



Behavior, Mood, Cognition, and Delirium-Related Triggers

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Approaching The Issues

- Issues arise by several routes
 - Identified via routine assessment
 - Identified in relation to a specific episode, incident, problem, situation, or risk
- Common approach works well, regardless



Combining Approach to Triggers

- Makes sense to consider together, before going off in diverse directions
 - 1-Delirium
 - 2-Cognitive loss
 - 4-Communication
 - 7-Psychosocial well being
 - 8-Mood state
 - 9-Behavioral symptoms
 - 17-Psychopharmacological medications



Why Combined Approach Makes Sense Biologically

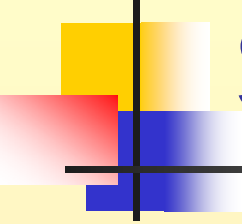
- Consistent with biology
- Brain and body function continually interact and influence one another
- Medications usually affect more than one aspect of body and brain function
 - Regardless of specific intended purpose
- Behavior ultimately is result of aggregate of multiple precursors
 - Care requires knowledge of precursors



Key Concepts

- Altered mental function or problematic cognition, behavior, and mood
 - Symptoms or syndromes (collections of signs and symptoms) needing careful evaluation and thoughtful management
- Disruptive or problematic behavior itself is not an illness or disease
- Not advisable just to manage or care plan symptoms without clarification

Managing Behavior and Mood Symptoms



- Many situations can be readily addressed with a careful assessment and systematic approach
 - Almost always time to think it through
 - Helps avoid (re)hospitalization
- Often unhelpful reflexive responses
 - Send the patient to the ER
 - Call the police
 - Get a psychiatric consultation
 - Get a urine culture



Psychiatric Practitioners

- Rarely essential to diagnosing delirium
- Psychiatrist depends on symptom history details
- Overreliance on psychiatric consultation for behavior, mood, and altered mental function may be problematic
 - If substitutes for or delays prompt recognition and management of medical causes



Psychiatric Practitioners

- Use “psych consults” judiciously
 - Involvement sometimes helpful, sometimes unnecessary or insufficient or not readily available
- Many of the causes are medical / medication-related
 - Shouldn't need to depend on psychiatric practitioners for first steps of care process
 - Including detailed data gathering and problem definition

Behavioral and Mood Symptoms



- Typically have diverse, often coexisting causes, e.g.
 - Acute or chronic medical and/or psychiatric illnesses
 - Anxiety or fear triggered by a situation or illness
 - Sensory deficits
 - Pain, thirst, hunger
 - Adverse medication effects



Care Delivery Process

- Recognition / Assessment
 - Problem definition
- Diagnosis / Cause identification
 - Goals identification
- Selecting interventions, treatments
- Monitoring



Care Delivery Process

- Follow the steps
- Incorporate information from the MDS and other sources at each step
- Use results at each step as basis for subsequent steps
- Obtain additional information as indicated
- Resist temptation to intervene prematurely
 - Educated hypothesis, based on effective clinical problem solving and decision making, is not same as a blind guess



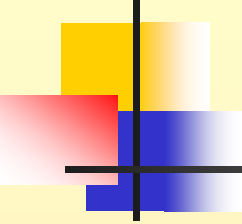
RECOGNITION



Recognition

- *How can we*
 - *Identify clearly and correctly a person's behavior, mood, cognition, and function?*
 - *Distinguish problematic behavior and mood, and altered mental function?*

Recognition Phase: Goals and Principles



■ Principles

- Identify and tell the story (sequence of symptom details)
- Characterize problems and risks in enough detail to permit subsequent steps
- Don't be led down the wrong path by limiting scope of details or discussion
 - For example, don't overlook medication side effects or hypothyroidism by jumping too quickly to conclusion of depression or exacerbation of dementia



Assessment Challenges

- Behavior is a symptom, like others
 - Unlike many other symptoms or condition changes, problematic behavior often affects other patients and staff
 - Often produces a sense of alarm and urgency to stop the symptom ASAP
- Professional approach
 - Important to take same approach to assess behavioral symptoms and impaired mood and mental function as other symptoms



Practitioner Roles

- Many disciplines involved in assessing and managing problematic behavior, mood, and mental function
- Physicians and other health care practitioners have critical role
 - Correct problem definition and cause identification
 - Sorting out treatable causes with multiple consequences



Key Step: Identify Situation

- *Identify current behavior, mood, cognition, and function*
- Review recent and previous history
 - MDS does not provide history details
- Observe patient in various situations
- Identify and document pertinent details
 - How the patient looks, thinks, and acts
 - Affect, appearance, insight, judgment, sensorium, thought content & process



