



*National Institute for  
Health and Clinical Excellence*

## Quick reference guide

Issue date: July 2010

# **Delirium**

Diagnosis, prevention and management

### About this booklet

This is a quick reference guide that summarises the recommendations NICE has made to the NHS in 'Delirium: diagnosis, prevention and management' (NICE clinical guideline 103).

### Who should read this booklet?

This quick reference guide is for doctors, nurses and other staff working in critical, acute and elective care in hospitals, and GPs and care assistants working in long-term care.

### Who wrote the guideline?

The guideline was developed by the National Clinical Guideline Centre for Acute and Chronic Conditions, which is a national collaborating centre based at the Royal College of Physicians. The Guideline Centre worked with a group of healthcare professionals (including consultants, a care home manager and specialist nurses), patient representatives, and technical staff, who reviewed the evidence and drafted the recommendations. The recommendations were finalised after public consultation.

For more information on how NICE clinical guidelines are developed, go to [www.nice.org.uk](http://www.nice.org.uk)

### Where can I get more information about the guideline?

The NICE website has the recommendations in full, reviews of the evidence they are based on, a summary of the guideline for people in hospital or long-term care and their family and/or carers, and tools to support implementation.

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NICE clinical guidelines are recommendations about the treatment and care of people with specific diseases and conditions in the NHS in England and Wales.

This guidance represents the view of NICE, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer, and informed by the summary of product characteristics of any drugs they are considering.

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 that would be inconsistent with compliance with those duties.

## Introduction

- Delirium (sometimes called 'acute confusional state') is a clinical syndrome characterised by disturbed consciousness, cognitive function or perception, which has an acute onset and fluctuating course.
- It is a common but serious and complex clinical syndrome associated with poor outcomes.
- Delirium may be present when a person presents to hospital or long-term care or may develop during a hospital admission or residential stay in long-term care.
- Delirium can be hypoactive or hyperactive but some people show signs of both (mixed) (see 'Key to terms'). Hypoactive and mixed delirium can be more difficult to recognise.
- The main focus of this quick reference guide is preventing delirium in people identified to be at risk, using a targeted, multicomponent, non-pharmacological intervention that addresses a number of modifiable risk factors ('clinical factors').
- This guideline does not cover children and young people (under 18 years), people receiving end-of-life care, people with intoxication and/or withdrawing from drugs or alcohol or with delirium associated with these states.

## Person-centred care

Treatment and care should take into account people's individual needs and preferences. Good communication is essential, supported by evidence-based information, to allow people to reach informed decisions about their care. Follow advice on seeking consent from the Department of Health or Welsh Assembly Government if needed. If the person agrees, families and carers should have the opportunity to be involved in decisions about treatment and care.

## Key to terms

**Hyperactive delirium:** subtype of delirium characterised by people who have heightened arousal and can be restless, agitated and aggressive.

**Hypoactive delirium:** subtype of delirium characterised by people who become withdrawn, quiet and sleepy.

**Multidisciplinary team:** a team of healthcare professionals with the different clinical skills needed to offer holistic care to people with complex clinical problems such as delirium.

**Long-term care:** residential care in a home that may include skilled nursing care and help with everyday activities. This includes nursing homes and residential homes.

## Key priorities for implementation

### Risk factor assessment

- When people first present to hospital or long-term care, assess them for the following risk factors. If any of these risk factors is present, the person is at risk of delirium.
  - Age 65 years or older.
  - Cognitive impairment (past or present) and/or dementia<sup>1</sup>. If cognitive impairment is suspected, confirm it using a standardised and validated cognitive impairment measure.
  - Current hip fracture.
  - Severe illness (a clinical condition that is deteriorating or is at risk of deterioration)<sup>2</sup>.

### Indicators of delirium: at presentation

- At presentation, assess people at risk for recent (within hours or days) changes or fluctuations in behaviour. These may be reported by the person at risk, or a carer or relative. Be particularly vigilant for behaviour indicating hypoactive delirium (marked \*). These behaviour changes may affect:
  - Cognitive function: for example, worsened concentration\*, slow responses\*, confusion.
  - Perception: for example, visual or auditory hallucinations.
  - Physical function: for example, reduced mobility\*, reduced movement\*, restlessness, agitation, changes in appetite\*, sleep disturbance.
  - Social behaviour: for example, lack of cooperation with reasonable requests, withdrawal\*, or alterations in communication, mood and/or attitude.

