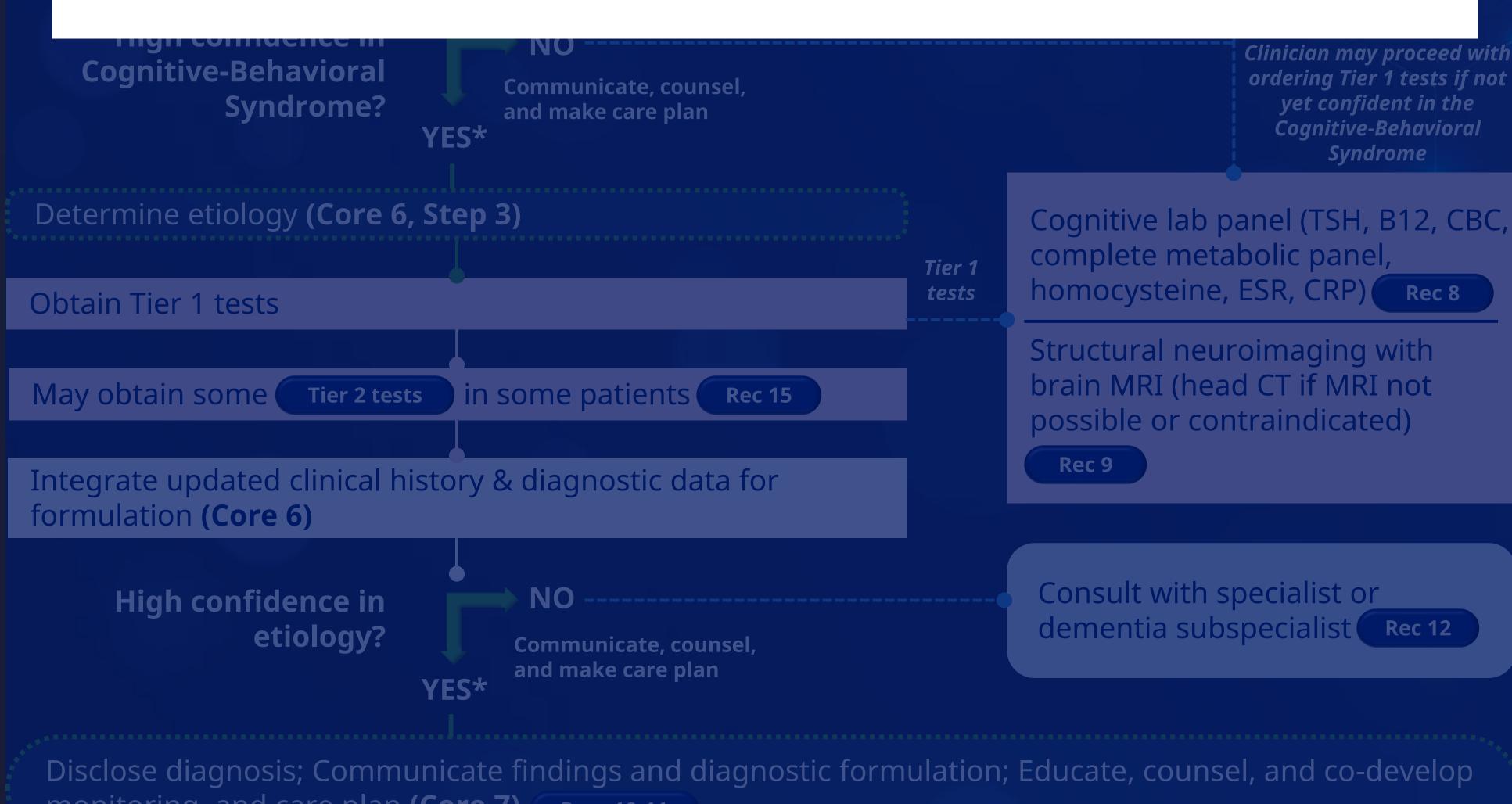
 Promote brain-healthy behaviors***

Make plan for monitoring of





- **RECOMMENDATION 12:** A patient with atypical findings or in whom there is uncertainty about how to interpret the evaluation, or that is suspected of having an early-onset or rapidly progressive cognitive-behavioral condition, should be further evaluated expeditiously, usually including referral to a specialist.
- **RECOMMENDATION 14:** Neuropsychological evaluation is recommended when office-based cognitive assessment is not sufficiently informative. Specific examples are when a patient or caregiver report concerning symptoms in daily life, but the patient performs within normal limits on a cognitive examination, or when the examination of cognitive-behavioral function is not normal but there is uncertainty about interpretation of results due to a complex clinical profile or confounding demo-graphic characteristics. The neuropsychological evaluation, at a minimum, should include normed neuropsychological testing of the domains of learning and memory (in particular delayed free and cued recall/recognition); attention, executive function, visuospatial function, and language.



monitoring and care plan (Core 7) **Recs 10-11** Provider action Intermediate step Decision point 🔲 Consultation/referral 🔲 Tests

*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia. **Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).

***Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

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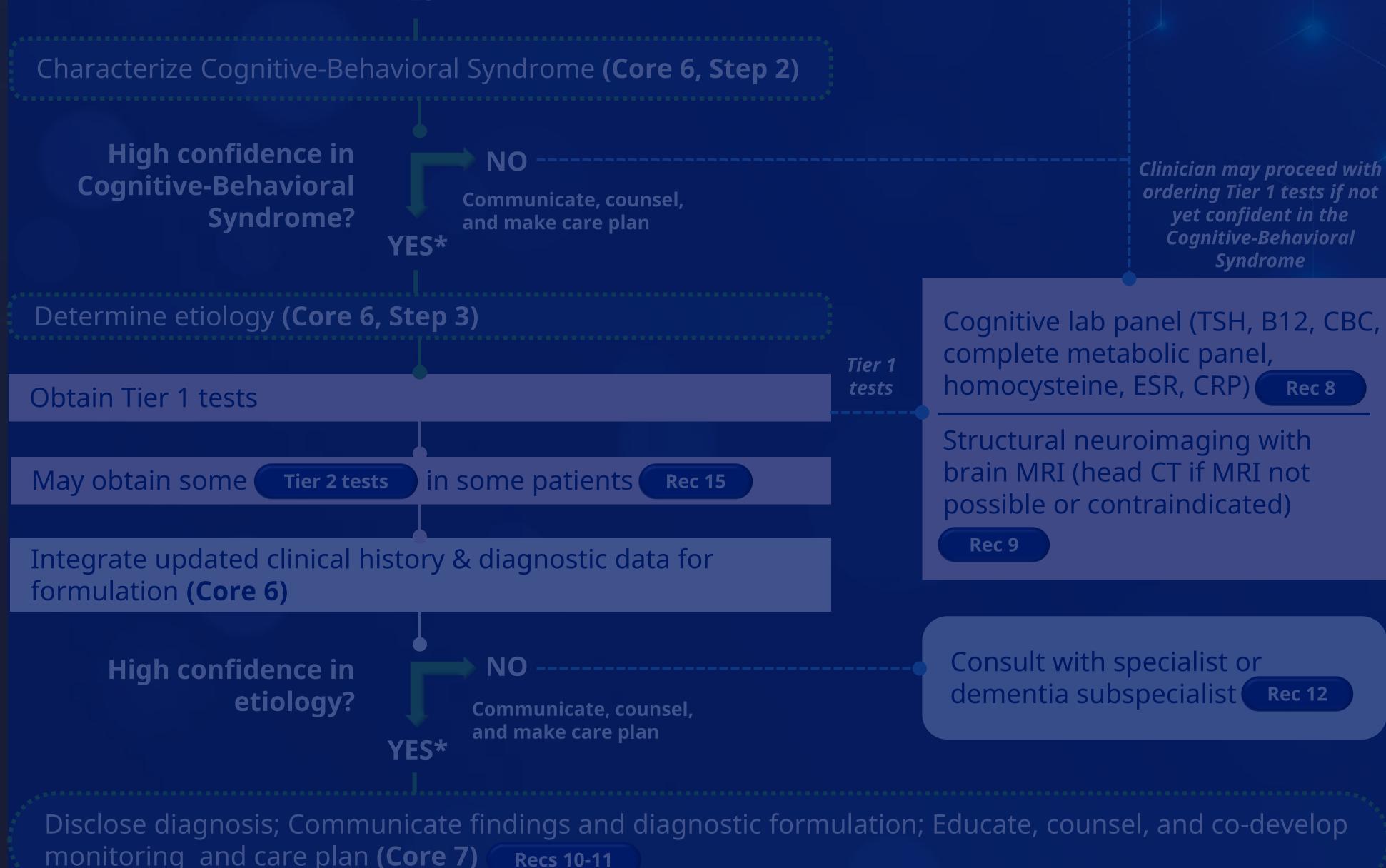
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Tap on the dark blue buttons to see the respective recommendations Concern for cognitive YES NO ---- Age ≥ 65 Perform Medicare Annual and/or behavioral Wellness Visit cognitive symptoms? assessment for case finding Promote brain-healthy Initiate evaluation for possible cognitive impairment or behaviors*** dementia (Cores 1-4) Consider referral for brain aging research Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3 Promote brain-healthy Obtain history of present illness from patient & care NO behaviors*** partner (Core 2) Rec 4 Consider referral for brain Perform structured multi-domain systems review aging research (Core 3) Rec 4 Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4) Communicate findings and diagnostic formulation; Perform focused examination, including mental status exam Educate, counsel, and develop using validated instrument (Core 5) care plan with patient and care partner (Core 7) Recs 10-11 Promote brain-healthy Integrate data & findings from history, systems review, & exam behaviors*** for diagnostic formulation (Core 6) Make plan for monitoring of symptoms High confidence that May reassess in 12 months YES patient is cognitively or sooner if new or unimpaired? worsening symptoms NO Consider referral for brain **RECOMMENDATION 8:** Laboratory tests in the evaluation of cognitive or behavioral symptoms should be multi-tiered and individualized to the patient's medical risks and profile. Clinicians