Define the Situation

- *Identify current behavior, mood, cognition, and function*
- Several routes to identifying possible behavior or mood issues or altered mental function (including delirium)
 - Symptoms
 - Patient exhibits problematic behavior or change in mental function



Identify Current Situation

- Several routes (continued)
 - Current diagnoses, e.g.
 - Dementia, schizophrenia, or bipolar disorder
 - History of symptoms
 - History of behavioral symptoms / episodes
 - Medications
 - Patient receiving psychopharmacologic medications or other medications that can affect behavior and mental function
 - Especially, any "anti-" medications



Details Count

- Why is it important to identify behavior, mood, and mental function in detail?
 - That is, more specifically than “agitated,” “combative,” “confused,” “having a psych problem,” “off the wall,” etc.
- What are some examples of how accurate, descriptive terminology can make a difference in successful treatment and outcomes?



Details Count

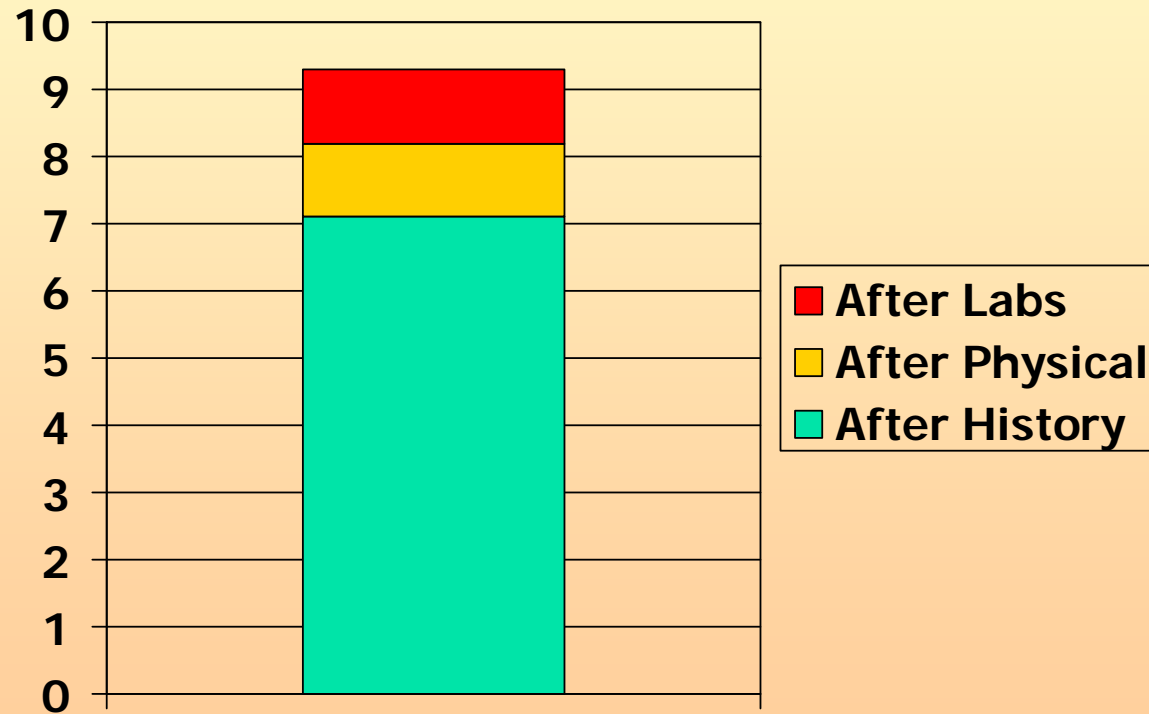
- Symptom details are essential
- Example
 - “Agitation” commonly used to describe diverse neuropsychiatric symptoms including irritability, restlessness, aggression, screaming, rummaging, resistance to care, and disinhibition
 - Common practice of documenting or treating “agitation” lacks clinical value
 - Needs more precise symptom description



