

## PROFESSIONAL PROCESS

### GOALS/OUTCOMES:

- A. Patient will demonstrate outcomes below:
1. Improved cognitive ability.
  2. Improved functional ability.
  3. Restorative sleep/rest.
- B. Patient/family/significant other (S.O.)/caregiver will verbalize and/or demonstrate an understanding of teaching/learning goals listed below: (Refer to Education Outcome Record)
1. Personal risk factors and signs/symptoms related to confusion (acute and chronic).
  2. Effective coping strategies.
  3. Effective communication approaches with staff/family.
  4. Factors which promote/alter orientation.
  5. Treatment and preventive interventions.
  6. Correct identification of environment/repetitive reminders of environment.
  7. Activity restrictions due to chronic/acute confusion (e.g., getting out of bed independently).
  8. Safe basic/instrumental activities of daily living (BADL/IADL).
  9. Lifestyle alterations, present and future (e.g., caution with new medications, visible daily schedule, communication techniques, behavior changes, safety precautions).
  10. General goals (room/unit routine, pain, medication, diagnostic tests/procedures, dietary modifications, hygiene, infection prevention, rehabilitation, medical equipment/supplies, tobacco cessation, resources for support).

### ASSESSMENT/INTERVENTIONS/CLINICAL REASONING/DECISION-MAKING:

- A. Assess and document readiness and ability to learn, learning needs and preferences. (Refer to Pre-Teaching Assessment on Education Outcome Record)
- B. Collaborate with interdisciplinary resources related to significant changes in patient status and for the continuum of care (e.g., Primary Care Physician, Gerontologist, Neurologist, Infectious Disease Specialist, Behavioral Health Services, Pain Management Services, Nursing, Social Work/Services, Dietitian/Nutrition Services, Pastoral Care, Pharmacy, Respiratory Therapy, Occupational Therapy, Physical Therapy, Speech Language Pathology, Home Care Services).
- C. Identify psychosocial, cultural, sexual, age-appropriate, developmental and spiritual well-being related to the human response of the patient/family.
- D. Mutually plan/develop goals, assess and document progress toward goals.
- E. Identify risks to safety.
- F. Implement appropriate interventions as follows and document:
1. Correlate cognitive status with laboratory values (e.g., urine, blood, sputum culture and sensitivity), medications, fluid/electrolyte status, respiratory status, bowel status, vital signs (VS), current medical condition/disease process, length of hospitalization, amount of social interaction, mental health history, pain, environment, related risk factors and baseline assessment data (including prehospital cognitive function, neurological function and physical function). (1; 11; 14-16; 20; 31; 35) {Grade C}
  2. Perform a cognitive evaluation to determine patient's ability to problem solve. (1; 4; 11; 13; 17; 29; 32; 35; 40) {Grade C}
  3. Collaborate with healthcare team, patient/family/caregiver in determining and treating factors contributing to chronic/acute confusion; emphasize the importance of establishing a baseline. (3; 4; 11; 16; 17; 28; 32; 35) (Grade B)
  4. Identify potentially stressful situation(s). (5; 8; 29; 35) {Grade C}
  5. Promote optimal communication for therapeutic benefit in an attempt to decrease feelings of isolation, helplessness and/or fear: (3; 17; 29; 32) {Grade C}
    - provide glasses/hearing aids, magnifying lens, familiar objects, visible plan for daily schedule/intermittent rest time/name of caregivers, personal listening system as appropriate. (16; 28; 40) {Grade C}
    - provide calm, gentle verbal communication, physical touch and good eye contact. (13; 17; 32; 35) {Grade C}
    - utilize communication approaches that enable clear thinking processes (e.g., short sentences, repetition, writing on tablet, speaking slowly, allowing time for thinking). (17; 28) {Grade B}
  6. Provide a calm, secure, nonstimulating environment (e.g., noise reduction, avoid bright lighting, massage). (1; 5; 28; 29; 32; 40) {Grade B}
    - provide memory orientation tools (e.g., clocks, calendars, family pictures, open curtains/blinds during day, orientation to person, place, purpose of admission and time, call by name) (4; 29; 32) {Grade C}