If any of these behaviour changes are present, a healthcare professional who is trained and competent in diagnosing delirium should carry out a clinical assessment to confirm the diagnosis.

### Interventions to prevent delirium

- Ensure that people at risk of delirium are cared for by a team of healthcare professionals who are familiar to the person at risk. Avoid moving people within and between wards or rooms unless absolutely necessary.
- Give a tailored multicomponent intervention package:
  - Within 24 hours of admission, assess people at risk for clinical factors contributing to delirium.
  - Based on the results of this assessment, provide a multicomponent intervention tailored to the person's individual needs and care setting as described on page 6.
- The tailored multicomponent intervention package should be delivered by a multidisciplinary team trained and competent in delirium prevention.

<sup>1</sup> If dementia is suspected, refer to further information on the diagnosis, treatment and care of people with dementia in 'Dementia: supporting people with dementia and their carers in health and social care' (NICE clinical guideline 42).

<sup>2</sup> For further information on recognising and responding to acute illness in adults in hospital see 'Acutely ill patients in hospital' (NICE clinical guideline 50).

## Key priorities for implementation *continued*

### Diagnosis (specialist clinical assessment)

- If indicators of delirium are identified, carry out a clinical assessment based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria or short Confusion Assessment Method (short CAM) to confirm the diagnosis. In critical care or in the recovery room after surgery, CAM-ICU should be used. A healthcare professional who is trained and competent in the diagnosis of delirium should carry out the assessment. If there is difficulty distinguishing between the diagnoses of delirium, dementia or delirium superimposed on dementia, treat for delirium first.
- Ensure that the diagnosis of delirium is documented both in the person's hospital record and in their primary care health record.

### Initial management

- In people diagnosed with delirium, identify and manage the possible underlying cause or combination of causes.
- Ensure effective communication and reorientation (for example, explaining where the person is, who they are, and what your role is) and provide reassurance for people diagnosed with delirium. Consider involving family, friends and carers to help with this. Provide a suitable care environment (see page 7).

### Distressed people

- If a person with delirium is distressed or considered a risk to themselves or others and verbal and non-verbal de-escalation techniques are ineffective or inappropriate, consider giving short-term (usually for 1 week or less) haloperidol<sup>3</sup> or olanzapine<sup>3</sup>. Start at the lowest clinically appropriate dose and titrate cautiously according to symptoms.

## Think delirium

Be aware that people in hospital or long-term care may be at risk of delirium. Delirium can have serious consequences (such as increased risk of dementia and/or death) and may increase the length of stay of people already in hospital and their risk of new admission to long-term care.