should obtain routine Tier 1 laboratory studies in all patients.



monitoring and care plan (Core 7)

*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia. **Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).

Decision point 🔲 Consultation/referral 🔲 Tests

***Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

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Provider action Intermediate step





Tap on the dark blue buttons to see the respective recommendations Concern for cognitive YES NO ---- Age ≥ 65 Perform Medicare Annual and/or behavioral Wellness Visit cognitive symptoms? assessment for case finding Promote brain-healthy Initiate evaluation for possible cognitive impairment or behaviors*** dementia (Cores 1-4) Consider referral for brain aging research Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3 Promote brain-healthy Obtain history of present illness from patient & care NO behaviors*** partner (Core 2) Rec 4 Consider referral for brain Perform structured multi-domain systems review aging research (Core 3) Rec 4 Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4) Communicate findings and diagnostic formulation; Perform focused examination, including mental status exam Educate, counsel, and develop using validated instrument (Core 5) care plan with patient and care partner (Core 7) Recs 10-11 Promote brain-healthy Integrate data & findings from history, systems review, & exam behaviors*** for diagnostic formulation (Core 6) Make plan for monitoring of symptoms High confidence that May reassess in 12 months YES patient is cognitively or sooner if new or unimpaired? worsening symptoms NO Consider referral for brain **RECOMMENDATION 9:** In a patient being evaluated for cognitive-behavioral syndrome, the clinician should obtain structural brain imaging to aid in establishing the cause(s). If magnetic resonance imaging (MRI) is not available or is contraindicated, computed tomography (CT) should be obtained. Characterize Cognitive-Behavioral Syndrome (Core 6, Step 2) High confidence in Clinician may proceed with **Cognitive-Behavioral** ordering Tier 1 tests if not Communicate, counsel, Syndrome? yet confident in the and make care plan Cognitive-Behavioral Syndrome

Determine etiology (Core 6, Step 3) Obtain Tier 1 tests

Cognitive lab panel (TSH, B12, CBC, complete metabolic panel, homocysteine, ESR, CRP) Rec 8

in some patients (May obtain some Tier 2 tests

Structural neuroimaging with brain MRI (head CT if MRI not possible or contraindicated)

Integrate updated clinical history & diagnostic data for formulation (Core 6)

Rec 9

High confidence in etiology?

NO Communicate, counsel, and make care plan

Consult with specialist or dementia subspecialist Rec 12

Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, counsel, and co-develop monitoring and care plan (Core 7) **Recs 10-11**

Provider action Intermediate step

Decision point 🔲 Consultation/referral 🔲 Tests

Tier 1

tests

Recs 1-19

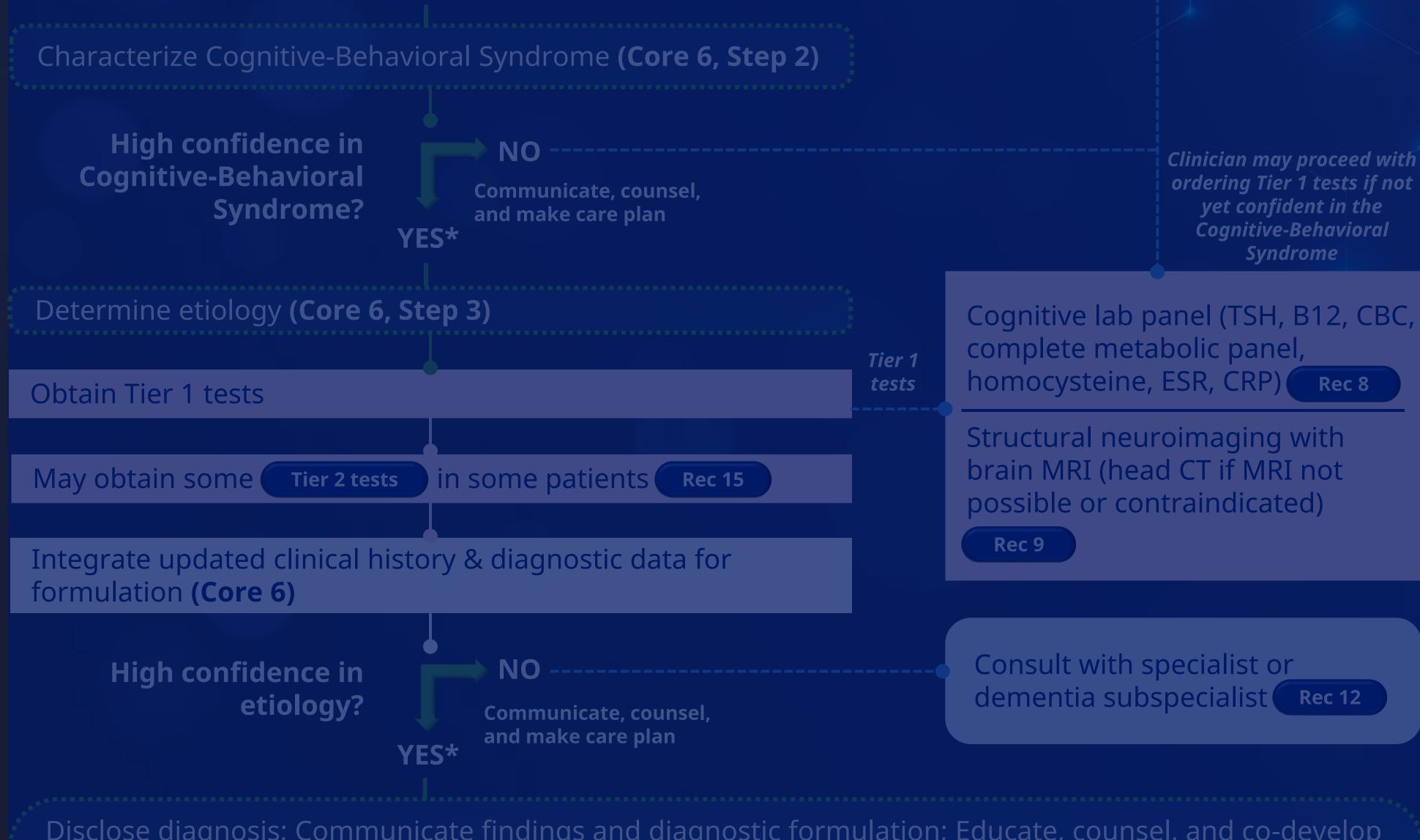
*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia. **Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).

***Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

Abbreviations: B12, vitamin B12; CBC, complete blood count; CRP, C-reactive protein; CT, computed tomography; ESR, erythrocyte sedimentation rate; MRI, magnetic resonance imaging; Rec, recommendation; TSH, thyroid-stimulating hormone.



