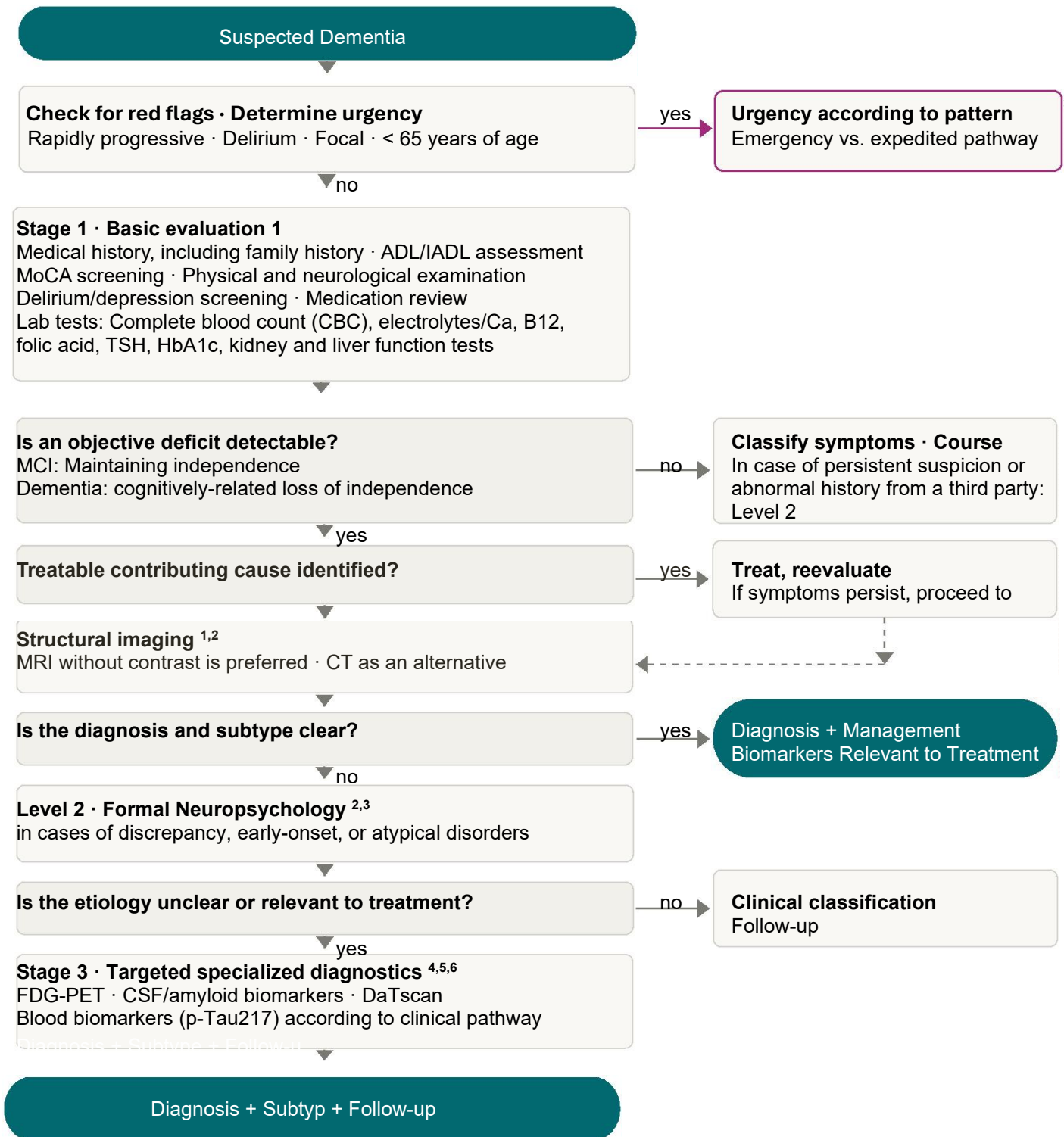


Diagnostic Algorithm for Suspected Dementia

Step-by-Step Evaluation in Clinical Practice · As of October 2026 · Created by ANTROPIC Claude Sonnet 5.5