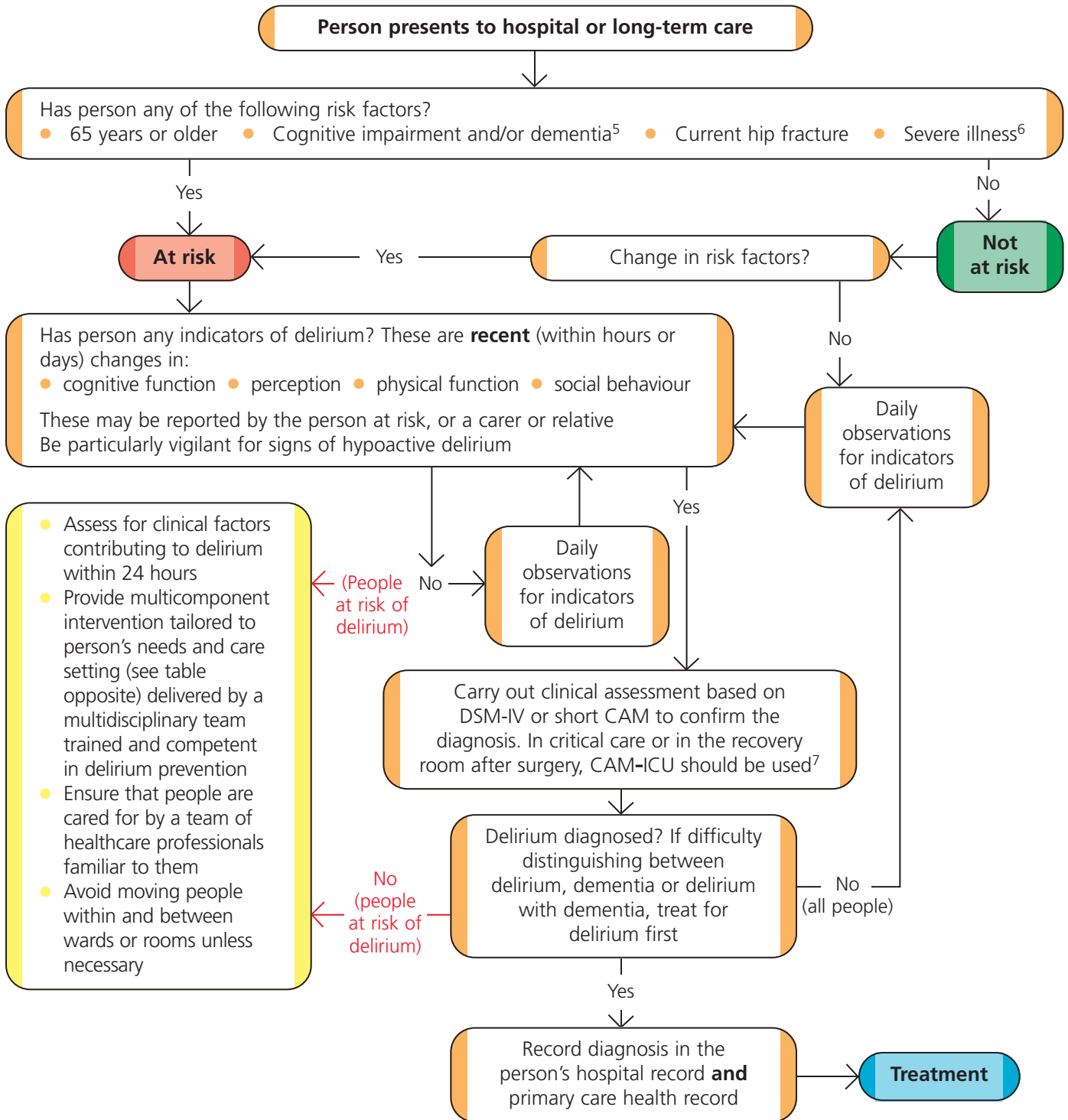
<sup>3</sup> Haloperidol and olanzapine do not have UK marketing authorisation for this indication.

## Interventions to prevent delirium

Clinical factor	Preventive intervention
Cognitive impairment or disorientation	<ul style="list-style-type: none"> <li>• Provide appropriate lighting and clear signage. A clock (consider providing a 24-hour clock in critical care) and a calendar should also be easily visible to the person at risk.</li> <li>• Reorientate the person by explaining where they are, who they are, and what your role is.</li> <li>• Introduce cognitively stimulating activities (for example, reminiscence).</li> <li>• Facilitate regular visits from family and friends.</li> </ul>
Dehydration or constipation	<ul style="list-style-type: none"> <li>• Encourage the person to drink. Consider offering subcutaneous or intravenous fluids if necessary.</li> <li>• Seek advice if necessary when managing fluid balance in people with comorbidities (for example, heart failure or chronic kidney disease).</li> </ul>
Hypoxia	<ul style="list-style-type: none"> <li>• Assess for hypoxia and optimise oxygen saturation if necessary.</li> </ul>
Immobility or limited mobility	<ul style="list-style-type: none"> <li>• Encourage the person to:               <ul style="list-style-type: none"> <li>– mobilise soon after surgery</li> <li>– walk (provide walking aids if needed – these should be accessible at all times).</li> </ul> </li> <li>• Encourage all people, including those unable to walk, to carry out active range-of-motion exercises.</li> </ul>
Infection	<ul style="list-style-type: none"> <li>• Look for and treat infection.</li> <li>• Avoid unnecessary catheterisation.</li> <li>• Implement infection control procedures in line with 'Infection control' (NICE clinical guideline 2).</li> </ul>
Multiple medications	<ul style="list-style-type: none"> <li>• Carry out a medication review for people taking multiple drugs, taking into account both the type and number of medications.</li> </ul>
Pain	<ul style="list-style-type: none"> <li>• Assess for pain. Look for non-verbal signs of pain, particularly in people with communication difficulties.</li> <li>• Start and review appropriate pain management in any person in whom pain is identified or suspected.</li> </ul>
Poor nutrition	<ul style="list-style-type: none"> <li>• Follow the advice given on nutrition in 'Nutrition support in adults' (NICE clinical guideline 32).</li> <li>• If the person has dentures, ensure they fit properly.</li> </ul>
Sensory impairment	<ul style="list-style-type: none"> <li>• Resolve any reversible cause of the impairment (such as impacted ear wax).</li> <li>• Ensure working hearing and visual aids are available to and used by people who need them.</li> </ul>
Sleep disturbance	<ul style="list-style-type: none"> <li>• Avoid nursing or medical procedures during sleeping hours, if possible.</li> <li>• Schedule medication rounds to avoid disturbing sleep.</li> <li>• Reduce noise to a minimum during sleep periods<sup>4</sup>.</li> </ul>