Tap on the dark blue buttons to see the respective recommendations Concern for cognitive YES NO ---- Age ≥ 65 Perform Medicare Annual and/or behavioral Wellness Visit cognitive symptoms? assessment for case finding Promote brain-healthy Initiate evaluation for possible cognitive impairment or behaviors*** dementia (Cores 1-4) Consider referral for brain aging research Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3 Promote brain-healthy Obtain history of present illness from patient & care NO behaviors*** partner (Core 2) Rec 4 Consider referral for brain Perform structured multi-domain systems review aging research (Core 3) Rec 4 Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4) Communicate findings and diagnostic formulation; Perform focused examination, including mental status exam Educate, counsel, and develop using validated instrument (Core 5) care plan with patient and care partner (Core 7) Recs 10-11 Promote brain-healthy Integrate data & findings from history, systems review, & exam behaviors*** for diagnostic formulation (Core 6) Make plan for monitoring of symptoms High confidence that May reassess in 12 months YES patient is cognitively or sooner if new or unimpaired? worsening symptoms NO Consider referral for brain **RECOMMENDATION 12:** A patient with atypical findings or in whom there is uncertainty about how to interpret the evaluation, or that is suspected of having an early-onset or rapidly progressive cognitive-behavioral condition, should be further evaluated expeditiously, usually including referral to a specialist. Characterize Cognitive-Behavioral Syndrome (Core 6, Step 2)



Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, counsel, and co-develop **Recs 10-11**

monitoring and care plan (Core 7)

*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia. **Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).

Decision point 🔲 Consultation/referral 🔲 Tests

***Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

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References: Atri A et al. Alzheimer's Dement. 2024;1-32; Dickerson BC et al. Alzheimer's Dement. 2024;1-29.

Provider action Intermediate step





Tap on the dark blue buttons to see the respective recommendations Concern for cognitive YES NO ---- Age ≥ 65 Perform Medicare Annual and/or behavioral Wellness Visit cognitive symptoms? assessment for case finding Promote brain-healthy Initiate evaluation for possible cognitive impairment or behaviors*** dementia (Cores 1-4) Consider referral for brain aging research Establish goals & process for evaluation, shared decision-making & disclosure of diagnosis with patient & care partner; iteratively educate and counsel (Core 1) Recs 1,2,3 Promote brain-healthy Obtain history of present illness from patient & care NO behaviors*** partner (Core 2) Rec 4 Consider referral for brain Perform structured multi-domain systems review aging research (Core 3) Rec 4 Evaluate biopsychosocial history/risk factors for cognitive impairment (Core 4) Communicate findings and diagnostic formulation; Perform focused examination, including mental status exam Educate, counsel, and develop using validated instrument (Core 5) care plan with patient and care partner (Core 7) Recs 10-11 Promote brain-healthy Integrate data & findings from history, systems review, & exam behaviors*** for diagnostic formulation (Core 6) Make plan for monitoring of symptoms High confidence that May reassess in 12 months YES patient is cognitively or sooner if new or unimpaired? worsening symptoms NO Consider referral for brain **RECOMMENDATION 15:** When diagnostic uncertainty remains, the clinician can obtain additional (Tier 2–4) laboratory tests guided by the patient's individual medical, neuropsychiatric, and risk profile (Strength of Recommendation A). Characterize Cognitive-Behavioral Syndrome (Core 6, Step 2) High confidence in **Cognitive-Behavioral**

Clinician may proceed with ordering Tier 1 tests if not Communicate, counsel, Syndrome? yet confident in the and make care plan Cognitive-Behavioral Syndrome Determine etiology (Core 6, Step 3) Cognitive lab panel (TSH, B12, CBC, complete metabolic panel, Tier 1 homocysteine, ESR, CRP) Rec 8 tests Obtain Tier 1 tests Structural neuroimaging with brain MRI (head CT if MRI not in some patients (May obtain some Tier 2 tests possible or contraindicated) Rec 9 Integrate updated clinical history & diagnostic data for formulation (Core 6) Consult with specialist or NO High confidence in dementia subspecialist Rec 12 etiology? Communicate, counsel, and make care plan

Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, counsel, and co-develop monitoring and care plan (Core 7) **Recs 10-11**

Provider action Intermediate step Decision point 🔲 Consultation/referral 🔲 Tests *Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia.

Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions). *Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation - obstructive sleep apnea & excessive alcohol use.

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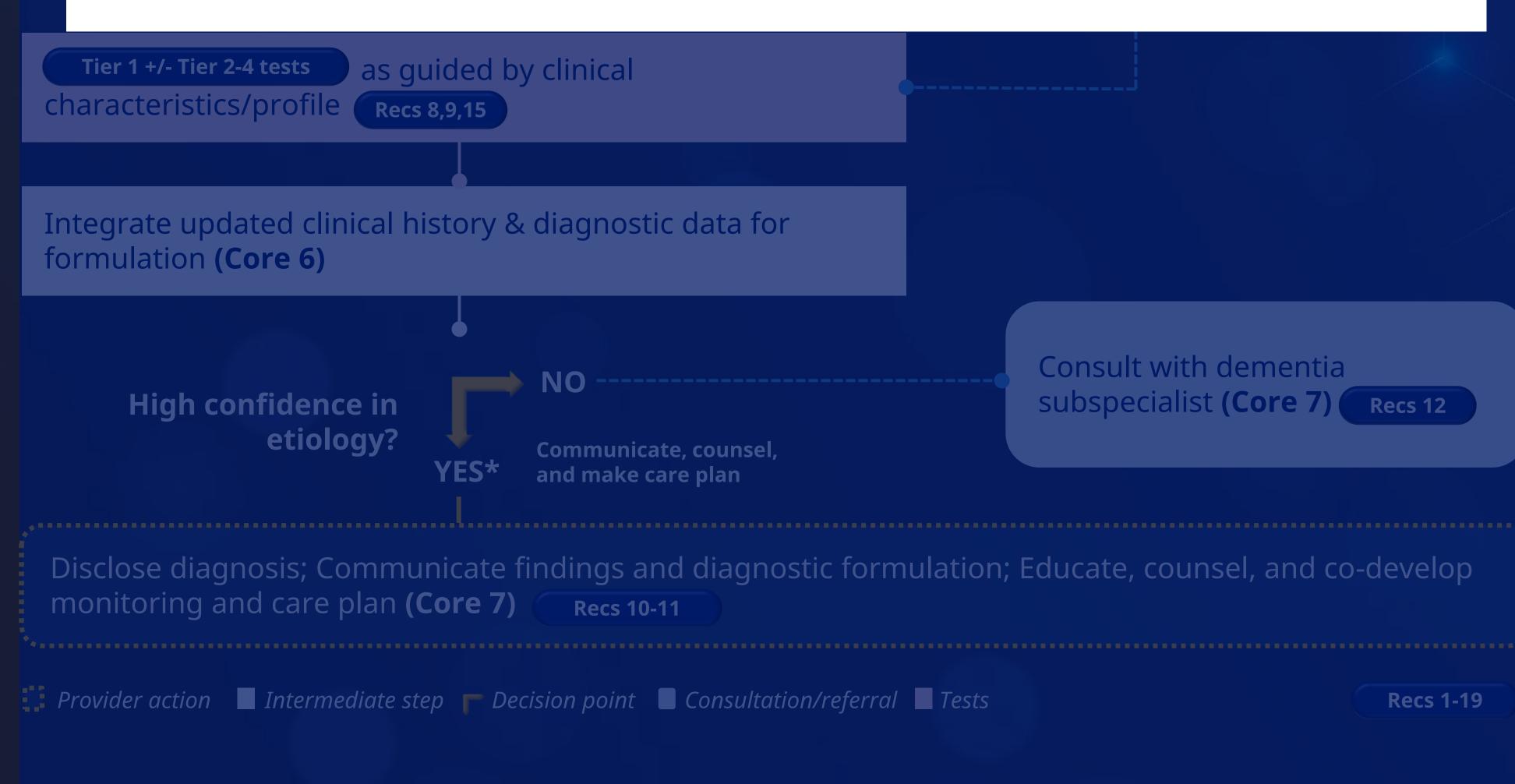




