Optimum
Workforce Leadership

# Delirium Prevention and Management Training

## Pack for Care Homes

supported by

Nottinghamshire County Council

NHS
Health Education England

# Contents



# Introduction

This training pack has been designed to increase your knowledge about delirium and has been designed to be a self-learning tool. Based upon the knowledge that you have gained the training pack has adopted a blended approach in which to consolidate your learning. The pack enables you to evaluate your learning through questionnaire, case studies and competency based assessment. Each assessment should be completed with the training pack facilitator/supervisor. Both you and your training facilitator/supervisor should:

- use the Competence Assessment Tool to assess yourself and devise an action plan to meet your individual development needs
- provide evidence for renewal of your registration with the Nursing and Midwifery Council revalidation
- provide evidence of achievement for your personal development plan
- use your assessment results to focus on your development needs, prepare for supervision meetings and support your career development.

While completing the tool it is useful to use the following framework in order to gain the maximum benefit from the training pack.

## Learning and Development Framework

**Step 1** **Review and Assess** your knowledge, skills and attitudes using the training pack compile your evidence to support your assessment.

**Step 2** **Identify and prioritise your learning and development needs** from your assessment results including any $360^0$ feedback. Identify, plan and prioritise your overall learning and development needs with your facilitator/supervisor.

**Step 3** **Plan and action**
Discuss suitable learning opportunities with your supervisor and agree relevant learning outcomes. Record these in your learning and development plan.

**Step 4** **Evaluate your learning and development**
In relation to improvements in your knowledge, skills and attitudes. Maintain a reflective record of your learning and development in your portfolio, to support your preparation of your supervision sessions or development review meetings.

# Management of delirium

## Definition

*"A state of fluctuating organic mental confusion usually of abrupt onset and relatively short duration, resulting in impaired attention, consciousness and disordered perception."*

## Facts

Delirium is common and affects about 30% of patients admitted to hospital from the community. However, it is only detected in about 50% of patients.

Delirium is a frequent concern within care homes with poor detection and misdiagnosis estimated to be from between 6.6% to 50%.

Treatment of delirium requires treatment of the underlying cause.

Delirium doubles the death rate in patients aged over 65 years. In hospital the mortality rate rises from 6% to 11%; there is also a higher mortality between one and six months following discharge.

Delirium is associated with an increased length of hospital stay: 21 vs nine days, with associated risk of suffering hospital acquired harms and deconditioning.

Delirium is associated with an increased need for 24hour care at one month compared to patients without delirium (47% vs 18%), and patients who are discharged after an admission with delirium are more likely to be readmitted.

For patients, delirium is associated with a loss of dignity, increased morbidity and mortality and a greater risk of going on to develop dementia within the next three years.

# What is delirium?

An acute confusional state of sudden onset and fluctuating course consisting of:

- Disturbed consciousness
- Hyper vigilant
- Drowsy / Lethargic
- Inattention
- Disorganised thinking
- Hallucinations
- Disturbed wake / sleep cycle

Delirium can be difficult to distinguish from dementia, and many frail older patients may have both.

Nice Guidance (2010) states:

*"If there is any doubt over the diagnosis, the person should initially be treated for delirium."*

**Delirium is potentially preventable in up to ⅓ of patients.**

Delirium requires a multicomponent of tailored interventions for prevention.