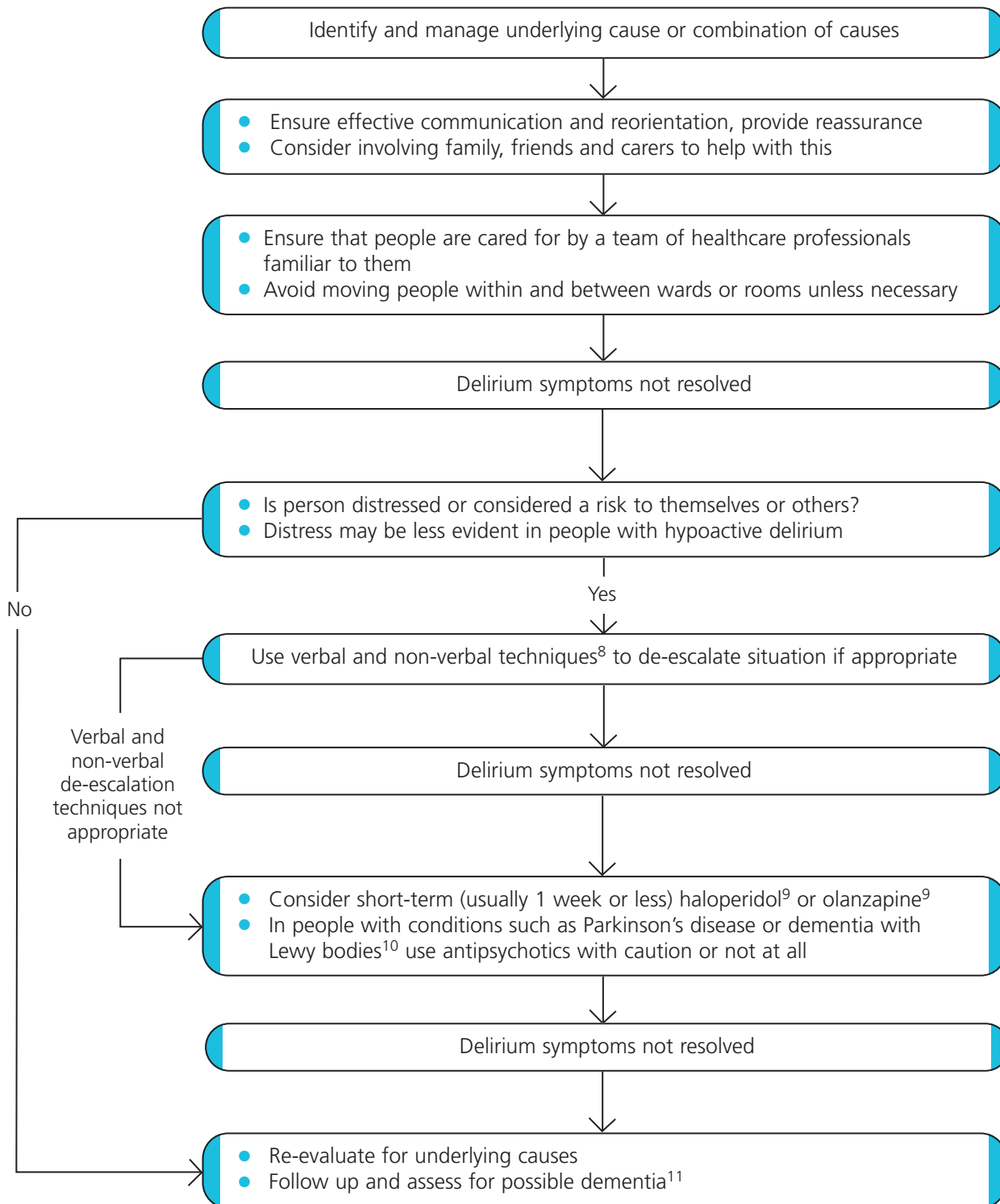
<sup>4</sup> See 'Parkinson's disease' (NICE clinical guideline 35) for information about sleep hygiene.

