Delirium Assessment and Care, protocol

Delirium Identification, Prevention and Treatment

Common Risk Factors for Delirium

<table>
<thead>
<tr>
<th>Patient/environment</th>
<th>Medical/health</th>
<th>Medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 75 or more</td>
<td>History of TIA/stroke</td>
<td>Poly pharmacy (5 or more meds)</td>
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<tr>
<td>Cognitive impairment</td>
<td>Surgery/anesthesia</td>
<td>Benzodiazepines</td>
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<tr>
<td>Past episode of delirium</td>
<td>Electrolyte imbalance</td>
<td>Narcotic analgesics</td>
</tr>
<tr>
<td>History of depression</td>
<td>Hypoxia</td>
<td>Cardiac drugs</td>
</tr>
<tr>
<td>Alcohol/drug withdrawal</td>
<td>Fever</td>
<td>Antipsychotics</td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>Unrelieved pain</td>
<td>Street drug use</td>
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<tr>
<td>Vision/hearing loss</td>
<td>Hypotension</td>
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<tr>
<td>Functional impairment</td>
<td>Infection</td>
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<tr>
<td>Relocation</td>
<td>Multiple co-morbidities</td>
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<tr>
<td>Restraints</td>
<td>Advanced illness</td>
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</tbody>
</table>

3 or more risk factors?

Complete Confusion Assessment Method (CAM)

CAM + (positive)
A. Acute Onset & fluctuating course
B. Inattention
C. Cognitive disturbances
D. Altered level of consciousness
Patient must exhibit behaviours from A and B and C or D

Assess contributing factors with PRISME

Implement PRISME nursing interventions

Nursing consults as indicated
- Psychiatric Liaison Team SPH
- Geriatric Outreach Team SPH

Reassess CAM and PRISME every 12 hours

CAM – (Negative)
Reassess every 12 hours and PRN

Notify most responsible physician within 1 hour

Physician Referral as indicated
- Psychiatry
- Geriatric Medicine if frail elderly
- Geriatric Psychiatry (MSJ)
Related Documents and Resources:
1. NCS6311 – Managing Unsettled Challenging Behaviours: Least Restraint Approach/PHC Non Residential Sites
2. NCS6053 - Alcohol Withdrawal protocol
3. CPF0500 – Corporate Policy – Consent
4. Hartford Institute for Geriatric Nursing Best Practice, Try this Series
   a. Issue 13 – Confusion Assessment Method (CAM)
   b. Issue D7 – Communication Difficulties: Assessment and Interventions
   c. Issue D8: Assessing and managing delirium in persons with dementia

Skill Level: Basic: RN, RPN or LPN

Need to Know
Delirium is characterized by a disturbance of consciousness and a change in cognition that develops over a short period of time. There is evidence from the history, physical exam, or laboratory findings that the disturbance is caused by direct physiological consequences of a general medical condition.

1. Delirium is a medical emergency.
2. Delirium results in higher incidence of in hospital mortality, increased hospital costs, longer length of stay, post discharge mortality, functional decline leading to institutionalization and dementia
3. Delirium is common in hospitalized patients (10%-85%)
4. Delirium is frequently unrecognized or misdiagnosed (70%)
5. Delirium can be predicted by identifying risk factors (See Algorithm)
6. Delirium can be accurately identified using the CAM Screening Tool (Confusion Assessment Method Appendix A)
7. Delirium can be prevented and the symptom severity reduced using non-pharmacological interventions (PRISME Appendix B)
8. Delirium can be treated with medications (referral to Psychiatry or Geriatric Medicine)
9. There are three different types of delirium
   a. Hyperactive delirium: overly alert, increased psychomotor activity, acutely responsive to the environment
   b. Hypoactive delirium: low level of psychomotor activity, may appear sedated or depressed
   c. Mixed delirium: fluctuation of hyperactive and hypoactive symptoms over brief or long periods