The features of delirium include:

- Disturbance of consciousness (hyper vigilant or very drowsy)
- Change in cognition
- Rapid onset over hours to days
- Fluctuating course
- Hallucinations (common)

## Approach to Diagnosis

# Risk factors for delirium

## Risk factors for delirium

- Age 65 years or older
- Pre-existing cognitive impairment and/or dementia
- Previous episode of delirium
- Current hip fracture
- Severe illness e.g. sepsis, acute pancreatitis, MI including patients needing HDU/ITU or surgery

## Potentially modifiable risk factors

- Sensory impairment (hearing or vision)
- Immobilization (catheters or restraints)
- Medications (for example, sedative hypnotics, narcotics, anticholinergic drugs, corticosteroids, polypharmacy, withdrawal of alcohol or other drugs)
- Acute neurological diseases (for example, acute stroke [usually right parietal], intracranial hemorrhage, meningitis, encephalitis)
- Intercurrent illness (for example, infections, iatrogenic complications, severe acute illness, anemia, dehydration, poor nutritional status, fracture or trauma, HIV infection)
- Metabolic derangement
- Surgery
- Environment (for example, admission to an intensive care unit)
- Pain
- Emotional distress
- Sustained sleep deprivation

## Nonmodifiable risk factors

- Dementia or cognitive impairment
- Advancing age (>65 years)
- History of delirium, stroke, neurological disease, falls or gait disorder
- Multiple comorbidities
- Male sex
- Chronic renal or hepatic disease
- History of acute onset in mental status.
- New episode of confusion regardless of pre-existing dementia diagnosis.
- Change in ability to function.

# Screening for Delirium

Care staff should simply ask the following question (SQuiD)

*"Do you think your resident has been more confused lately?"*

## Delirium types

When thinking about delirium, remember that it can be **hyperactive, hypoactive, or a mixture of both**.

| | |
|---|---|
| Hyperactive | • Increased motor activity/'wandering'<br>• Hallucinations<br>• Agitation<br>• Inappropriate or challenging behaviour |
| Mixed | • May fluctuate between showing signs of hyper and hypoactive Delirium |
| Hypoactive (most common) | • Reduced motor activity/'off legs'<br>• Lethargy/drowsy<br>• Picking at blankets or at the air<br>• **Associated with higher mortality** |

**Staff need to be vigilant for particular signs of hypoactive delirium.**

# Recognising delirium

## Recent changes or fluctuations in behaviour

***Cognition:*** Reduced concentration*, slow responses*, confusion.

***Perception:*** Hallucinations (can be visual or auditory).

***Changes in physical function:*** reduced mobility*, reduced movement*, restlessness, agitation, change in appetite*, sleep disturbance.

***Changes in social function:*** withdrawal*, non-cooperation with reasonable requests, alteration in mood and/or attitude.

## Diagnosing delirium

The simple Confusion Assessment Method (CAM) screen is sensitive to indication a possible delirium diagnosis. Care staff should suspect delirium if three out of the four following criteria is met:

1) Confusion is of acute onset or fluctuating course
2) There is evidence of inattention (e.g. can not count backwards from 20 to one)
3) There is evidence of disorganised thinking

OR

4) There is an altered level of consciousness (drowsy or hyperalert).

**Importance of reassessment**

People who have suffered a delirium are at risk of further episodes and are nine times more likely to go on to develop dementia, so it is very important that the resident is reassessed and monitored back in the community by the resident GP some four - eight weeks following treatment.

Once a diagnosis has been made it is important to consider a thorough history and examination. Consider some of the common factors / causes of delirium using the PINCH ME acronym.

**P** PAIN
**I** INFECTION
**N** NUTRITION
**C** CONSTIPATION
**H** HYDRATION
**M** MEDICATION
**E** ENVIROMENT / ELECTROLYTES

*** Remember no cause will be found in 1/3 of your residents.

# Investigations

**Investigations are requested to find the underlining cause:**

- Bloods: glucose, full blood count, urea and electrolytes, liver function tests, calcium, thyroid function tests, blood cultures.
- Urinalysis
- Chest x-ray
- ECG
- Pulse oximetry
- Consider need for: arterial blood gases, CT brain, lumbar puncture, electroencephalogram.