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YES Concern for cognitive Consider case-finding & and/or behavioral establishing baseline **Age ≥ 65** symptoms? performance on standardized YFS* Promote brain-healthy behaviors*** Initiate process of multi-tiered specialist comprehensive Consider referral for brain evaluation for possible cognitive impairment or dementia aging research with patient & care partner History of present illness, structured multi-systems review, biopsychosocial factors, review of previous data & evaluations (e.g. primary care, neuropsychology, specialists) (Cores 1-4) Recs 4-7,13 NO Promote brain-healthy behaviors*** Consider referral for brain aging research Comprehensive exam (Core 5)

- **RECOMMENDATION 4:** During history taking for a patient being evaluated for cognitive or behavioral symptoms, the clinician should obtain reliable information involving an informant regarding changes in (1) cognition, (2) activities of daily living (ADL and instrumental ADL [IADL]), (3) mood and other neuropsychiatric symptoms, and (4) sensory and motor function. Use o structured instruments for assessing each of these domains is helpful.
- **RECOMMENDATION 5:** During history taking for a patient being evaluated for cognitive or behavioral symptoms, the clinician should obtain reliable information about individualized risk factors for cognitive decline.
- **RECOMMENDATION 6:** In a patient being evaluated for cognitive or behavioral symptoms, the primary clinician should per-form an examination of cognition, mood, and behavior (mental status exam), and a dementia-focused neurologic examination, aiming to diagnose the cognitive—behavioral syndrome.
- **RECOMMENDATION 7:** In a patient being evaluated for cognitive or behavioral symptoms, clinicians should use validated tools to assess cognition.
- **RECOMMENDATION 13:** A specialist evaluating a patient with cognitive or behavioral symptoms should perform a comprehensive history and office-based examination of cognitive, neuropsychiatric, and neurologic functions, aiming to diagnose the cognitive-behavioral syndrome and its cause(s).



***Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia.** **Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).





^{***}Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines, untreated blood pressure <120/< 80mmHg, total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation for obstructive sleep apnea & excessive alcohol use.
Abbreviations: Rec, recommendation.

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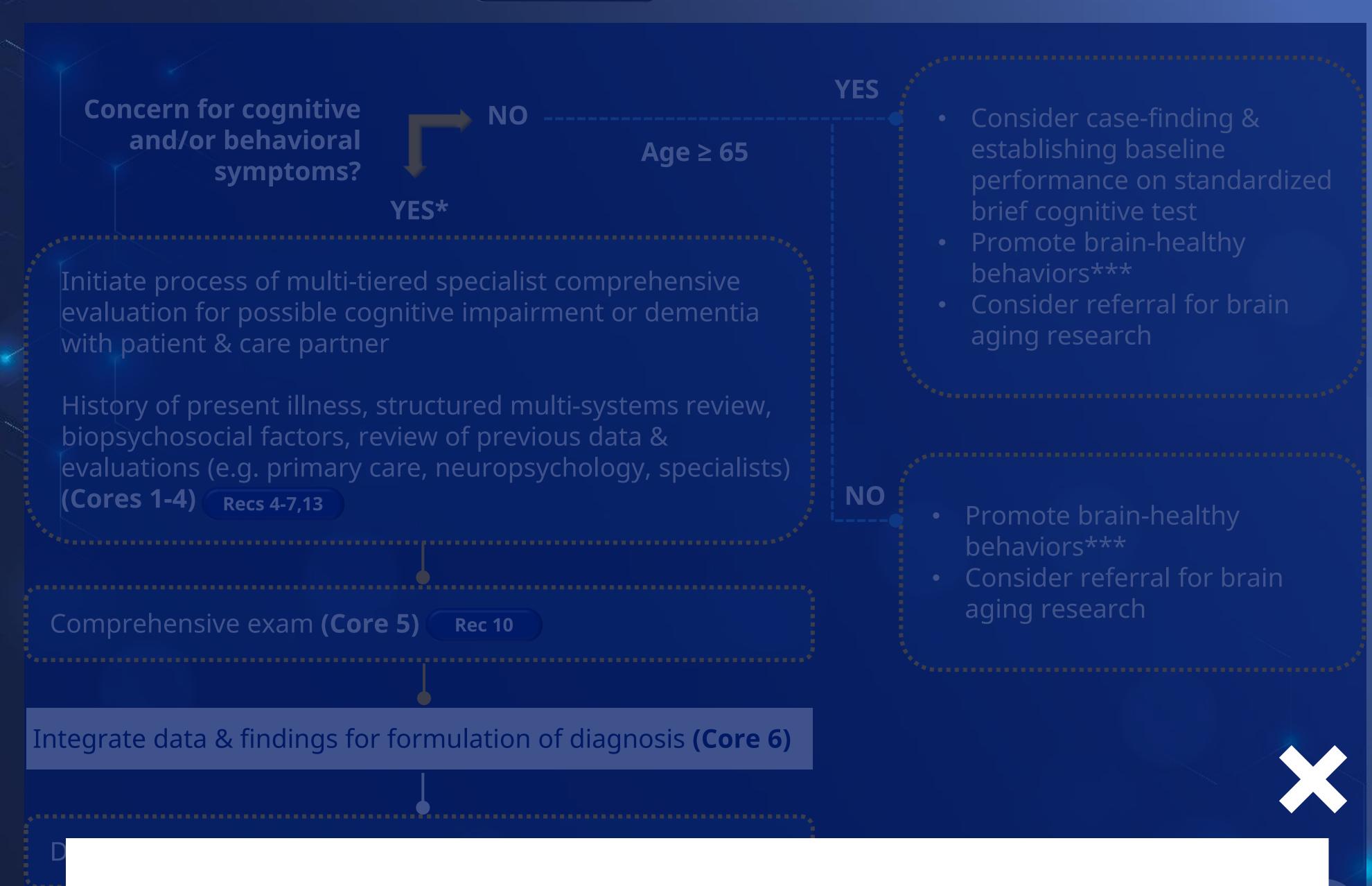
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- **RECOMMENDATION 12:** A patient with atypical findings or in whom there is uncertainty about how to interpret the evaluation, or that is suspected of having an early-onset or rapidly progressive cognitive-behavioral condition, should be further evaluated expeditiously, usually including referral to a specialist.
- **RECOMMENDATION 14:** Neuropsychological evaluation is recommended when office-based cognitive assessment is not sufficiently informative. Specific examples are when a patient or caregiver report concerning symptoms in daily life, but the patient performs within normal limits on a cognitive examination, or when the examination of cognitive-behavioral function is not normal but there is uncertainty about interpretation of results due to a complex clinical profile or confounding demo-graphic characteristics. The neuropsychological evaluation, at a minimum, should include normed neuropsychological testing of the domains of learning and memory (in particular delayed free and cued recall/recognition); attention, executive function, visuospatial function, and language.