PRACTICE GUIDELINE

Assessment & Interventions
All adults admitted to PHC facilities with 3 or more risk factors are screened for delirium using CAM.
- Notify the most responsible physician within 1 hour of a positive CAM screen
- All adults who screen positive for delirium should be further assessed by the nurse using the PRISME framework. Use the PRISME Framework to guide nursing interventions until delirium clears
NURSING PRACTICE STANDARD

NCS6323 – Delirium

- The most responsible physician will make a decision about treatment and if required will refer to Psychiatry or to Geriatric Medicine for the frail elderly.
- Use the CAM to screen for delirium every 12 hours as long as there are 3 or more risk factors present. Note: Residential Care: screen if behaviour or condition change.
- Refer to NCS6311 for managing unsettled behaviour

Patient/Family Education & Resources:
- VCH/PHC Patient Health Education Materials Catalogue:
  a) Clearing the confusion: Information for Families (CA.900.C55)
  b) Delirium: What it is and how you can help (CA.900.D379)

Documentation:
1. Document presence of positive risk factors, CAM results and PRISME interventions on Delirium Screening and Care Plan (PHC NF351(T)) or other site specific tool
2. After the initial first CAM + screen document the following information on the progress notes:
   - CAM + and identify the specific descriptors for 3 and or 4. (These are the bolded identifiers in sections 3 and /or 4 on the CAM screening tool Appendix A).
   - Specific PRISME factors that are abnormal and may be contributing to delirium. (Appendix B)
   - Document time most responsible physician was notified
   - Document plan in terms of referral or interventions
   - Document nursing action(s) taken
3. Evaluation
   - Document patient response to the intervention strategies in terms of hyperactive/hypoactive behaviors and changes in cognition
   - Reassess patient for risk factors +/- CAM if indicated.

References:
3. www.careforelders.ca
NURSING PRACTICE STANDARD


Persons/Groups Consulted:
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Elizabeth Loewen Clinical Nurse Specialist Elder Care MSJ
Clinical Nurse Leaders MSJ Medicine and Geriatric Psychiatry

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Members of Geriatric Consultation Outreach Team

Approved/Review/Revision:
February 2004
Revised: February 2005
March 2010
September 2011
January 2012
July 2012 (minor update)

Appendices (Acute Care tools)
Appendix A – Confusion Assessment Method (CAM Screen)
Appendix B – PRISME Assessment and Interventions
Appendix C – Delirium Screening and Care Plan (PHC-NF351 (T))
Appendix A: Confusion Assessment Method (CAM)

A positive screen requires both 1 and 2 and at least one of 3 or 4. If 1 or 2 is negative, the screen is negative. If in doubt, consider the screen positive and proceed according to the Delirium Algorithm.

**ACUTE ONSET + FLUCTUATING COURSE**

1. **Consider:**
   - Has the patient mental status changed from baseline (reported by nurse, patient or family)?
   - Has behavior changed through the shift (or course of observation)?

   **PLUS**

2. **Consider:**
   - Does patient demonstrate difficulty focusing attention, following conversation or difficulty following instructions?
   - Is patient easily distracted, attention wander, make poor eye contact or stare into space?

   **AND AT LEAST ONE OF “3” OR “4”**

3. **COGNITIVE DISTURBANCES**
   - **Disorganized Thinking**
     Consider:
     - Disorganized thinking or incoherence?
     - Ramble?
     - Switch subject of conversation unpredictably?
     - Illogical/unclear ideas?

   - **Disorientation**
     Consider:
     - Orientation to person, place and time?

   - **Memory Impairment**
     Consider:
     - Inability to recall events?
     - Inability to follow instruction?

   - **Perceptual Disturbances**
     Consider:
     - Visual or auditory hallucinations?
     - Misinterpreting objects or events?

4. **ALTERED LEVEL OF CONSCIOUSNESS**
   - **Increase or Decrease in Level of Consciousness**
     Consider:
     - Hypervigilance or hyperalertness?
     - Lethargy, stupor, or coma?

   - **Psychomotor Agitation/Retardation**
     Consider:
     - Appearing antsy, picking or pulling at surroundings, restless, sluggish, or pacing?