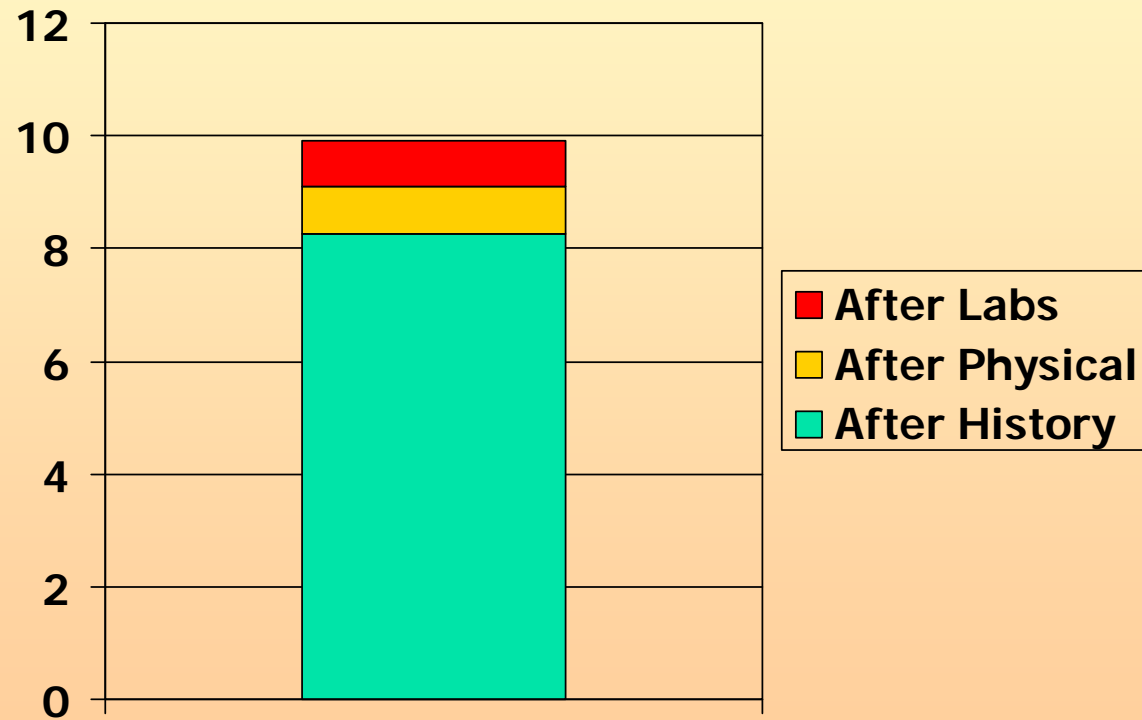
Definition of "Confusion" ^{1,2}

- Clouding of consciousness
- Disorientation
- Mixed up
- Confounded
- Perplexed
- Unclear
- Uncertain
- Flustered
- **Altered mental state**

History is Most Important (1992)



History is Most Important (1975)





Definitions

- Behavior
 - An individual's overt actions and reactions
- Mood
 - An enduring emotional state
- Cognition
 - Actions related to obtaining and interpreting information, including learning, memory, perception, and thinking



Some Definitions

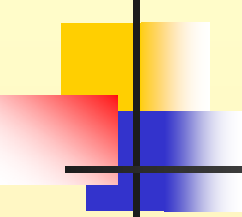
- Altered mental function
 - Significant change in alertness, mood or cognition that impacts an individual's function, comfort, safety, or social interactions
- Mental status
 - An individual's overall level of attention and cognitive function
- Level of consciousness
 - An individual's overall level of activation in relation to the outside world



Coordinated Approach

- Diverse staff contribute information
 - At least some staff should be able to use some specific terminology
 - For example, is someone calm or restless, is speech understandable and clear
- Licensed staff and practitioners
 - Should be able to provide more detail, using appropriate professional terminology
 - Basic neurological, mental status exam and some detailed behavioral observations

Defining Behavioral Issues: Details



- Nature and relevant factors
 - Onset, preceding factors or triggers
- Course
 - Duration and frequency, continuous or intermittent, compared to usual
- Severity
 - Consequences of the behavior or change in mental function, reason why situation is problematic, danger to patient /others



Acute Symptom Presentation

- Acute symptoms present in diverse ways
- Examples
 - Abrupt, persistent, or significant change in usual comprehension, ADL performance
 - Disturbances after change in medication regimen
 - Change in usual level of consciousness
 - For example, alert to drowsy, drowsy to stuporous; fluctuation



Useful Additional Information

- Review pertinent information
 - Patient's medical, surgical, family, and social history; pertinent behavioral history
 - Baseline mental status
 - Any prior diagnostic work-up and management
 - Available transfer information



Key Step: Clarify Problem Situations

- *Define the issue in detail*
- *Identify why (if at all) the situation represents a problem*
 - *In contrast to a variation of normal for the individual or for the population*



Verify and Clarify

- Verify and clarify information to the extent possible
 - How were issues identified or verified?
 - What are known symptom details?
 - What was done with medications while hospitalized?
 - Were diagnostic efforts adequate?
 - How was the patient managed elsewhere?
- Virtues of verification



In the Nursing Home

- Broad range of behavior
 - Some behavior reflects diverse personalities and life experiences
 - Some behavior is distressed, dysfunctional, disturbing, or disruptive
- Allegedly problematic behavior or problematic mood often comparable to what occurs in society
 - For example, sadness in response to loss is not an illness to be routinely treated