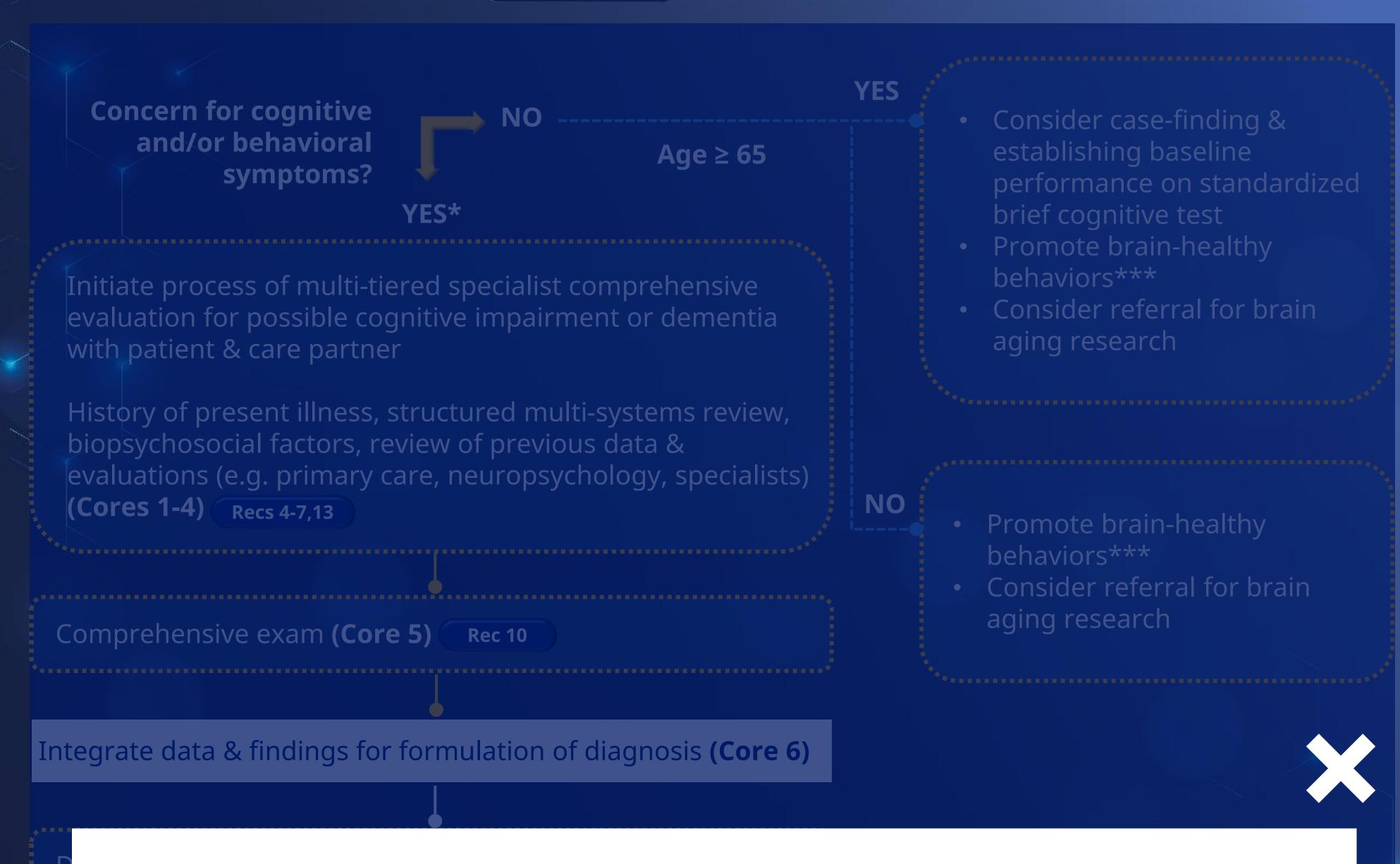
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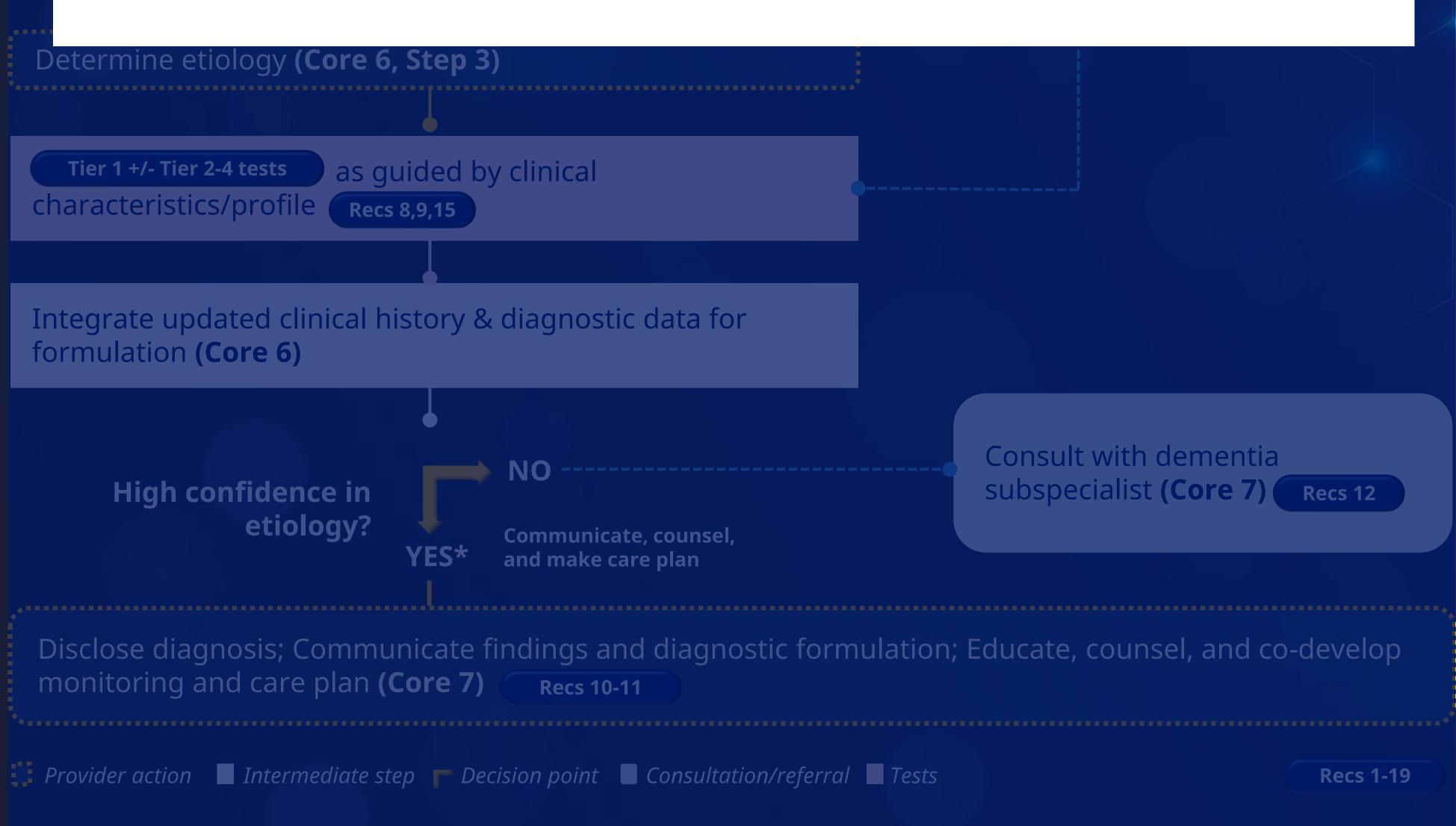


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- **RECOMMENDATION 8:** Laboratory tests in the evaluation of cognitive or behavioral symptoms should be multi-tiered and individualized to the patient's medical risks and profile. Clinicians should obtain routine Tier 1 laboratory studies in all patients.
- **RECOMMENDATION 9:** In a patient being evaluated for cognitive-behavioral syndrome, the clinician should obtain structural brain imaging to aid in establishing the cause(s). If magnetic resonance imaging (MRI) is not available or is contraindicated, computed tomography (CT) should be obtained.
- **RECOMMENDATION 15:** When diagnostic uncertainty remains, the clinician can obtain additional (Tier 2–4) laboratory tests guided by the patient's individual medical, neuropsychiatric, and risk profile.



*Consider triage at any step (Rec 12) if there is suspicion that patient has early onset, atypical, and/or rapidly progressive dementia. **Subjective Cognitive Decline, Mild Cognitive Impairment, dementia, other (delirium, encephalopathy, or other conditions).