   - **Altered Sleep/Wake Cycle**
     Consider:
     - Awake for extended periods during the night and asleep during day?
     - Excessive sleeping?
### NURSING PRACTICE STANDARD

**Appendix B**

#### NCS6323 – Delirium

<table>
<thead>
<tr>
<th>P</th>
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<th>M</th>
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<tbody>
<tr>
<td><strong>Pain</strong></td>
<td>• Assess pain level hourly or PRN</td>
<td>• Implement and assess effectiveness of pain management strategies</td>
<td>• Narcotic</td>
<td>• Non-narcotic</td>
<td>• Local or regional block</td>
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<td></td>
<td>• Non-pharmacological</td>
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<td></td>
<td></td>
<td>• Determine baseline cognition (MMSE &amp;/or MOCA)</td>
<td>• Acknowledge emotions</td>
<td>• Encourage verbal expression</td>
<td>• Use clear, short, simple instructions &amp; explanations</td>
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<td></td>
<td></td>
<td></td>
<td>• Avoid confrontations</td>
<td></td>
<td></td>
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<tr>
<td><strong>Psychosocial</strong></td>
<td></td>
<td>• Promote “family” involvement</td>
<td>• Determine ability to contact by phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Determine baseline function</td>
<td>• Determine ability to cope with stress/stimuli</td>
<td>• See NCS6311 for de-escalation strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Retention</strong></td>
<td>• Determine baseline bladder routine</td>
<td>• Use a bladder scan to determine retention and post void residuals</td>
<td>• Offer toileting hourly</td>
<td>• Monitor VS</td>
<td>• Convey attitude of warmth, calmness, and firm kindness</td>
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<tr>
<td></td>
<td>• Use D/C Foley catheter if medically appropriate</td>
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<td></td>
<td></td>
<td>• Provide information, re-orientate and support in the context of a safe environment</td>
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<tr>
<td></td>
<td>• Follow Urinary Catheter Management Protocol</td>
<td></td>
<td></td>
<td></td>
<td>• Provide watch, clock, calendar, familiar objects/pictures from home, calming music as appropriate</td>
</tr>
<tr>
<td><strong>Restraint</strong></td>
<td>• Use least restrictive measures to prevent self harm</td>
<td>• Create a hazard free environment</td>
<td>• Increase supervision</td>
<td>• Early mobilization promote self-care, toileting</td>
<td>• Avoid hyperactive – reduce stimuli,</td>
</tr>
<tr>
<td></td>
<td>• Consider patient family member/companion/close or constant care for surveillance and safety</td>
<td>• Provide schedule of day’s events</td>
<td>• Offer snacks between meals if indicated in nutrition consult</td>
<td>Daily pressure sore risk assessment</td>
<td>• Evaluate the use of radios and TV</td>
</tr>
<tr>
<td><strong>Infection</strong></td>
<td>• Assess for UTI, pneumonia, C. Diff, purulent wound.</td>
<td>• Monitor WBC</td>
<td>• Determine time of last BM. Palpate &amp; auscultate abdomen. Rectal check PRN</td>
<td>• Hypoxia: O₂ Sats at 92% unless medically contraindicated</td>
<td>If hypoactive – increase stimuli as tolerated. Activate and ambulate</td>
</tr>
<tr>
<td></td>
<td>• Use antibiotics as indicated</td>
<td></td>
<td>• Maintain normal elimination pattern</td>
<td>• Screen for drug/alcohol intake</td>
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<tr>
<td></td>
<td></td>
<td>• Implement appropriate bowel protocol i.e. Elder Care Bowel Protocol</td>
<td></td>
<td>• Monitor effects of PRN’s</td>
<td></td>
</tr>
<tr>
<td><strong>Intake</strong></td>
<td>• Dehydration record 24 hour intake and output</td>
<td>• Offer fluids hourly (minimum 1500mL/day unless contraindicated)</td>
<td>• Offer snacks between meals if indicated in nutrition consult</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
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<tr>
<td></td>
<td>• Offer toileting hourly</td>
<td>• Screen for dysphagia and consult with OT/dietician PRN</td>
<td>• Monitor chemistry, electrolytes, glucose</td>
<td>• Mobility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Consider patient family member/companion/close or constant care for surveillance and safety</td>
<td>• Offer fluids hourly (minimum 1500mL/day unless contraindicated)</td>
<td>• Screen for drug/alcohol intake</td>
<td>• Elder Care Bowel Protocol</td>
<td></td>
</tr>
<tr>
<td><strong>Sleep</strong></td>
<td>• Promote normal sleep wake cycle</td>
<td>• Short day naps</td>
<td>• Periods of 4 hours uninterrupted sleep at night</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
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<tr>
<td></td>
<td>• Convey attitude of firm kindness</td>
<td>• Monitor VS</td>
<td>• Convey attitude of firm kindness</td>
<td>• Mobility</td>
<td></td>
</tr>
<tr>
<td><strong>Medication</strong></td>
<td>• Review recent medication changes</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Elder Care Bowel Protocol</td>
<td></td>
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<tr>
<td></td>
<td>• Screen for drug/alcohol intake</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Mobility</td>
<td></td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>• Convey attitude of warmth, calmness, and firm kindness</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Elder Care Bowel Protocol</td>
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<tr>
<td></td>
<td>• Provide information, re-orientate and support in the context of a safe environment</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Mobility</td>
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<tr>
<td></td>
<td>• Provide watch, clock, calendar, familiar objects/pictures from home, calming music as appropriate</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Elder Care Bowel Protocol</td>
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<td></td>
<td>• Provide schedule of day’s events</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Mobility</td>
<td></td>
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<tr>
<td></td>
<td>• Avoid room changes</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Elder Care Bowel Protocol</td>
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<td></td>
<td>• Room should be quiet with adequate lighting</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Mobility</td>
<td></td>
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<tr>
<td></td>
<td>• Reduce shadows at night</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Elder Care Bowel Protocol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If Hyperactive – reduce stimuli,</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Convey attitude of firm kindness</td>
<td>• Mobility</td>
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<td>• Evaluate the use of radios and TV</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Elder Care Bowel Protocol</td>
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<td></td>
<td>• If Hypoactive – increase stimuli as tolerated. Activate and ambulate</td>
<td>• Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)</td>
<td>• Mobility</td>
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<td></td>
<td>• Purposeful hourly rounding</td>
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</table>
# DELIRIUM SCREENING AND CARE PLAN