Delirium

- *How can we recognize and clarify delirium?*



Delirium

- Delirium

- A medical illness of acute or subacute onset that presents with psychiatric symptoms, including
 - Disturbance of consciousness and attention
 - Change in cognition (e.g. perception, thought, and memory) and/or
 - Perceptual impairments (illusions, hallucinations, or delusions)



Delirium: Implications

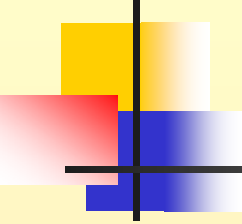
- Common in hospital and nursing home
- May last several days to month or more
- Increases risk for short- and longer-term complications and death
- Postoperative delirium predicts limited recovery, poor long-term outcome
- Delirium at admission to postacute => more likely to be rehospitalized and less likely to be discharged home



Delirium: Recognition

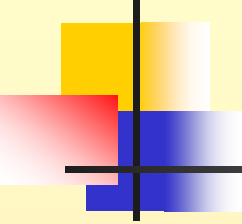
- Requires high index of suspicion
- Consider in any patient with change or fluctuation in behavior, mood, or mental function, regardless of having dementia
- Symptoms may be present in various combinations
 - May change over days or weeks
- Practitioners and staff must integrate diverse, often nonspecific findings

Delirium: Tools to Help Identify



- Confusion Assessment Method (CAM)
 - Based on consideration of 11 different issues
- Lead to answering 4 questions
 - Is change in mental status acute and does it fluctuate throughout the day?
 - Patient difficulty in focusing attention?
 - Disorganized or incoherent speech?
 - Altered level of consciousness?

Delirium: Tools to Help Identify



- CAM Interpretation

- Delirium suggested if 1 and 2 and either 3 or 4 are true
- Inouye SK, van Dyck CH, Alessi CA et al. Clarifying confusion: The confusion assessment method: A new method for detection of delirium. *Ann Intern Med* 1990;113:941–948



Delirium: Varieties

- All varieties have some common symptom presentation
 - Disturbed consciousness and cognition
- May have different etiologies
 - Delirium due to a general medical condition
 - Substance-induced delirium
 - Delirium due to multiple etiologies
 - Delirium not otherwise specified
 - Adapted from DSM-IV (APA, 2000)



Delirium: Varieties

- Hyperactive
 - Approximately one-fourth
 - Easiest to diagnose / best outcomes
- Hypoactive
 - Approximately one-fourth
 - More likely to be missed or to be misdiagnosed as depression
- Fluctuating activity levels
 - Approximately one-third



Delirium: Varieties

- No change in activity levels
 - Approximately 15 percent
 - Very difficult to diagnose
 - Liptzin B, Levkoff SE. An empirical study of delirium subtypes. Br J Psychiatry 1992 Dec; 161: 843-845



Key Step: Identify Risk Factors

- *Identify specific risk factors for disturbances of behavior and mood, and for delirium*



Behavior Risks: Examples

- Potential for problematic behavior
 - History of problematic behavior / dementia
 - Potential to provoke or react aggressively to physical confrontations
 - Potential to wander into stairwells in a wheelchair
 - Potential to become agitated or combative while care is being rendered
 - Taking medications that can affect mental function, cognition, and consciousness



Delirium Risks: Examples

- Having dementia: common risk factor
- Indwelling urinary catheters and other medical devices that may restrict mobility or function
- Restraints
- Number, dose of medications with central nervous system (CNS) effects / side effects
 - Especially, anticholinergic medications

Delirium Risk Factors:

Examples

- Fluid and electrolyte imbalance
- Significant anemia
- Impaired sensory function
- Impaired sleep
- Unnecessary infection isolation or restrictions



Using the Information

- *What do we do with the information that has been obtained about behavior and mental function?*



Key Step: Identify Urgency

- *Determine urgency of situation and need for additional evaluation and testing*
- A few issues require urgent assessment and vigorous management
 - The rest can be handled more routinely, with more time for collecting and analyzing information



Urgency of Situation

- Some changes in behavior and mental function are less severe or dangerous
 - For example, single episode of physical aggression that is readily contained vs. frequently recurring or escalating aggression
- In nonurgent situation, search for causes can occur with greater deliberation



Action and Reaction

- Why is it a good idea to inhibit the staff's rush to the phone?
- Often not helpful to
 - Give medications to “control” behavior
 - Routinely request immediate ER transfer
- Hospitalization risks / complications
 - Restraint use / unnecessary catheterization
 - Addition of questionable medications
 - Discontinuation of essential medications



Cause Identification

- *How can we try to identify causes of problematic behavior and mood and altered mental function?*