7. Incorporate prehospitalization lifestyle; re-establish patient's routine (e.g., bathing, eating, diversional activity, sleep patterns, familiar pillow/clothing): (4; 5; 17; 28; 32; 40) {Grade B}
  - Encourage sleep/rest enhancement (e.g., home routine, naps during day, noise reduction, relaxation techniques, warm milk, warm blankets, back rub, music, cluster care for uninterrupted sleep/rest). {Grade C}
  - provide continuity of staff/caregivers. (29; 32; 34; 35) {Grade C}
  - encourage presence of family members, familiar objects from home; evaluate the need for a sitter/attendant. (1; 5; 11; 13; 16; 17; 29; 32; 35) {Grade C}
8. Promote functional ability, independence and sense of control while ensuring patient safety: (4; 5; 29; 32; 35) {Grade C}
  - involve patient in their care, as appropriate. (4; 5; 29; 32; 35) {Grade C}
  - increase patient activity to highest possible level (e.g., ambulation, self-feeding, range of motion, up in chair). {Grade C}
  - provide timely removal of invasive devices and unfamiliar equipment (e.g., indwelling catheters). {Grade C}
  - offer toileting at least every two hours, or as needed; utilize bedside commode as appropriate. {Grade C}
  - move patient close to nursing station, place all personal belongings within reach, use of bed alarm. {Grade C}
  - minimize use of restraints. (4; 5; 35) {Grade C}
9. Promote adequate hydration, nutrition and bowel function: {Grade C}
  - maintain accurate intake and output measurements. {Grade C}
  - assist with food/fluids at mealtime/throughout day (e.g., meal set-up, feeding). {Grade C}
  - Identify home bowel routine [e.g., time of day, frequency, potential stimulus (warm liquids, prune juice)]; promote bowel function (e.g., privacy, stool softeners/laxatives). (14) {Grade C}
10. Review current medications [e.g., prescription, nonprescription, supplements (herbal, vitamin, mineral)]; monitor for side effects and interactions: {Grade C}
  - request patient/family/caregiver bring all medications in for reconciliation against stated medication list. (34) {Grade C}
  - collaborate with healthcare team regarding treatment-related pharmacotherapy options. (14; 15; 31) {Grade C}
11. Identify/utilize positive coping strategies. (8; 16; 29) {Grade C}
12. Address concerns, provide education, offer reassurance and provide support to patient and family: (3-5; 8; 17; 29; 32) {Grade C}
  - utilize anticipatory guidance/explanation (e.g., provide information on realistic expectations). (26) {Grade C}

Clinical Practice Guidelines represent a consistent/standardized approach to the care of patients with specific diagnoses. Care should always be individualized by adding patient specific information to the Plan of Care.

## GENERAL INFORMATION: ACUTE/CHRONIC CONFUSION

### A. CLINICAL DESCRIPTION:

#### 1. Definitions:

- Acute Confusion: A disturbance of consciousness with reduced ability to focus, sustain or shift attention; a change in cognition or the development of a perceptual disturbance that occurs over a short period of time and tends to fluctuate over the course of the day.
- Chronic Confusion: Irreversible, long-standing and/or progressive deterioration of intellect and personality characterized by decreased ability to interpret environmental stimuli, decreased capacity for intellectual thought processes; manifested by disturbances of memory, orientation and behavior. (16; 36; 39; 40)

### B. RELATED RISK FACTORS: (2; 3; 5; 8-11; 13-15; 17-20; 22; 23; 27-29; 31; 32; 35-40)(6; 7; 12; 16; 21; 24; 25; 30; 33; 36; 41)

#### PERSONAL

##### Acute confusion

- advanced age.  
**Note:** *The risk of acute confusion increases with age, but is not a normal aging change*
- sensory impairments (e.g., auditory, visual)
- alcohol/substance abuse
- stress

##### Chronic confusion

- ineffective assistive devices (e.g. glasses/hearing aids)
- anxiety/panic
- fear/insecurity
- family history
- head trauma
- hearing impairment
- poor vision