## Environmental considerations

- Nurse in an environment which is well lit and calm, with visible clocks and clear signage, e.g. to bathrooms.
- Avoid all room moves unless absolutely necessary to the clinical interests of the resident.
- Provide gentle reassurance and orientation prompts to the resident. The resident may benefit from familiar photographs and objects being sent to the hospital ward following admission.
- Ensure hospital staff allow your resident to wear their own clothes wherever possible.
- Ensure the patient's spectacles are available, clean and are worn. Hearing aids should be in working order.
- Encourage the resident to mobilise with whatever assistance is necessary and when possible.
- Promote adequate quantities of uninterrupted sleep, avoiding all unnecessary interventions, particularly at night.

# Communication

## Communication in delirium

- Remember 93% of communication is nonverbal - be vigilant to nonverbal cues. (grimacing, restlessness, vocal sounds).
- Ensure that the resident is not in any pain. Treat promptly if this is the case.
- Ensure that the resident is familiar with the staff in attendance and can establish a good rapport.
- Explain what you need to do slowly and use nonverbal cues to support explanation.
- Use language that the person can understand and check understanding.
- Reduce distraction and give the resident time.
- Avoid overstimulation and noise.

## Important principles in caring for people with delirium

- Encourage family members and carers to be present in the home, participating in care if they are able to, for example at meal times.
- Additional staff may be required to support and care for the patient, particularly in the context of hyperactive delirium.
- In hyperactive delirium there may be complex behaviour, and residents who are mobile may 'wander'. In general, residents should be allowed to move about as they wish, where it is safe to do so.
- De-escalation techniques can be implemented to diffuse difficult situations and alleviate the resident distress. This can include verbal methods or non-verbal methods including communication via pictures and writing, eye contact, body language and touch.
- Under certain circumstances a **Deprivation of Liberty Safeguard (DoLS)** application may be required if a resident lacks capacity and remains in the home as they await assessment, treatment or hospital admission and if it is felt to be in their best interests to prevent them coming to harm e.g. if they are repeatedly trying to leave the home.

## Nutrition and hydration in delirium

- Address the resident's hydration and nutritional needs, by encouraging oral intake of diet and fluids wherever possible, and documenting their daily intake.
- Ensure the patient is given whatever assistance they require to eat and drink.
- If intravenous hydration is required, aim to time this intervention to periods during the day when the patient is settled. Keep all fluid prescriptions under daily review with the support of GP practice etc.
- Consider if the resident's swallow is safe and adequate, and seek expert assessment from Speech and Language Therapy as a matter of urgency if concern arises.
- Do not keep patients 'Nil By Mouth' without alternative hydration and nutrition provision.
- Daily attention should be given to bowel function and constipation and promptly treated. Suppositories or enemas may be considered.
- Retention of urine should be treated, but otherwise urinary catheters should be avoided wherever possible.

# Management of complex behaviour in delrium

Residents with delirium can sometimes present or become very distressed and express this with challenging behaviour.

First use verbal and non-verbal techniques to de-escalate the situation. Talk slowly and calmly.

Delirium may be less evident in people with hypoactive delirium, who can still become distressed by, for example, psychotic symptoms.

If the person with delirium is very distressed, or considered a risk to themselves or others, and verbal and non-verbal de-escalation techniques are ineffective or inappropriate, antipsychotic medication can be considered.

Antipsychotic medication is associated with a **number of adverse effects**. Therefore, it should only be considered as **a short term** treatment option for delirium **(less than a week)** and the prescription reviewed on a daily basis

Antipsychotic medication may be **inappropriate in a number of circumstances** for example:

- If reversible conditions such as urinary retention or pain have not been treated or excluded.
- If barriers to effective communication have not been overcome.
- For people with specific conditions such as dementia with Lewy Bodies or Parkinson's Disease.

## Using de-escalation techniques

- Aim for the involvement of one key staff member who is known to the patient to support them in a situation where their behaviour has become challenging; remember that the patient is likely to be very distressed.
- Avoid 'crowds' of other staff gathering, this is not helpful and is likely to give the impression of 'ganging up' on the patient.
- Avoid having members of the team in their direct personal space, or ideally line of sight, as this is very threatening.
- Be respectful, even formal. Introduce yourself and shake hands; use their title rather than first name in the first instance.