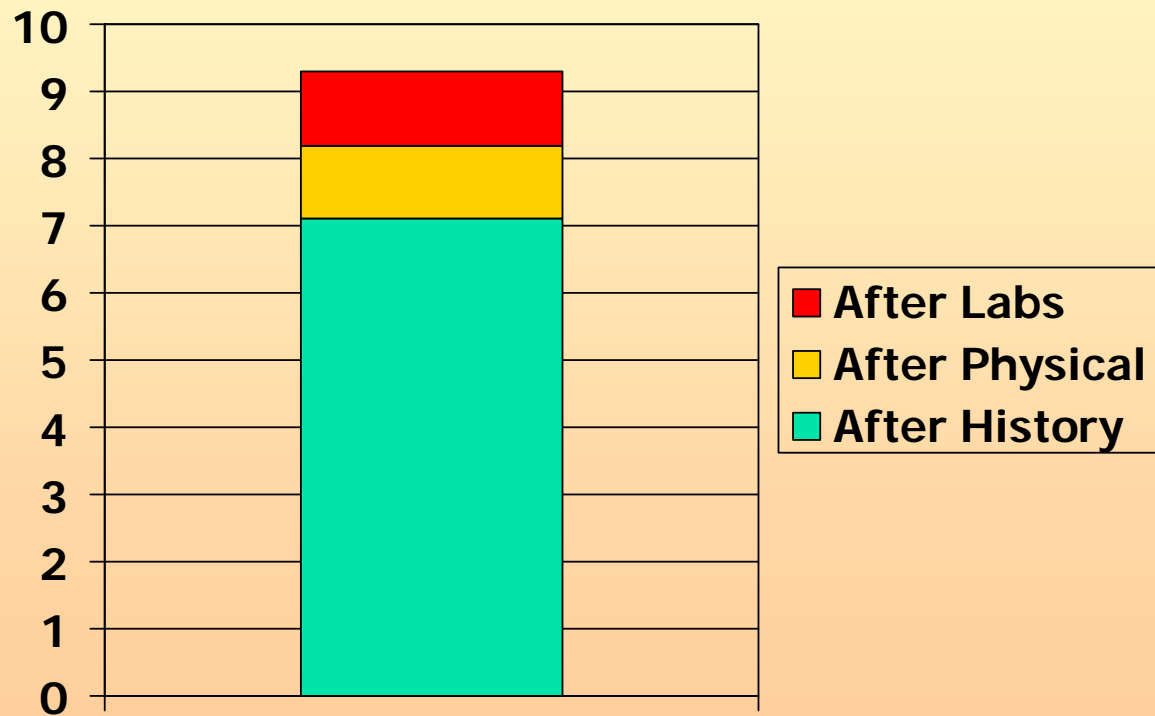
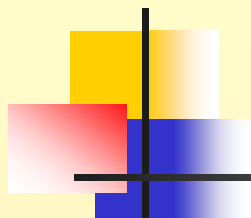


Key Step: Identify Causes

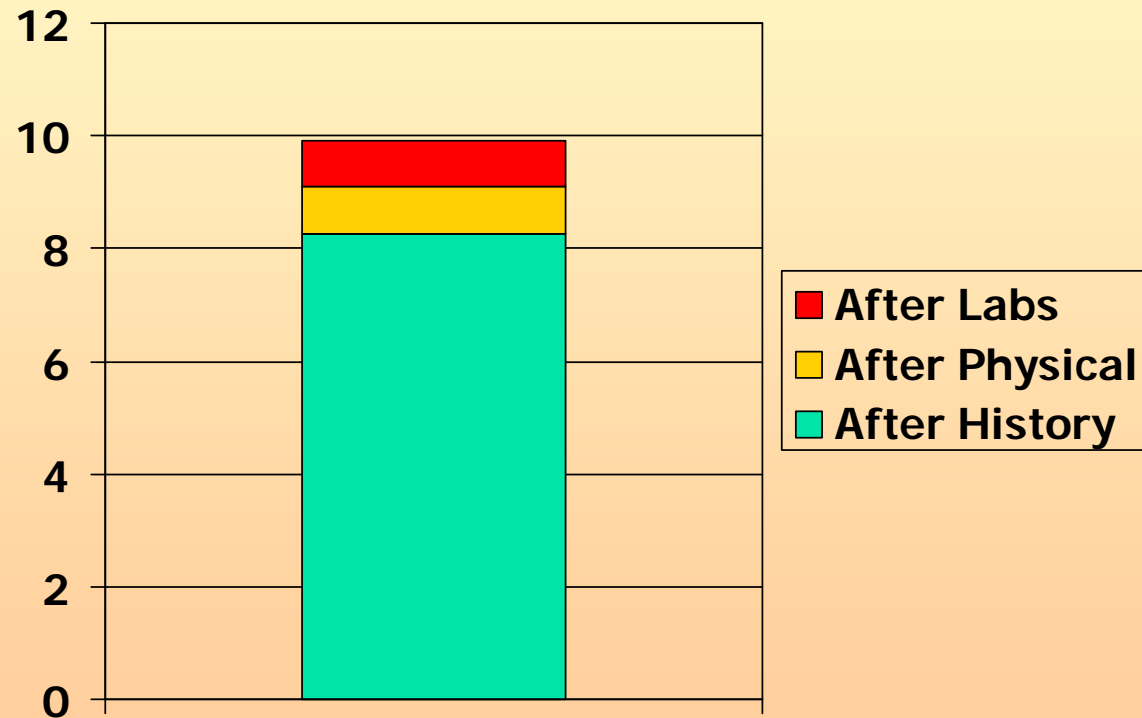
- *Identify cause(s) of problematic behavior, mood, and mental function*
- Systematic approach helps identify causes of problematic behavior and altered mental function
 - Begins with detailed description of current behavior, function, and mental status in proper context (earlier Steps)