## 1. Risk Factors (Check all that apply)

<table>
<thead>
<tr>
<th>Patient/Environmental Risks</th>
<th>Medical Risks</th>
<th>Medication Risks</th>
</tr>
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<tbody>
<tr>
<td>Age 75 or older</td>
<td>History of TIA or CVA</td>
<td>Receiving 5 or more meds</td>
</tr>
<tr>
<td>Cognitive Impairment</td>
<td>Surgery/Anesthesia</td>
<td>Benzodiazepines</td>
</tr>
<tr>
<td>Previous Delirium</td>
<td>Electrolyte Imbalance</td>
<td>Narcotic Analgesics</td>
</tr>
<tr>
<td>History of Depression</td>
<td>Hypoxia</td>
<td>Cardiac Drugs</td>
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<tr>
<td>Alcohol/Drug Withdrawal</td>
<td>Fever</td>
<td>Antipsychotics</td>
</tr>
<tr>
<td>Use of Restraints</td>
<td>Unresolved Pain</td>
<td>Street Drug Use</td>
</tr>
</tbody>
</table>

Based on above: □ Patient has 3 or more risk factors, initiate CAM screening every 12 hours and initiate PRISME
□ If patient has less than 3 risk factors, do NOT initiate CAM but continue to monitor for changes in risk factors and initiate appropriate PRISME interventions to mitigate risk.

