NICE National Institute for Health and Care Excellence

NICE Pathways

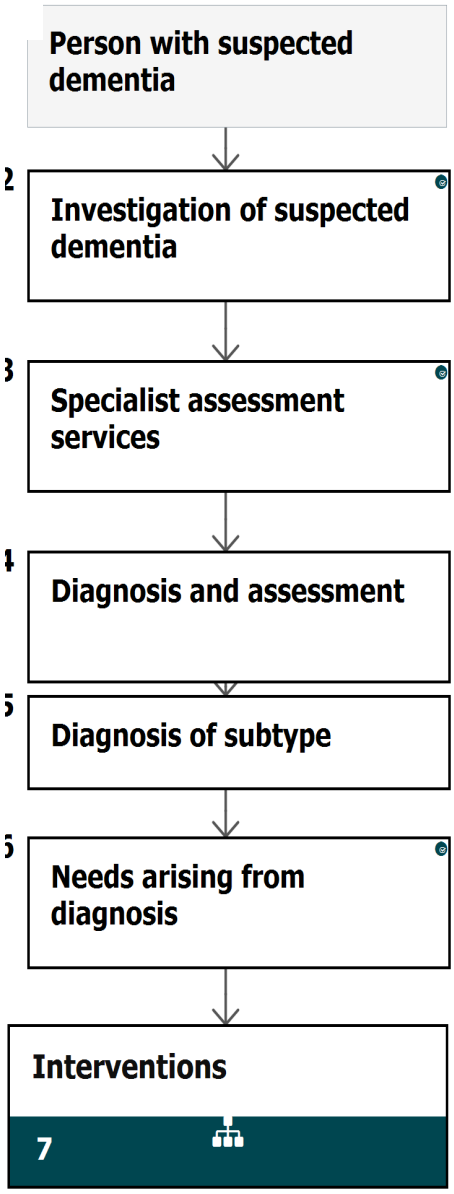
Dementia diagnosis and assessment

NICE Pathways bring together all NICE guidance, quality standards and other NICE information on a specific topic.

NICE Pathways are interactive and designed to be used online. They are updated regularly as new NICE guidance is published. To view the latest version of this pathway see:

http://pathways.nice.org.uk/pathways/dementia
Pathway last updated: March 2017

This document contains a single pathway diagram and uses numbering to link the boxes to the associated recommendations.



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 further information, see what NICE says 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 interactive flowchart.

Supporting people to live well with dementia

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:

- 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.

People with learning disabilities

Refer people with learning disabilities who have suspected dementia to a psychiatrist with expertise in assessing and treating mental health problems in people with learning disabilities.

Quality standards

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

Dementia

2. Memory assessment services

Mental wellbeing of older people in care homes

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.

See what NICE says on depression and multimorbidity.

Clinical cognitive assessment

Examine:

- attention and concentration
- 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.

Consider supplementing an assessment of dementia with an adult with learning disabilities with:

- measures of symptoms, such as the Dementia Questionnaire for People with Learning Disabilities (DLD), the Down Syndrome Dementia Scale (DSDS), or the Dementia Screening Questionnaire for Individuals with Intellectual Disabilities (DSQIID)
- measures of cognitive function to monitor changes over time, such as the Test for Severe Impairment (TSI).
- measures of adaptive function to monitor changes over time.

Complete a baseline assessment of adaptive behaviour with all adults with Down's syndrome.

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.

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 further information, see what NICE says 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.

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

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:

- 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 interactive flowchart.

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

Dementia

3. Written and verbal information

7 Interventions

See Dementia / Dementia interventions

Sources

Mental health problems in people with learning disabilities: prevention, assessment and management (2016) NICE guideline NG54

Dementia: supporting people with dementia and their carers in health and social care (2006 updated 2016) NICE guideline CG42

Your responsibility

The guidance in this pathway represents the view of NICE, which was arrived at after careful consideration of the evidence available. Those working in the NHS, local authorities, the wider public, voluntary and community sectors and the private sector should take it into account when carrying out their professional, managerial or voluntary duties. Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way which would be inconsistent with compliance with those duties.

Copyright

Contact NICE

National Institute for Health and Care Excellence
Level 1A, City Tower
Piccadilly Plaza
Manchester
M1 4BT

www.nice.org.uk

nice@nice.org.uk

0845 003 7781