- Show empathy and concern. Acknowledge their feelings and that the situation they find themselves is frightening or distressing. Use symbolic gestures e.g. offer them a drink.
- Ask questions and listen to the answers.
- Distraction may be very helpful, using their familiar photos and objects as prompts can be very useful.
- Do not disagree with the patient.
- Answer any questions honestly, clarify any misconceptions.
- Offer available choices and explore alternatives. Encourage input from the individual and use their suggestions and choices where possible.
- Allow the patient to 'wander' if it is safe to do so, there may be purposeful behaviour behind it.
- The staff member should remain calm, self-controlled and confident, without being dismissive or overbearing.

## The use of sedative medications in delirium

- The use of medication in delirium should be avoided unless absolutely essential and is a last resort after supportive measures and de-escalation techniques have been attempted.
- Use should be restricted to residents who are considered to be a danger to themselves or others.
- The need for medication should be reviewed every 24 hours.
- Very occasionally sedating medication may be indicated if the resident is becoming very distressed by their symptoms of delirium e.g. frightening hallucinations. The use of medication may also be carefully considered to enable urgent tests and investigations to be carried out, if it is felt that these cannot wait until the resident has settled with non-pharmacological intervention.
- 'Wandering' is not an indication for using sedating medication, and pharmacological intervention may cause an increase in confusion in this resident group. Sedating medication also increases the risk of falls.

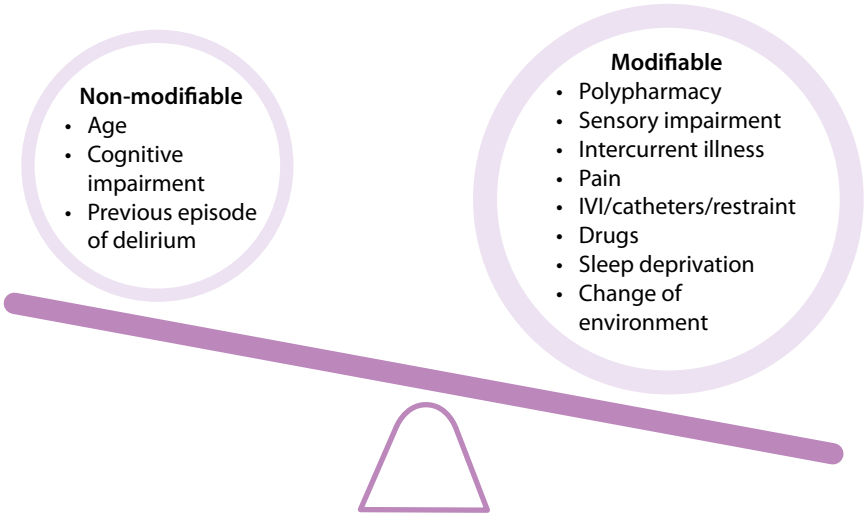
# Preventing delirium

**Effective prevention of delirium in those at risk remains the 'Gold Standard' of care.**

Once residents have been identified as being at risk of delirium, a Multicomponent Intervention to prevent delirium should be used to prevent it from occurring.

Residents with dementia or those who have experienced an episode of delirium in the past are at a particularly increased risk of a further episode and special effort needs to be made with this vulnerable group to avoid precipitating factors.

## We can acutually change a lot!



## AMT Assessments 4 and 10

**AMT 4**

1 Age
2 Date of Birth
3 Place
4 Year

Score of 0-3 is abnormal and means that cognition should be investigated further.

**AMT 10**

1 Age
2 Time to nearest hour
3 Address (don't score this)
4 Year
5 Place
6 Recognition of 2 people
7 Date of birth
8 Date of WW2
9 Name or present monarch
10 Count backwards from 20-1
11 Ask to repeat address correctly to score

Score of 8 or less is abnormal and should be investigated further.