History is Most Important (1992)



History is Most Important (1975)





Physical Findings: Examples

- Head trauma
- Carotid bruits
- Thyroid enlargement, tenderness
- Abnormal heart rhythm, rate
- Abnormal lung sounds, respiratory distress
- Abdominal tenderness, mass
 - Tender, enlarged liver; tender gall bladder
- Deformity, swelling, limited movement of extremities
- Urinary retention, incontinence



Neurological Examination

- Motor system
 - Gait, posture, balance
 - Weakness
 - Spasticity
 - Tremor
- Sensory system
 - Touch, pain, temperature
 - Position
 - Vibration
- Cranial nerves
 - Vision, hearing
 - Mouth & tongue
 - Fasciculations
- Reflexes
 - Hyper / hypo
 - Clonus
 - Muscle tone
 - Neck stiffness
- Higher functions
 - Orientation
 - Commands
 - Speech
 - Calculations
 - Memory
 - MMSE
 - Emotions / mood



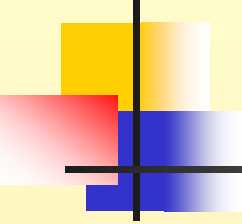
Key Step: Identify Causes

- Physical, functional, psychosocial
 - A few causes common in population
- Diverse additional possibilities that could involve any organ system
- Several causes often coexist
- Multiple symptoms often have a common cause
 - For example, adverse medication reaction
=> change in cognition and fall



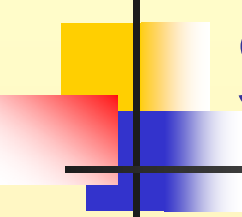
Identify Causes

- “Obvious” can sometimes be misleading or provide only part of the explanation
 - For example, do not assume environmental causes until others considered
- MDS and CAA are not designed to (nor do they) give a comprehensive, orderly, or systematic approach to identifying specific causes



Causes of Mood and Behavior Disturbances: Examples

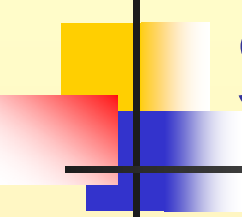
- Acute
 - Delirium
 - Multi-factorial
 - Usually, but not always reversible
 - Psychosis
 - CVA
- Chronic
 - Dementia exacerbation
 - Parkinson's
 - Hydrocephalus
- Mental illness
 - Schizophrenia
 - Acute emotional states
- Depression



Diverse Causes of Common Symptoms: Examples

- Both patients with and without dementia may have identical symptoms
 - Restlessness, sleep disturbance, aggression, psychosis, etc.
- Sexually inappropriate behavior may result from diverse causes, for example
 - Personality disorder
 - Psychotic delusion that a stranger in the facility is a spouse

Diverse Causes of Common Symptoms



- Physical impairments may contribute to behavior symptoms
 - For example, aphasia => inability to understand or verbally express distress or pain
 - Impaired vision and hearing may lead to suspiciousness, paranoia, anxiety described as “agitation”

Causes of Behavior

Symptoms: Categories

- Medical illness with or without delirium
- Psychiatric illness (e.g., psychosis complicating schizophrenia or mania complicating bipolar disorder)
- Personal comfort needs
- Environmental issues
- Personality characteristics and disorders
- Behavioral and psychiatric symptoms related to dementia



Key Step: Identify Medical Causes

- *Review for medical illnesses with or without delirium*
- Consider based on history, known diagnoses, current signs and symptoms, risk factors, current medication regimen
- If evaluations and tests thus far do not reveal a specific cause
 - Consider additional medical, neurological, psychological, or psychiatric assessment



Identify Causes of Delirium

- Practitioner actively involved as needed, including direct patient examination
- Clear organic etiology identified in majority of patients with delirium
- Unlikely that environmental factors alone will cause delirium