#### PHYSIOLOGICAL

##### Acute confusion

- pain
- fluid volume deficit, dehydration
- electrolyte imbalance(s) (e.g., hyponatremia)
- nutritional deficiency(s)
- uncontrolled diabetes
- organ failure (e.g., renal, liver)
- infections (e.g., upper respiratory infection, urinary tract infection)
- impaired physical or functional ability
- history of mental illness (e.g., depression)
- hypoxia/anoxia
- **History:** dementia, depression, stroke, heart failure, epilepsy, cardiogenic or septic shock, human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), infection, smoking

#### PHYSIOLOGICAL

##### Acute confusion

- cancer
- hypo/hyperthermia
- increased severity of illness
- metabolic disorders
- toxins (e.g. toxic psychosis)
- hypoglycemia
- sepsis
- vitamin deficiency

##### Chronic confusion

- hypertension
- smoking
- history of stroke
- renal failure
- malnutrition/dehydration/nutritional deficiency
- psychiatric disorders (e.g., depression/schizophrenia)
- alcohol abuse
- male gender
- Alzheimer's disease
- Parkinson's disease
- Huntington's disease
- Pick's disease
- head injury
- vascular dementia
- cortical Lewy body disease
- HIV/AIDS
- Creutzfeldt-Jakob disease
- neoplastic brain tumor
- neurosyphilis
- Wernicke-Korsakoff syndrome

#### ENVIRONMENTAL

##### Acute confusion

- relocation (including unit changes)
- sensory overload or deprivation
- limited social contacts

##### Chronic confusion

- unfamiliar surroundings/routines
- absent support system
- external stimuli (e.g., TV, visitors, noise, bright lights)
- sensory deprivation
- change in routine (e.g., mealtime, bed time, medication administration, exercise time)

#### TREATMENT RELATED

##### Acute confusion

- polypharmacy
- current hospitalization
- recent medication changes (e.g., home medications not resumed, new medications added or patient taking own medications in addition to medications prescribed in hospital)
- recent surgical procedure/anesthetics
- sleep disturbances

##### Chronic confusion

- medications/side effects of medications (e.g., sedatives, narcotics, tranquilizers)
- treatment and diagnostic procedure overload

### C. SIGNS AND SYMPTOMS: (3-5; 8-11; 17; 18; 29; 32; 36; 37; 39; 40)

#### 1. Acute confusion:

- a. Disturbances of consciousness, attention, cognition, emotions, sleep-wake cycle, psychomotor activity and perception.
- b. Decreased clarity of awareness of environment.
- c. Decreased ability to focus, sustain or shift attention.
- d. A change in cognition such as memory deficit, disorientation, language disturbance.
- e. Perceptual disturbances (e.g., misinterpretations, illusions, hallucinations).
- f. Emotional disturbances (e.g., anxiety, fear, depression, irritability, anger, euphoria, apathy).
- g. Usually develops over a short period of time (hours to days).
- h. Duration of symptoms may range from less than one week to more than two months; typically, symptoms resolve within 10 to 12 days.

#### 2. Chronic confusion:

- a. Altered interpretation/response to stimuli
- b. Clinical evidence of organic impairment
- c. Progressive/long-standing cognitive impairment
- d. Altered personality
- e. Impaired memory (short and long-term)
- f. Impaired socialization
- g. No change in level of consciousness
- h. Inability to recognize objects/faces/other sensory information
- i. Perceptual disturbances (e.g., delirium, paranoia, hallucinations)
- j. Emotional disturbances (e.g., anger, overreacting, aggressive, demanding, restlessness/agitation)
- k. Physical disturbances (e.g., wandering at night, incontinence)