## Preventing delirium: The 10 areas for intervention

**Orientation**

- Avoid moving the person between wards or rooms unless absolutely necessary.
- Provide appropriate lighting and clear signage.
- Ensure a clock and calendar are visible.
- Facilitate regular visits from family and friends.
- Introduce cognitively stimulating activities such as reminiscence.
- Re-orientate the person regularly - who are, where they are and your role.

**Dehydration and Constipation**

- Prevent dehydration by encouraging the person to drink.
- Consider offering suboutaneous or intravenous fluid if necessary.
- Monitor bowel function and treat constipation promptly.

**Hypoxia**

- Assess for hypoxia and treat as appropriate.

**Infection**

- Look for and treat infection.
- Avoid unnecessary urinary catheterisation.
- Implement infection control procedures.

**Immobility**

- Encourage the person to walk, and ensure access at all times to appropriate walking aids as needed.
- Mobilise as soon as possible after surgery.
- Encourage active range-of-motion exercises.

**Pain**

- Assess for pain.
- Look for non-verbal signs of pain, especially in people who have communication difficulties.
- Treat pain promptly when it is identified or suspected.

**Medication review**

- Carry out a medication review and consider both type and number of medications.

**Sensory impairment**

- Ensure hearing or visual aids are available and in good working order.
- Treat any reversible causes of sensory impairment, such as impacted ear wax.

**Nutrition**

- Follow local guidelines on screening for and addressing poor nutrition.
- Ensure dentures fit properly.

**Sleep**

- Reduce noise to a minimum during sleep periods.
- Avoid disrupting sleep with procedures or medication administration unless absolutely necessary.

# Community delirium management summary

## Think Delirium!

History of acute onset change in mental status or new onset confusion?

Clinical suspicion of delirium or CAM test positive

Obtain collateral history from relatives or carers

Record baseline cognition (AMT 4 or AMT 10)

Act on acute, severe causes and stabilise patient
e.g. infection/medication toxicity/hypoxia/hypoglycaemia/dehydration

**MANAGEMENT**

Can the patient be managed safely in the community?
If not, escalate care as appropriate

Treat underlying causes ('PINCH ME')

| Investigation (see full pathway) | Medication Review | Optimise clinical condition |
|---|---|---|

**General management**

- Document diagnosis of delirium in notes
- Explain to patient and carer and provide them with information
  Encourage oral hydration and nutrition wherever possible and document daily intake
- Good pressure area care
- Avoid catheterisation unless absolutely necessary
- Treat constipation

**Environmental measures**

- Ensure glasses are clean and worn
- Ensure hearing aids are working and worn
- Mobilise regularly as able
- Avoid change of environment unless in the clinical interest of the patient
- Give gentle reassurance and orientation prompts
- Ensure adequate uninterrupted sleep
- Nurse in calm, well lit area with orientation aids visible
- Avoid any unnecessary interventions

**Treat delirium symptoms**

- Encourage family to be involved in care
- Consider escalating care if symptoms are severe enough to compromise safety in the patient's unusual place of residence
- If challenging behaviour threatens the safety of the patient or others, use 0.5mg lorazepam (**"start low, go slow"**) as a holding measure as per full guideline, and review use/need every 24hr
- Assess mental capacity and need for Deprivation of Liberty Safeguarding (DOLS)
- Inform next of kin if medication changes

Repeat delirium assessment when clinically indicated until two successive daily negatives.
**(Delirium can persist for weeks/months after the acute causes are treated)**

If patient not improving after 2-3 days or if severe delirium, or doubt about diagnosis, refer to GP.

If delirium symptoms persist beyond six weeks, consider referral to memory clinic.