Identify Medical Conditions: Acute or Abrupt Onset

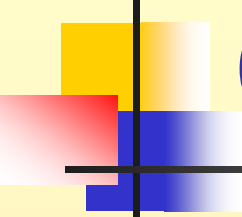
- Medication adverse consequences
- Fluid and electrolyte imbalance
- Infections
- Hypoglycemia or marked hyperglycemia
- Acute renal failure / Acid-base imbalance
- Acute hepatic failure
- Respiratory failure, hypoxia, CO₂ retention



Medical Conditions: Acute or Abrupt Onset

- Cardiac arrhythmia, myocardial infarction, or congestive heart failure
- Head trauma
- Stroke or seizure
- Pain, acute or chronic
- Urinary outlet obstruction
- Alcohol or drug abuse or withdrawal

Medical Conditions: More Gradual



- Hypo- or hyperthyroidism
- Neoplasm
- Nutritional deficiency (e.g., folate, thiamine, Vitamin B12)
- Anemia
- Sensory deficits



Diagnostic Test Options

- Based on clinical suspicion
 - Need proper interpretation, in context
- Electrolytes, BUN, glucose, creatinine
 - To identify fluid/electrolyte imbalance
- Serum osmolality, urine sodium
 - If hyponatremia is detected
- CBC with differential
 - If infection, inflammatory processes, bleeding, or anemia are suspected



Diagnostic Test Options

- Chest x-ray / Oxygen saturation (if pneumonia or pulmonary embolism are suspected)
- Urinalysis (if renal dysfunction or urinary tract infection are suspected on clinical grounds)



Diagnostic Test Options

- Cultures of urine, blood or other tissues or body fluids (if infection is suspected on clinical grounds)
- Serum medication levels, when appropriate (to identify possible medication toxicity)
- Brain CT scan or MRI with enhancement (if findings suggest stroke or other acute neurological problem)



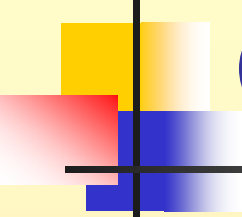
Diagnostic Test Options

- EKG/rhythm strip (if a cardiac arrhythmia or other heart dysfunction is suspected)
- Serum Vitamin B12 level, liver function tests (to identify other metabolic abnormalities)
- TSH / free T4 / T3 (to identify possible thyroid dysfunction)

Infections and Behavior / Altered Mental Function

- *To what extent do infections cause acute problematic behavior and altered mental function?*
- *Do bacteriuria or UTIs cause acute problematic behavior or altered mental function?*

Infections As a Potential Cause



- Infections common in LTC
 - May cause fever, sepsis, pain, and other complications that can affect mental function and level of consciousness
- Linking infections and various behavior needs careful thought
- Misinterpretation of test results and symptoms can lead to inappropriate interventions and inattention to other relevant causes

Bacteriuria and Problematic Behavior



- Does bacteriuria alone cause problematic behavior or altered mental function?
- Common practices
 - Order urine cultures for anyone with problematic behavior
 - Attribute problematic behavior and altered mental states to bacteriuria
 - Give antibiotics for positive urine culture
 - Continue antibiotic regardless of whether patient meets criteria for infection

Bacteriuria and Problematic Behavior



- UTIs not prominently associated with physical or verbal aggression in individuals with dementia
 - Arch Intern Med 2006;166:1295-1300
- Interpret urinalyses and urine cultures cautiously
 - When infection suspected on clinical grounds
 - When no other readily identifiable cause

Bacteriuria and Problematic Behavior



- Positive urine culture, with or without abnormal urinalysis, does not prove UTI is present
- Don't confuse asymptomatic bacteriuria with infection
- If patient lacks other clinical findings of a symptomatic UTI
 - Consider other causes of symptoms instead of, or in addition to urinary source

Bacteriuria and Problematic Behavior



- Even when infection suspected or confirmed on clinical grounds
 - Review current medication regimen
 - Consider BMP and additional relevant tests to identify possible fluid and electrolyte imbalance (dehydration or high or low sodium)
- Skilled clinician should interpret test results and examine patient, as needed

Medications and Behavior / Altered Mental Function

- *What medications can impair behavior, mood, cognition, and can cause altered mental function, and by what mechanisms?*



Medication-Related Causes

- Medications and related effects and adverse consequences are common and important causes of many psychiatric symptoms in susceptible individuals
 - Drugs that may cause psychiatric symptoms.
Medical Letter 2002; 44(1134):59-62
- Staff and practitioner, with consultant pharmacist's input as needed, review current medication regimen for potentially problematic medications