### D. ADDITIONAL INFORMATION: (11; 13; 17; 18; 40)

#### 1. Acute confusion:

- a. There are three common subtypes of acute confusion: hyperactive, hypoactive and mixed. The signs/symptoms of each are listed below:
  - Hyperactive: verbal and/or physical aggression, restlessness, irritability, easily distracted, mood lability.
  - Hypoactive: lethargy, somnolence, withdrawal, clouded inattention, slow speech, apathy, decreased responsiveness to stimuli.  
Note: This type often goes unrecognized as the patient is "quiet" and not disruptive to staff routines.
  - Mixed: signs and symptoms may be evident from both hyperactive and hypoactive acute confusion.
- b. A variety of scales to measure confusion and/or identify risk for delirium have been developed [e.g., CAM (Confusion Assessment Method), CAM-ICU (Confusion Assessment Method Intensive Care Unit version), NEECHAM Confusion Assessment Scale].
- c. Acute confusion is not uncommon. The prevalence of acute confusion in the hospitalized medically ill ranges from 10 to 30 percent; among hospitalized elders incidence of acute confusion has been reported as high as 80 percent.

#### 2. Chronic confusion:

- a. A variety of scales to measure chronic confusion are commonly used (e.g., Mini-Mental State Exam, Mini-Cog, The Royall Clock Drawing Test and the Geriatric Depression Scale).
- b. Various medical/laboratory testing may also be done to determine cause of chronic confusion [e.g., noncontrast computed tomography brain scan (CT scan), Metabolic Panel, CBC, Serum B<sub>12</sub> level, Thyroid profile].

### E. PATIENT/FAMILY RESOURCES:

1. Medline Plus: <http://www.nlm.nih.gov/medlineplus/ency/article/003205.htm>

### F. SAFETY CONSIDERATIONS AND INITIATIVES:

#### 1. Assessment/Communication:

##### The Joint Commission:

##### 2011 Hospital Accreditation Standards:

- Rights and Responsibilities of the Individual:  
**Standard RI.01.01.01:** The hospital respects, protects, and promotes patient rights.  
**Standard RI.01.01.03:** The hospital respects the patient's right to receive information in a manner he or she understands.
- Provision of Care:  
**Standard PC.01.02.01:** The hospital assesses and reassesses its patients.  
**Standard PC.01.02.03:** The hospital assesses and reassesses the patient and his or her condition according to defined time frames.  
**Standard PC.01.03.01:** The hospital plans the patient's care.  
**Standard PC.02.01.21:** The hospital effectively communicates with patients when providing care, treatment, and services.  
**Standard PC.02.03.01:** The hospital provides patient education and training based on each patient's needs and abilities.

##### The Joint Commission International:

##### Accreditation Standards for Hospitals, 4th ed:

- Patient and Family Rights: **Standard PFR.5:** All patients are informed about their rights and responsibilities in a manner and language they can understand.
- Assessment of Patients:  
**Standard AOP.1:** All patients cared for by the organization have their health care needs identified through an established assessment process.

**Standard AOP.2:** All patients are reassessed at intervals based on their condition and treatment to determine their response to treatment and to plan for continued treatment or discharge.

- Management of Communication and Information:

**Standard MCI.2:** The organization informs patients and families about its care and services and how to access those services.

**Standard MCI.3:** Patient and family communication and education are provided in an understandable format and language.

- International Patient Safety Goals: **IPSG 2:** Improve Effective Communication

National Quality Forum:

- Safe Practices for Better Healthcare – 2010 Update, Safe Practice 12, Ensure that care information is transmitted and appropriately documented in a timely manner and in a clearly understandable form to patients and to all of the patient's healthcare providers/professionals, within and between care settings, who need that information to provide continued care.

2. **Functional Status:**

The Joint Commission:

2011 Hospital Accreditation Standards:

- Provision of Care:

**Standard PC.01.02.01:** The hospital assesses and reassesses its patients.

**Standard PC.01.02.03:** The hospital assesses and reassesses the patient and his or her condition according to defined time frames.

The Joint Commission International:

Accreditation Standards for Hospitals, 4th ed.:

- Assessment of Patients: **Standard AOP.1.6:** Patients are screened for nutritional status and functional needs and are referred for further assessment and treatment when necessary.

G. This guideline could potentially be used in conjunction with any Medical Diagnosis and/or Human Response Clinical Practice Guideline.

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