NICE National Institute for Health and Care Excellence

Dementia diagnosis and assessment

A NICE pathway brings together all NICE guidance, quality standards and materials to support implementation on a specific topic area. The pathways are interactive and designed to be used online. This pdf version gives you a single pathway diagram and uses numbering to link the boxes in the diagram to the associated recommendations.

To view the online version of this pathway visit:

http://pathways.nice.org.uk/pathways/dementia

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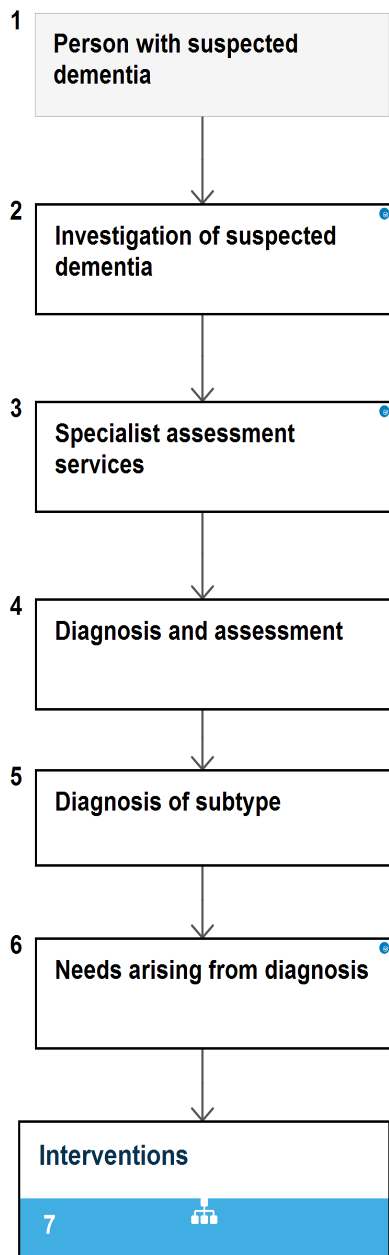
NICE Pathways



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1 Person with suspected dementia

No additional information

2 Investigation of suspected dementia

Conduct a basic dementia screen at the time of presentation, usually in primary care. Include:

- routine haematology
- biochemistry tests (electrolytes, calcium, glucose, and renal and liver function)
- thyroid function tests
- serum vitamin B_{12} and folate levels.

Perform a midstream urine test if delirium is a possibility. For more information on delirium, see the NICE pathway on delirium.

Conduct investigations such as chest X-ray or electrocardiogram (ECG) as determined by clinical presentation.

Do not routinely:

- test for syphilis serology or HIV unless there are risk factors or the clinical picture dictates
- examine cerebrospinal fluid.

Quality standards

The following quality statement is relevant to this part of the pathway.

Supporting people to live well with dementia quality standard

1. Discussing concerns about possible dementia

3 Specialist assessment services

Memory assessment services (provided by a memory assessment clinic or community mental health teams) should be the single point of referral for people with possible dementia. They should provide:

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- a responsive service with a full range of assessment, diagnostic, therapeutic and rehabilitation services to accommodate different types and all severities of dementia and the needs of families and carers
- integrated care in partnership with local health, social care, and voluntary organisations.

Quality standards

The following quality statements are relevant to this part of the pathway.

Dementia quality standard

2. Memory assessment services

Mental wellbeing of older people in care homes quality standard

3. Recognition of mental health conditions

4 Diagnosis and assessment

Make a diagnosis of dementia only after a comprehensive assessment, including:

- history taking
- cognitive and mental state examination
- physical examination
- review of medication to identify any drugs that may impair cognitive functioning.

Ask people who are assessed for possible dementia whether they wish to know the diagnosis and with whom it should be shared.

If dementia is mild or questionable, conduct formal neuropsychological testing.

At the time of diagnosis, and regularly afterwards, assess medical and psychiatric comorbidities, including depression and psychosis.

For more information, see the NICE pathway on depression.

Clinical cognitive assessment

Examine:

- attention and concentration

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- orientation
- short- and long-term memory
- praxis
- language
- executive function.

Conduct formal cognitive testing using a standardised instrument, such as:

- Mini Mental State Examination (MMSE)
- 6-Item Cognitive Impairment Test (6-CIT)
- General Practitioner Assessment of Cognition (GPCOG)
- 7-Minute Screen.

Take into account other factors that may affect performance, including educational level, skills, prior level of functioning and attainment, language, sensory impairment, psychiatric illness and physical or neurological problems.

5 Diagnosis of subtype

Diagnosis of subtype of dementia should be made by healthcare professionals with expertise in differential diagnosis using international standardised criteria.

Type	Recommended diagnostic criteria[1]
Alzheimer's disease	Prefer NINCDS/ADRDA criteria. Alternatives include ICD-10 and DSM-IV.
Vascular dementia	Prefer NINDS-AIREN criteria. Alternatives include ICD-10 and DSM-IV.
Dementia with Lewy bodies (DLB)	International Consensus criteria for DLB.
Frontotemporal dementia (FTD)	Lund–Manchester criteria, NINDS criteria for FTD.

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[1] See NICE–SCIE guideline for further details.

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Use cerebrospinal fluid examination if Creutzfeldt–Jakob disease (CJD) or other forms of rapidly progressive dementia are suspected.

Do not routinely use electroencephalography (EEG). Consider in:

- suspected delirium, frontotemporal dementia or CJD
- associated seizure disorder in those with dementia.

For more information on delirium, see the NICE pathway on delirium.

Consider brain biopsy only if a potentially reversible cause is suspected that cannot be diagnosed in any other way.

Imaging

Use structural imaging to exclude other cerebral pathologies and help establish the subtype. Imaging may not always be needed in those presenting with moderate to severe dementia, if the diagnosis is already clear.

- Prefer MRI to assist with early diagnosis and detect subcortical vascular changes. However, CT scanning could be used.
- Take specialist advice when interpreting scans in people with learning disabilities.

Use perfusion hexamethylpropyleneamine oxime (HMPAO) single-photon emission computed tomography (SPECT) to help differentiate Alzheimer's disease, vascular dementia and frontotemporal dementia.

- The test is not useful in people with Down's syndrome, who may have SPECT abnormalities resembling Alzheimer's disease throughout life.
- If HMPAO SPECT is unavailable, consider 2-[^{18}F]fluoro-2-deoxy-D-glucose positron emission tomography (FDG PET) as an alternative.

Use dopaminergic iodine-123-radiolabelled 2β-carbomethoxy-3β-(4-iodophenyl)-N-(3-fluoropropyl) nortropane (FP-CIT) SPECT to confirm suspected DLB.

Usually manage dementia with mixed pathology according to the likely dominant condition.

6 Needs arising from diagnosis

Following a diagnosis of dementia:

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- make time available to discuss the diagnosis with the person with dementia and, if the person consents, with their family. Both may need ongoing support.
- offer the person with dementia and their family written information about:[1]
    - signs and symptoms
    - course and prognosis
    - treatments
    - local care and support services
    - support groups
    - sources of financial and legal advice and advocacy
    - medico-legal issues, including driving
    - local information sources, including libraries and voluntary organisations.

Record any advice and information given in the notes.

Consider mentoring or supervising less experienced colleagues if you regularly diagnose dementia and discuss this with people with the condition and carers.

Quality standards

The following quality statements are relevant to this part of the pathway.

Dementia quality standard

3. Written and verbal information

7 Interventions

See Dementia / Dementia interventions

[1] This recommendation is also relevant to social care staff.

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Sources

Dementia. NICE clinical guideline 42 (2006)

Your responsibility

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