



PREVALENCE	Delirium is a common, but often overlooked syndrome among nursing home residents, especially those with pre-existing cognitive impairment. Approximately 25% of residents admitted from acute care settings will have new or persistent delirium that restricts their success in rehabilitation and prolongs their stay in the nursing home.
DEFINITION	Delirium is a state of acute confusion that develops quickly and can fluctuate over the course of a day. It is associated with disturbances of awareness, attention, cognition and perception, and is considered a medical emergency.
CAUSES OF DELIRIUM	<p>Causes of delirium are usually multiple in origin. Mentes (1995) refers to categorizing causal factors of delirium by these three factors:</p> <ul style="list-style-type: none"> • Systemic – conditions that alter brain processes (e.g. infections, drug toxicity, electrolyte imbalances or elimination problems) • Mechanical – conditions that block or restrict normal brain function (e.g. CVA, brain trauma) • Psychosocial-environmental – conditions that are external and non-biologic which impact a person’s wellbeing (e.g. sensory deprivation, over-stimulation, personal losses, age associated physiologic and psychosocial changes) <p>Chan and Brennan (1999) report that medications are the most common reversible cause of delirium, accounting for 22 to 39% of all cases.</p>
RISK FACTORS ASSOCIATED WITH DELIRIUM	<p>Advanced age is one of the most significant risk factors for the development of delirium, with an age of 80 or older being at greatest risk (Weinberger and Carnes, 1997). Another significant risk factor is the presence of existing baseline cognitive impairment. A person with dementia has a two to three times greater risk of developing delirium than a person with normal mental status (Shua-Haim et al., 2000).</p> <p>Additional risk factors include:</p> <ul style="list-style-type: none"> • Hypothermia • Low serum albumin • Visual impairment • Limited social interactions • Multiple prescription medications <p>(Chan and Brennan, 1999)</p>
BARRIERS TO RECOGNITION OF DELIRIUM	<p>Barriers related to recognizing Delirium include:</p> <ul style="list-style-type: none"> • Use of vague terminology within the medical community regarding delirium



**BARRIERS TO
RECOGNITION OF
DELIRIUM (CONT.)**

- Misdiagnosis – thought to be illness, depression, dementia or a normal consequence of aging
- Lack of useful and uncomplicated diagnostic tools
- Lack of awareness and understanding of delirium signs and symptoms within the nursing home

**FURTHER
READING AND
WEB RESOURCES**

A more detailed overview of Delirium can be obtained by contacting your state Quality Improvement Organization (QIO). Last accessed 04/08/2005
http://www.ahqa.org/pub/connections/162_694_2450.cfm

Chan D, Brennan NJ. Delirium: Making the diagnosis, improving the prognosis. *Geriatrics* Mar 1999; 54: 28-42.

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Quality Measures Resource Manual, January 2004, Version 4.6D.01. Updated 2/1/2004. Last accessed 04/08/2005
<http://www.medqic.org/Delirium>

Revised Long-Term Care Resident Assessment Instrument User's Manual, December 2002, Version 2.0, 3:112. Last accessed 04/08/2005
<http://www.cms.hhs.gov/MinimumDataSets20/>



Nursing Home Quality Initiative

FAST FACTS: DELIRIUM *Screening & Evaluation*

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WHAT IS SCREENING?

A question or test to determine if a person may or may not need further evaluation for a problem or condition. If the result of the screening is positive, it should trigger a comprehensive evaluation of a resident's problem or condition. If the result is negative, the facility should conduct periodic re-screening.

KEY STEPS IN SCREENING

The following are specific changes you can make in your facility regarding screening for delirium:

- Establish a policy to screen all new residents for delirium
- Document baseline mental status from family if able
- Use a standardized delirium screening tool to detect signs and symptoms of delirium (e.g. Mini-Mental Status Exam, Cognitive Capacity Screening Examination)
- Identify residents at high risk for delirium
- Establish a policy for conducting delirium assessment for all residents who screen positive for delirium symptoms or were identified as high-risk for delirium
- If resident is at high-risk for developing delirium monitor resident for any abrupt changes in cognition or level of awareness

WHAT IS EVALUATION?

A more in-depth assessment, or more testing, to collect additional information as to why a resident screened positively (e.g. assessment of identified causes of delirium).

KEY STEPS IN EVALUATION

Following are key steps related to evaluation of delirium:

- Use validated, standardized delirium assessment tools that identify underlying causes of four cardinal elements of delirium:
 - ⇒ acute onset and fluctuating course
 - ⇒ disorganized thinking
 - ⇒ inattention
 - ⇒ altered level of consciousness [e.g. Confusion Assessment Method (CAM)]
- Document all clinical findings, record test results and notify physician if symptoms of delirium are present



**FURTHER
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AND WEB
RESOURCES**

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http://www.ahqa.org/pub/connections/162_694_2450.cfm

Bair BD. Presentation and recognition of common psychiatric disorders in the elderly. Clinical Geriatrics. 2000

Chan D, Brennan NH. Delirium: Making the diagnosis, improving the prognosis. Geriatrics. Mar 1999; 54:28-42.

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<http://www.cms.hhs.gov/medicaid/mds20/raich3.pdf>



Nursing Home Quality Initiative

FAST FACTS: DELIRIUM

Interventions and Monitoring

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IMPORTANCE OF DELIRIUM INTERVENTION

The consequences of delirium are high morbidity and mortality, along with an enormous financial burden for the healthcare system. More specifically, delirium is responsible for increased length of hospital stays, increased nursing care, decreased ability to function, delayed rehabilitation, and more frequent institutionalization (Fick and Foreman, 2000).

KEY DELIRIUM INTERVENTIONS

Once delirium is recognized, appropriate interventions are necessary. Interventions essentially can be categorized into those that treat the physical symptoms or underlying causes and those that are supportive in nature.

Physical:

- Physician to determine and treat underlying cause of delirium
- Monitor and record vital signs
- Monitor and record fluid intake and output
- Provide adequate oxygenation
- Conduct cognitive assessment each shift

Supportive:

- Minimize over-stimulation
- Maintain safety with no use of physical restraints (unless deemed medically necessary)
- Provide familiar and consistent staff
- Encourage use of all assistive devices (eyeglasses, hearing aids, etc.)
- Re-orient and repeat explanations as necessary
- Maintain current routine (toileting, hygiene, sleep-wake cycles) as much as possible

MONITORING DELIRIUM

Delirium rating scales are instruments that help in determining the severity and symptoms of delirium and can be used to follow the course of the syndrome. Two well known rating scales are:

- The Confusion-Rating Scale (CRS) that evaluates resident behavior based on four domains:
 - ⇒ Orientation
 - ⇒ Communication
 - ⇒ Behavior
 - ⇒ Presence of perceptual disturbances
- The NEECHAM Confusion Scale which is a nurse-oriented instrument that facilitates rapid bedside measurement of normal functioning.



**MONITORING
DELIRIUM (CONT)**

Each scale has it's own advantages and disadvantages. It is advisable to determine which scale is appropriate to use in your own facility.

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Updated 2/1/2004. Last accessed 04/08/2005
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