Sources

1. NICE NG97. Dementia: assessment, management and support — <https://www.nice.org.uk/guidance/ng97/chapter/recommendations>
2. Alzheimer's Association Clinical Practice Guideline (DETECT-ADRD) — <https://pmc.ncbi.nlm.nih.gov/articles/PMC11772716/>
3. EFNS-ENS-Empfehlungen zur Diagnostik der Demenz — <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1468-1331.2010.03040.x>
4. Belgischer Konsensus: Biomarker-basierte Diagnosepfade bei Alzheimer — <https://onlinelibrary.wiley.com/doi/full/10.1111/ene.70668>
5. Palmqvist et al., JAMA 2024: Blutbiomarker in Primär-/Sekundärsorgung — <https://jamanetwork.com/journals/jama/fullarticle/2821669>
6. Irish Network for Biomarkers in Neurodegeneration: CSF-Konsensus — <https://imj.ie/clinical-consensus-guidelines-on-the-application-of-cerebrospinal-fluid-biomarkers-for-alzheimers-disease-diagnosis-recommendations-of-the-irish-network-for-biomarkers-in-neurodegeneration/>

Practical Considerations

The algorithm on page 1 summarizes the guideline-compliant procedure. This page provides a more in-depth look at the red flags, the indications for specialized tests, and the rules for interpretation.

Red Flags — Urgency Based on Pattern

Findings	Procedure
Acute or fluctuating Confusion ¹	First rule out delirium (emergency): infection, medication, metabolic issues
Newly onset focal neurological deficits	Stroke or mass effect: immediate imaging
Rapidly progressive (weeks–months)	Urgent neurological evaluation with a broad differential diagnosis (including, among others, prion disease); MRI with DWI
Onset before age 65	Early specialized evaluation using biomarkers; genetic counseling if there is a positive family history

Level 3 — Which specialized test for what

Test	Indication
FDG-PET ²	Aids in differential diagnosis when the cause remains unclear after MRI (AD, FTD, DLB)
CSF Aβ42/40 · p-Tau · t-Tau or Amyloid-PET ^{2,4}	Unconfirmed suspicion of Alzheimer’s disease, atypical or early-onset disorder; Confirmation of amyloid status
Plasma p-Tau217 (blood biomarker) ^{4,5}	Validated assay according to assay-specific center protocol; unclear results should be further investigated in a targeted manner
DaTscan (¹²³ I-FP-CIT-SPECT) ⁶	Suspected Lewy body dementia

Cardinal rules

1. Dementia is a clinical diagnosis: A normal screening score does not rule it out; daily living functions (ADL/IADL) determine whether a case is classified as MCI or dementia.¹
2. Treatable contributing factors (depression, sedatives, anticholinergics, metabolic disorders) do not automatically preclude further assessment—treat, reevaluate, and conduct further evaluation if deficits persist.¹
3. A normal MRI does not rule out a neurodegenerative disease.²
4. Amyloid positivity alone does not constitute a clinical diagnosis of Alzheimer’s disease; interpret biomarkers only when there is a specific clinical question regarding and when the results have implications for treatment.⁴
5. Blood biomarkers are assay-dependent: use only validated methods; confirm unclear results.^{4,5}

Sources

1. NICE NG97. Dementia: assessment, management and support — <https://www.nice.org.uk/guidance/ng97/chapter/recommendations>
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4. Belgischer Konsensus: Biomarker-basierte Diagnosepfade bei Alzheimer — <https://onlinelibrary.wiley.com/doi/full/10.1111/ene.70668>
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6. Irish Network for Biomarkers in Neurodegeneration: CSF-Konsensus — <https://imj.ie/clinical-consensus-guidelines-on-the-application-of-cerebrospinal-fluid-biomarkers-for-alzheimers-disease-diagnosis-recommendations-of-the-irish-network-for-biomarkers-in-neurodegeneration/>