Screened by: ___________________________    Date: ___________    Time: ___________

## 2. CAM Screening Documentation:

For CAM + (positive) result, patient must exhibit behavior from both 1 and 2 and either 3 or 4

### 2.1 Reassess CAM every shift

| Date: | Shift | D | N | D | N | D | N | D | N
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### 2.2 Time

1. Acute onset and fluctuating course

   - Behavior fluctuates during shift
   - Shifts from baseline

2. Inattention

   - Difficulty focusing attention
   - Easily distracted
   - Trouble following conversation

3. Cognitive Disturbances

   - Disorganized thinking (repetitive, rambling)
   - Disorientation
   - Memory impairment
   - Perceptual disturbances

4. Altered Level of Consciousness (LOC)

   - Increased LOC (euphant)
   - Decreased LOC (e.g., stupor, coma)
   - Psychomotor agitation
   - Psychomotor retardation
   - Altered sleep / wake cycle

**Indicate (+) (positive) or – (negative): CAM Result:** ___________

**Initials:** ___________

## 3. PRISME Nursing Interventions (Check all that apply)

### P Pain

- Use 24 hour Pain Management Flow Sheet (PHC-NF219)
- Provide regular analgesia (narcotic & non-narcotic)
- Use non-pharmacological pain management strategies (comfort measures)

### R Restraint

- Bladder scan PRN. I & O catheter if required
- Remove indwelling catheter ASAP
- Regular toileting Q2H

### I Infection

- Assess for UTI, Pneumonia, wound infection
- Monitor V/S every __ h

### S Sleep

- Ensure 4-hour sleep periods
- Daytime rest period
- Ensure glasses, hearing aids & dentures fit well and work
- Social isolation
- Encourage family participation

### M Medication

- Review recent med changes
- Alcohol & drug screen
- Avoid at risk meds
- Monitor I & O, labs, O2, Sat. blood sugar
- Ensure agitation is treated

### E Mobility

- Encourage self-care, toileting, early ambulation, up for meals
- Braden Scale for predicting Sore Risk (PHC-EL29)
- Provide schedule of daily activities
- Avoid restraints
- Encourage ambulate
- Hypoactive – increase stim as tolerated, Activate & ambulate
- Hyperactive – reduce stim, especially at night

**If you initial this form, you must complete the Interdisciplinary Signature Sheet at the front of the patient chart.**

Form No. PHC-NF351(T) (R. Jan 4-12)
DELIRIUM SCREENING AND CARE PLAN

Delirium Identification, Prevention and Treatment – Algorithm

COMMON RISK FACTORS FOR DELIRIUM

- Patient/Environment
  - Age 75 years or older
  - Cognitive impairment
  - Previous delirium
  - History of depression
  - Alcohol/drug withdrawal
  - Sleep disturbance
  - Vision/hearing loss
  - Functional impairment
  - Relocation
  - Use of restraints

- Medical/Health
  - History of TIA/CVA
  - Surgery/Anesthesia
  - Electrolyte imbalance
  - Hypoxia
  - Fever
  - Unrelieved pain
  - Hypotension
  - Infection
  - Multiple co-morbidities
  - Advanced Illness

- Medication
  - Receiving 5 or more medications
  - Benzodiazepines
  - Narcotic analgesics
  - Cardiac drugs
  - Anti-psychotics
  - Street drug use

3 or more risk factors

Complete Confusion Assessment Method (CAM)

CAM + (positive)
1. Acute onset and fluctuating course
2. Inattention
3. Cognitive disturbances
4. Altered level of consciousness
   Patient must exhibit behaviours from 1 and 2 AND 3 or 4.

Assess contributing factors with PRISME

Implement PRISME Nursing Interventions

Nursing consults as indicated:
- Psychiatric consult Liaison (SPH)
- Geriatric consult Outreach Team (SPH)

Reassess CAM and PRISME every 12 hours

CAM – (negative)
Reassess every 12 hours and PRN

Notify most responsible Physician within 1 hour of initial CAM + (positive)

Physician referral as indicated:
- Psychiatry
- Geriatric medicine if frail elderly
- Geriatric psychiatry (MSJ)