# Preventing and diagnosing delirium



<sup>5</sup> If cognitive impairment is suspected, confirm using a standardised and validated cognitive impairment measure. If dementia is suspected, refer to 'Dementia: supporting people with dementia and their carers in health and social care' (NICE clinical guideline 42).  
<sup>6</sup> For further information on recognising and responding to acute illness in adults in hospital see 'Acutely ill patients in hospital' (NICE clinical guideline 50).  
<sup>7</sup> A healthcare professional trained and competent in the diagnosis of delirium should carry out this assessment.

## Treating delirium



<sup>8</sup> See 'Violence' (NICE clinical guideline 25).

<sup>9</sup> Haloperidol and olanzapine do not have UK marketing authorisation for this indication.

<sup>10</sup> For more information on the use of antipsychotics for these conditions, see 'Parkinson's disease' (NICE clinical guideline 35) and 'Dementia' (NICE clinical guideline 42).

<sup>11</sup> For more information on dementia see 'Dementia' (NICE clinical guideline 42).



## Information for people with or at risk of delirium

Offer information to people with or at risk of delirium, and their family and/or carers which:

- explains that delirium is common and usually temporary
- describes people's experience of delirium
- encourages people at risk and their families and/or carers to tell their healthcare team about any sudden changes or fluctuations in usual behaviour
- encourages the person who has had delirium to share their experience of delirium with the healthcare professional during recovery
- advises the person of any support groups.

Ensure information meets cultural, cognitive and language needs.

### Related NICE guidance

For information about NICE guidance that has been issued or is in development, see [www.nice.org.uk](http://www.nice.org.uk)

#### Published

- Alcohol use disorders. NICE clinical guideline 100 (2010).
- Donepezil, galantamine, rivastigmine (review) and memantine for the treatment of Alzheimer's disease (amended). NICE technology appraisal guidance 111 (2009).
- Schizophrenia. NICE clinical guideline 82 (2009).
- Surgical site infection. NICE clinical guideline 74 (2008).
- Drug misuse. NICE clinical guideline 52 (2007).

- Acutely ill patients in hospital. NICE clinical guideline 50 (2007).
- Dementia. NICE clinical guideline 42 (2006).
- Parkinson's disease. NICE clinical guideline 35 (2006).
- Nutrition support in adults. NICE clinical guideline 32 (2006).
- Violence. NICE clinical guideline 25 (2005).
- Falls. NICE clinical guideline 21 (2004).
- Infection control. NICE clinical guideline 2 (2003).

#### Under development

Alcohol dependence and harmful alcohol use. NICE clinical guideline. Publication expected February 2011.

## Further information

### Ordering information

You can download the following documents from [www.nice.org.uk/guidance/CG103](http://www.nice.org.uk/guidance/CG103)

- The NICE guideline – all the recommendations.
- A quick reference guide (this document) – a summary of the recommendations for healthcare professionals.
- ‘Understanding NICE guidance’ – a summary for people in hospital or long-term care and their family and/or carers.
- The full guideline – all the recommendations, details of how they were developed, and reviews of the evidence they were based on.

For printed copies of the quick reference guide or ‘Understanding NICE guidance’, phone NICE publications on 0845 003 7783 or email [publications@nice.org.uk](mailto:publications@nice.org.uk) and quote:

- N2224 (quick reference guide)
- N2225 (‘Understanding NICE guidance’).

### Implementation tools

NICE has developed tools to help organisations implement this guidance (see [www.nice.org.uk/guidance/CG103](http://www.nice.org.uk/guidance/CG103)).

### Updating the guideline

This guideline will be updated as needed, and information about the progress of any update will be available at [www.nice.org.uk/guidance/CG103](http://www.nice.org.uk/guidance/CG103)

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