**Indications for Acute Referral to Community Mental Health Team**

- Severe agitation or distress not responding to standard measures
- Doubt about diagnosis
- If detention under the Mental Health Act is being considered

**This delirium pathway is not exhaustive, and is not a substitute for clinical judgement.** Additional assessment, investigation, management strategies or treatments may be necessary on a case by case basis. Clinical judgement and decisions should be made by the appropriate responsible healthcare professional.

This pathway is appropriate for adults ages 18 or over.

**It is NOT intended for use in patients withdrawing from drugs or alcohol.**

**See full delirium guidelines for more information.**

**AMT 4**

1 Age
2 Date of Birth
3 Place
4 Year

Score of 0-3 is abnormal and should prompt further investigation.

In up to 30% cases, no cause for delirium is found.

**'PINCH ME'**

Causes of delirium

- **P**ain
- **I**nfection
- **C**onstipation
- **H**ydration
- **M**edication
- **E**lectrolytes/Environment

## Delirium 10 point Questionnaire

| Question | Answer |
|---|---|
| 1 Approximately what percentage of your residents will suffer with delirium? | |
| 2 Following an episode of delirium what percentage of people progress to have dementia? | |
| 3 Can you name at least 6 / 7 symptoms which may indicate a possible delirium diagnosis? | |
| 4 What percentage of people with delirium can successfully be treatment with a reversed clinical outcome? | |
| 5 Name at least seven risk factors associated with delirium? | |

| Question | Answer |
|---|---|
| 6 Name the three types of delirium and the symptoms of each. | |
| 7 Identify three circumstances in which the use of antipsychotic medication may be inappropriate despite evidence of complex behaviours. | |
| 8 Identify some of the environmental factors that need to be considered when managing a resident with delirium. | |
| 9 Name at least 8 of the 10 interventions required to safely manage delirium. | |
| 10 Following an episode of delirium approximately how long should it be before the GP need to reassess the resident (post initial delirium episode). | |

**** Participants must achieve 8 out of 10 to successfully pass.

# Case study example

Harry is 81, and a resident within the care home. Harry was diagnosed with Alzheimer's disease four years ago. He is usually a very chatty and a sociable man. His conversation is often based around his time at work. He is independent in most aspects of personal care with some prompting from staff to ensure he remembers to change his clothes regularly.

He has a very good appetite and enjoys mealtimes. Over the last two days Harry has become less talkative, his appetite is poor and he is not doing anything to support staff to wash and dress him.

He is now struggling to mobilise around the home.

Last night he was incontinent of urine and he doesn't now recognise where he is. He is talking about a man in his bedroom.

1. What type of Delirium could Harry be presenting with?

2. Based upon the above presentation consider the next steps required to support and manage Harry?

# Case study example

Diane is an 83-year-old woman who has been in the hospital for 1 day following a fall having been your home on regular respite According to her family, Diane has had increasing memory problems over the past year and has had problems getting lost while driving to a local restaurant, where she has been many times.

She also has had increasing difficulty finding the correct name for things and has experienced increased difficulties in completing activities of daily living. While bringing clothes to Diane from the your care home and you notice she is more confused.

She tells you to stay away and tries to punch you. She accuses you of trying to kill her and steal her belongings. This is not her usual behavior on respite. She is disoriented to time and place, and does not recognize you from the care home.

You leave the room, and you hear her talking to herself and moving items around in the room. You return to check on her and find that she is trying to get out of bed.

1. What type of Delirium could Diane have?

2. Based upon the above presentation, can you consider the next steps required to support and manage Diane?

# Evidence base

- NICE Guidance (CG 103) Delirium (July 2010)
- British Geriatrics Society Guidelines (January 2006)
- Scottish Delirium Association "Think Delirium" Delirium Toolkit
- European Delirium Association
- NICE Guidance (NG10) Violence (May 2015)
- "The Silver Book" Quality Care for Older People with Urgent and Emergency Care Needs

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