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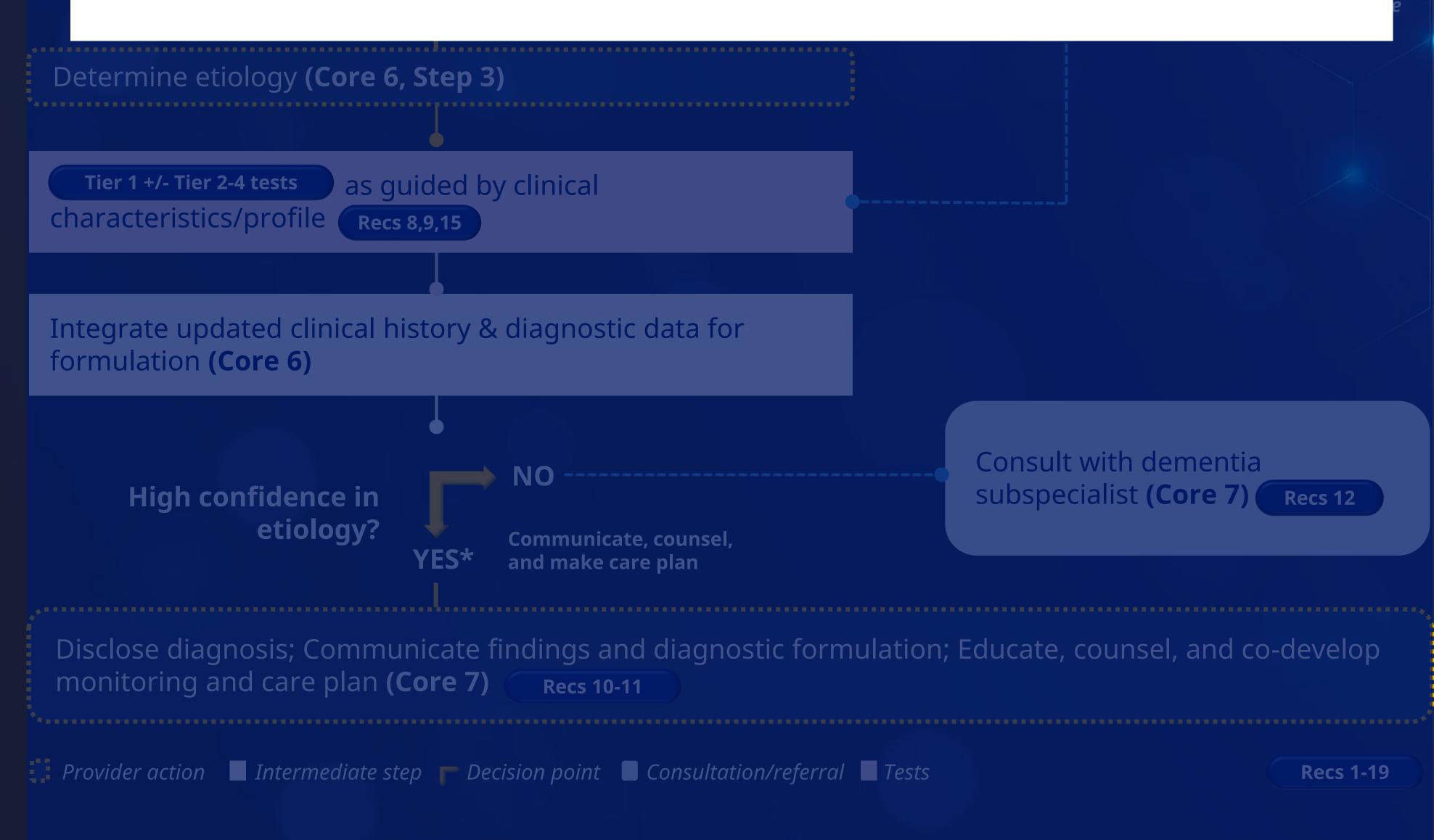


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YES Concern for cognitive Consider case-finding & and/or behavioral establishing baseline **Age ≥ 65** symptoms? performance on standardized YFS* Promote brain-healthy behaviors*** Initiate process of multi-tiered specialist comprehensive Consider referral for brain evaluation for possible cognitive impairment or dementia aging research with patient & care partner History of present illness, structured multi-systems review, biopsychosocial factors, review of previous data & evaluations (e.g. primary care, neuropsychology, specialists) (Cores 1-4) Recs 4-7,13 NO Promote brain-healthy behaviors*** Consider referral for brain aging research Comprehensive exam (Core 5) Integrate data & findings for formulation of diagnosis (Core 6)

- **RECOMMENDATION 10:** Throughout the evaluation process, the clinician should establish a dialogue with the patient and care partner about the understanding (knowledge of facts) and appreciation (recognition that facts apply to the person) of the presence and severity of the cognitive-behavioral syndrome. The patient and care partner's understanding and appreciation of the syndrome guide education, diagnostic disclosure, and methods for communicating and documenting diagnostic findings.
- **RECOMMENDATION 11:** In communicating diagnostic findings the clinician should honestly and compassionately inform both the patient and their care partner of the following information using a structured process: the name, characteristics, and severity of the cognitive-behavioral syndrome; the disease(s) likely causing the cognitive-behavioral syndrome; the stage of the disease; what can be reasonably expected in the future; treatment options and expectations; potential safety concerns; and medical, psychosocial and community resources for education, care planning and coordination, and support services.

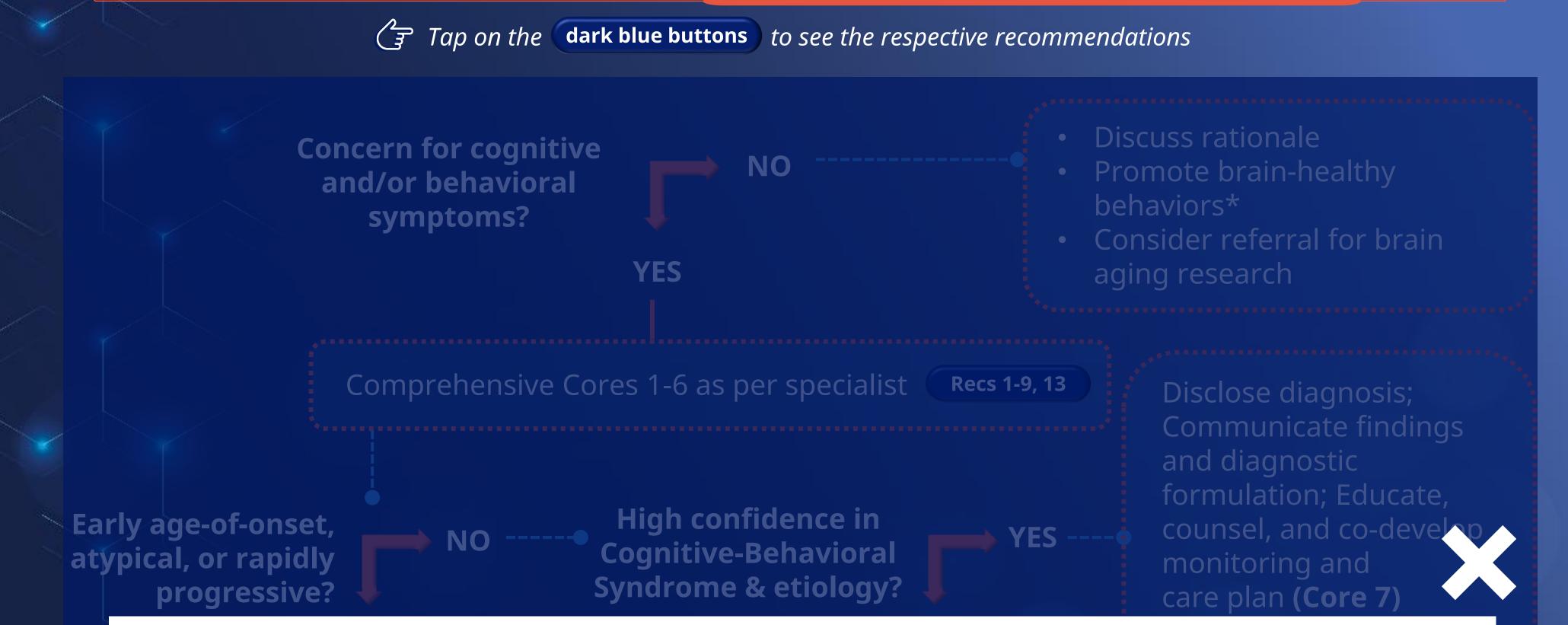


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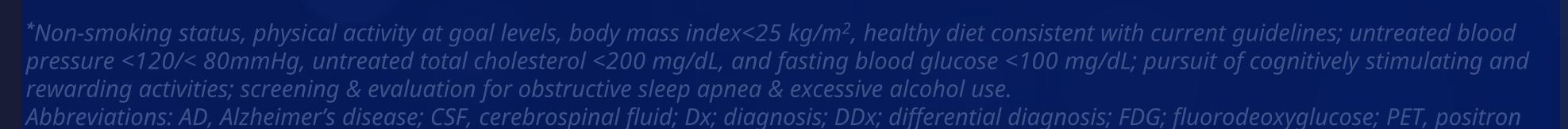
- **RECOMMENDATION 1:** For patients who self-report or whose care partner or clinician reports cognitive, behavioral, or functional changes, the clinician should initiate a multitiered evaluation focused on the problem.
- **RECOMMENDATION 2:** The clinician should use patient-centered communication to develop a partnership with the patient or with the patient and a care partner to (1) establish shared goals for the evaluation process and (2) assess capacity (under-standing and appreciation) to engage in the goal-setting process for the evaluation.
- **RECOMMENDATION 3:** The evaluation process should use tiers of assessments and tests based on individual presentation, risk factors, and profile to establish a diagnostic formulation, including (1) the overall level of impairment, (2) the cognitive-behavioral syndrome, and (3) the likely cause(s) and contributing factors.
- **RECOMMENDATION 4:** During history taking for a patient being evaluated for cognitive or behavioral symptoms, the clinician should obtain reliable information involving an informant regarding changes in (1) cognition, (2) activities of daily living (ADL and instrumental ADL [IADL]), (3) mood and other neuropsychiatric symptoms, and (4) sensory and motor function. Use o structured instruments for assessing each of these domains is helpful.
- RECOMMENDATION 5: During history taking for a patient being evaluated for cognitive or behavioral symptoms, the clinician should obtain reliable information about individualized risk factors for cognitive decline.
- **RECOMMENDATION 6:** In a patient being evaluated for cognitive or behavioral symptoms, the primary clinician should per-form an examination of cognition, mood, and behavior (mental status exam), and a dementia-focused neurologic examination, aiming to diagnose the cognitivebehavioral syndrome.
- **RECOMMENDATION 7:** In a patient being evaluated for cognitive or behavioral symptoms, clinicians should use validated tools to assess cognition.
- **RECOMMENDATION 8:** Laboratory tests in the evaluation of cognitive or behavioral symptoms should be multi-tiered and individualized to the patient's medical risks and profile. Clinicians should obtain routine Tier 1 laboratory studies in all patients.
- **RECOMMENDATION 9:** In a patient being evaluated for cognitive-behavioral syndrome, the clinician should obtain structural brain imaging to aid in establishing the cause(s). If magnetic resonance imaging (MRI) is not available or is contraindicated, computed tomography (CT) should be obtained.
- **RECOMMENDATION 13:** A specialist evaluating a patient with cognitive or behavioral symptoms should perform a comprehensive history and office-based examination of cognitive, neuropsychiatric, and neurologic functions, aiming to diagnose the cognitive-behavioral syndrome and its cause(s).

referral to another dementia subspecialist for opinion) (Core 7) Recs 10, 11



Provider action 📕 Intermediate step 🥟 Decision point 📘 Consultation/referral 📕 Tests

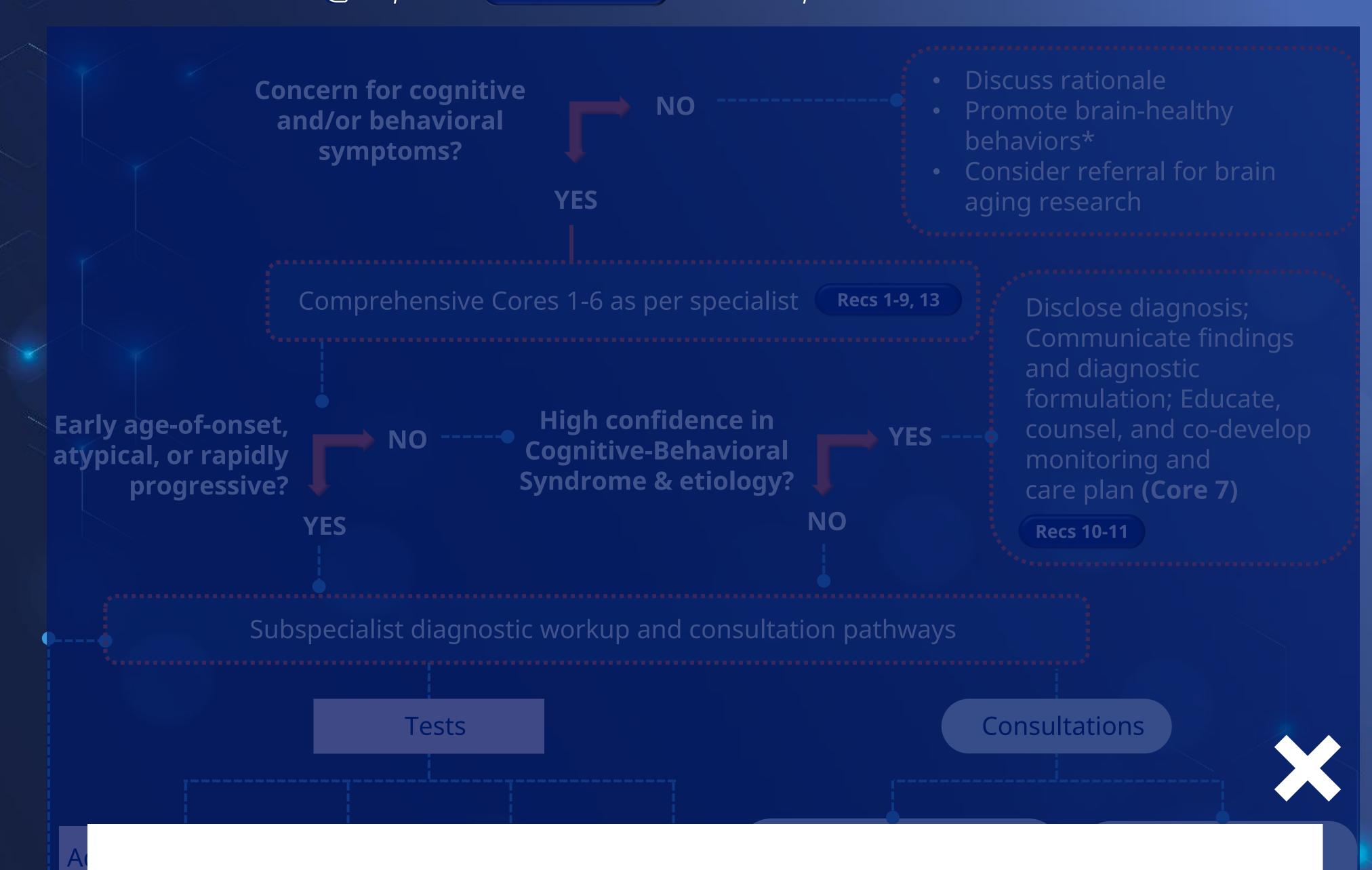
Recs 1-19



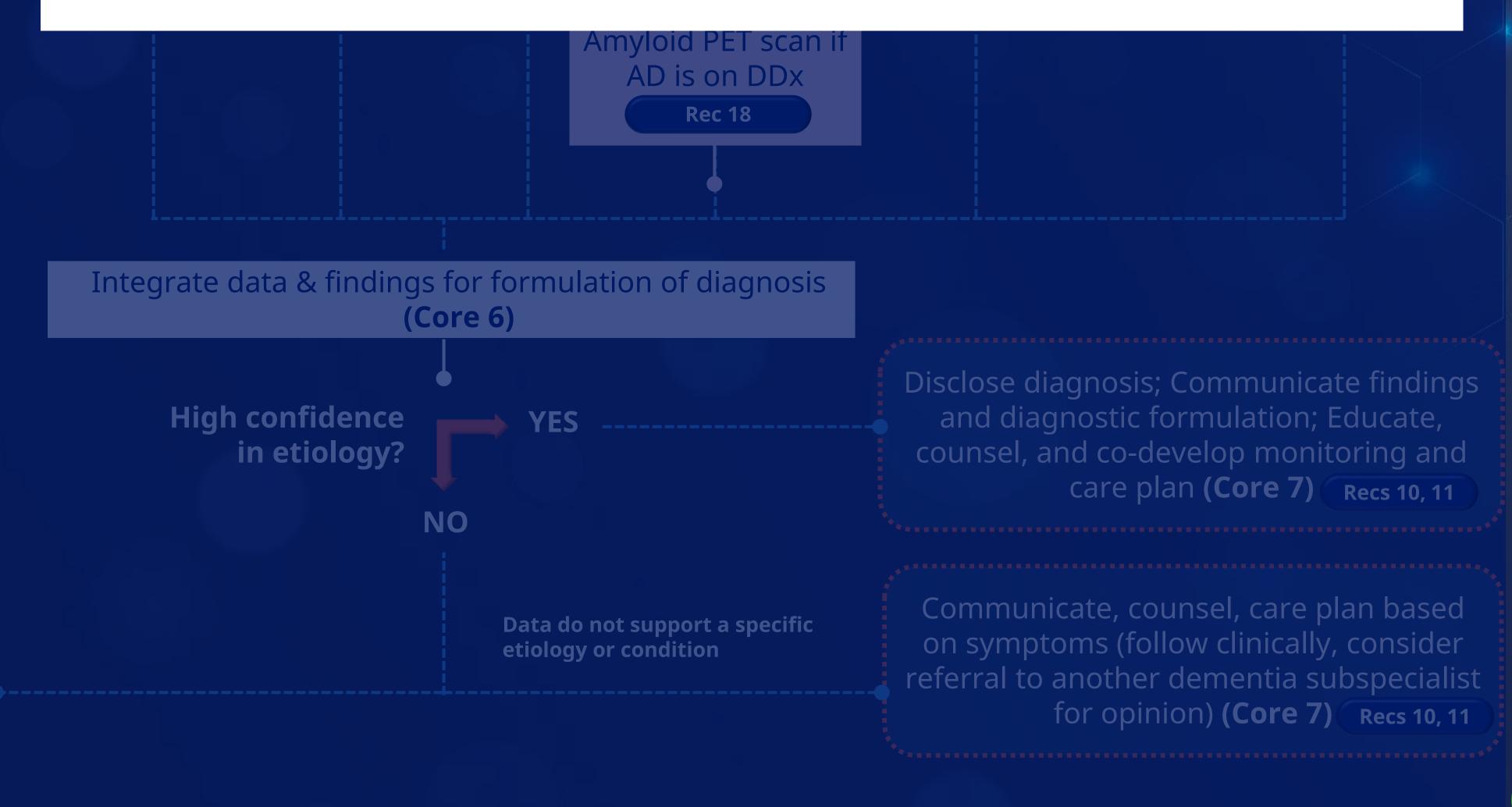
emission tomography; Rec, recommendation. References: Atri A et al. Alzheimer's Dement. 2024;1-32; Dickerson BC et al. Alzheimer's Dement. 2024;1-29.



ি Tap on the dark blue buttons to see the respective recommendations



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- **RECOMMENDATION 11:** In communicating diagnostic findings the clinician should honestly and compassionately inform both the patient and their care partner of the following information using a structured process: the name, characteristics, and severity of the cognitive-behavioral syndrome; the disease(s) likely causing the cognitive-behavioral syndrome; the stage of the disease; what can be reasonably expected in the future; treatment options and expectations; potential safety concerns; and medical, psychosocial and community resources for education, care planning and coordination, and support services.



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Abbreviations: AD, Alzheimer's disease; CSF, cerebrospinal fluid; Dx; diagnosis; DDx; differential diagnosis; FDG; fluorodeoxyglucose; PET, positron emission tomography; Rec, recommendation.

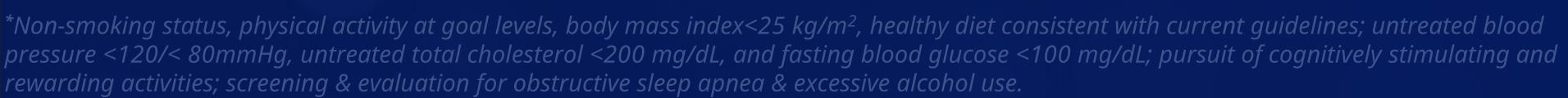
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Provider action I Intermediate step Decision point Consultation/referral Tests









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Provider action I Intermediate step Decision point Consultation/referral Tests



Tap on the dark blue buttons to see the respective recommendations Discuss rationale **Concern for cognitive** NO Promote brain-healthy and/or behavioral behaviors* symptoms? Consider referral for brain YES aging research Comprehensive Cores 1-6 as per specialist Recs 1-9, 13 Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, High confidence in Early age-of-onset, counsel, and co-develop **Cognitive-Behavioral** atypical, or rapidly monitoring and Syndrome & etiology? progressive? care plan (Core 7) NO **YES Recs 10-11** Subspecialist diagnostic workup and consultation pathways Consultations Tests Add any (Tier 1-4 tests) If possible If additional confidence autosomal **Rec 15** in Cognitive Behavioral dominant fam Syndrome (Syndromic pattern, consider **RECOMMENDATION 15:** When diagnostic uncertainty remains, the clinician can obtain additional (Tier 2–4) laboratory tests guided by the patient's individual medical, neuropsychiatric, and risk profile. Rec 17 Consider Amyloid PET scan if AD is on DDx Rec 18 Integrate data & findings for formulation of diagnosis (Core 6) Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, High confidence counsel, and co-develop monitoring and in etiology? care plan (Core 7) Recs 10, 11 NO Communicate, counsel, care plan based Data do not support a specific on symptoms (follow clinically, consider etiology or condition referral to another dementia subspecialist for opinion) (Core 7) Recs 10, 11 Provider action 📕 Intermediate step 🥟 Decision point 🔲 Consultation/referral 📕 Tests **Recs 1-19**

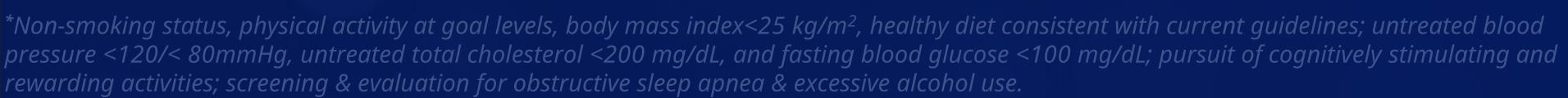
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Provider action I Intermediate step Decision point Consultation/referral Tests





ি Tap on the dark blue buttons to see the respective recommendations Discuss rationale **Concern for cognitive** NO Promote brain-healthy and/or behavioral behaviors* symptoms? Consider referral for brain YES aging research Comprehensive Cores 1-6 as per specialist Recs 1-9, 13 Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, High confidence in Early age-of-onset, counsel, and co-develop **Cognitive-Behavioral** atypical, or rapidly monitoring and Syndrome & etiology? progressive? care plan (Core 7) NO **YES Recs 10-11** Subspecialist diagnostic workup and consultation pathways Consultations Tests Add any (Tier 1-4 tests) If possible If additional confidence autosomal **Rec 15** in Cognitive Behavioral dominant fam Syndrome (Syndromic pattern, consider **RECOMMENDATION 18:** If diagnostic uncertainty still exists after obtaining structural imaging with or without FDG PET and/or CSF Aβ42 and tau/p-tau, the dementia specialist can obtain an amyloid PET scan according to the appropriate use criteria to evaluate for cerebral amyloid pathology. **Rec 17** Consider Amyloid PET scan if AD is on DDx Rec 18 Integrate data & findings for formulation of diagnosis (Core 6) Disclose diagnosis; Communicate findings and diagnostic formulation; Educate, High confidence counsel, and co-develop monitoring and in etiology? care plan (Core 7) Recs 10, 11 NO Communicate, counsel, care plan based Data do not support a specific on symptoms (follow clinically, consider etiology or condition referral to another dementia subspecialist for opinion) (Core 7) Recs 10, 11

*Non-smoking status, physical activity at goal levels, body mass index<25 kg/m², healthy diet consistent with current guidelines; untreated blood pressure <120/< 80mmHg, untreated total cholesterol <200 mg/dL, and fasting blood glucose <100 mg/dL; pursuit of cognitively stimulating and rewarding activities; screening & evaluation for obstructive sleep apnea & excessive alcohol use.

Abbreviations: AD, Alzheimer's disease; CSF, cerebrospinal fluid; Dx; diagnosis; DDx; differential diagnosis; FDG; fluorodeoxyglucose; PET, positron emission tomography; Rec, recommendation.

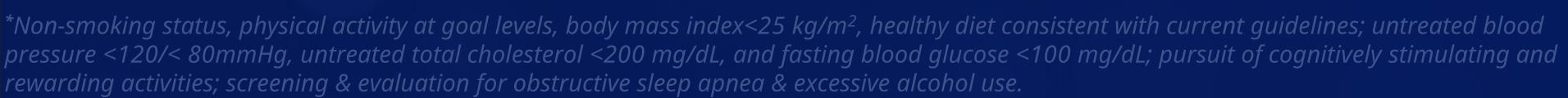
References: Atri A et al. Alzheimer's Dement. 2024;1-32; Dickerson BC et al. Alzheimer's Dement. 2024;1-29.

Provider action I Intermediate step Decision point Consultation/referral Tests





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