Medication-Related Issues

- Examples of mechanisms of medication-induced problematic behavior or AMF
 - Cause oversedation
 - Affect levels of neurotransmitters in the brain
 - Disrupt fluid and electrolyte balance
 - Impair kidney, heart, intestinal, lung, and other organ function



Medication-Related Issues

- Even if medication regimen has been stable and has not caused adverse reactions in the past
- Most significant / serious medication risks—including direct and indirect effects on mental function—have been identified and documented
 - Can be anticipated
 - Adverse consequences can often be prevented or at least readily identified



Medication-Related Issues

- F329, Unnecessary Medications
 - Surveyor Guidance under the OBRA '87 regulations
 - www.cms.hhs.gov/transmittals/downloads/R22SOMA.pdf



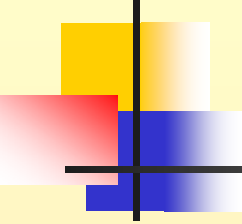
Medication-Related Issues

- Medications with anticholinergic properties are especially problematic
 - See OBRA F329 surveyor guidance, Table 2
 - Often not essential
 - Can be readily tapered or stopped
- Other medications can affect behavior and mental states by counteracting or overstimulating brain chemicals such as serotonin



Medications Affecting Mood, Behavior, Cognition

- Antiarrhythmic agents
- Anticholinergic agents (and medications with anticholinergic effects, side effects)
- Antidepressants
- Anticonvulsants
- Antiemetics
- Antihistamines / decongestants
- Antihypertensive agents
- Antineoplastic agents
- Anti-Parkinsons agents
- Corticosteroids
- Muscle relaxants
- Antipsychotic medications
- Opioids
- Sedatives/sleep medications



Key Step: Psychiatric Disorders

- *What psychiatric illnesses can cause acute problematic behavior and altered mental function?*
- Consider possible psychiatric illnesses, for example
 - Exacerbation of schizophrenia or bipolar disorder
 - Mood disorder (e.g., depression, anxiety)



Psychosis

- Can be symptom of
 - Delirium
 - Other conditions such as schizophrenia, schizoaffective disorders, major depression, bipolar affective disorders, and mania
- Common findings
 - Illusions, delusions, hallucinations, and paranoia



Psychosis

- Most patients who have dementia with Lewy bodies have visual hallucinations
- Unlike delirium, psychosis not usually associated with impaired level of consciousness



Other Disorders

- Manic phase of bipolar disorder
 - Much less common than depressive phase
 - Can present as dramatic and abrupt changes in behavior
 - Typically, elated mood, grandiosity, and heightened activity levels
- Assess for depression if change in behavior, cognition, mood without another apparent cause



Apathy and Mood Disorders

- Apathy tends to have more symptoms related to motivation
 - Lack of interest, low energy, and psychomotor slowing, lack of emotional responsiveness, etc.
- Depression tends to relate more to mood, including dysphoria
 - Sadness, guilt feelings, self-criticism, helplessness, and hopelessness), suicidal ideation, etc.



Mood Disorders

- Careful diagnosis of depression
- Commonly used empirical approach to treatment
- If mood disorder suspected, but initiating or increasing dose of antidepressant does not at least somewhat improve symptoms, consider other diagnoses before increasing doses further or adding more medications



Depression: Use and Misuse

- Term "depression" is in many ways ambiguous
 - Used to refer to mood, symptom, syndrome, disease entity
- All human beings show fluctuations in mood
 - Depressed mood not necessarily a disorder



Depression: Use and Misuse

- Happiness is to be desired, but unhappiness does not constitute a diagnostic category
 - Unhappiness or normal sadness should not be confused with depression as a syndrome
- Better if MSE used “sadness” instead of depression as a symptom
 - Should restrict term “depression” to a syndrome or disorder
- Kaplan and Sadock. Comprehensive Textbook of Psychiatry 4th edition. Chapter 18



Limited Efficacy of Antidepressants



- Antidepressants represent best established treatment for major depressive disorder
 - But, little evidence of specific pharmacological effect relative to placebo in less severe depression
- Conclusions
 - Little or no benefit of antidepressant medication compared with placebo in patients with mild or moderate symptoms
 - Substantial benefit for patients with very severe depression
 - Fournier JC, DeRubeis RJ, Hollon SD, Dimidjian S, Amsterdam JD, Shelton RC, Fawcett J. Antidepressant drug effects and depression severity: A patient-level meta-analysis. *JAMA*. 2010;303(1):47-53.



Personality Disorders

- If causes of problematic behavior still not identified
- In individuals with history of personality disorder or socially inappropriate behavior
 - Who do not have delirium, psychosis, or depression



Personality Disorders

- Definition

- Enduring patterns of inner experiences and behavior that deviate markedly from the expectations of an individual's culture, are pervasive and inflexible, and typically have an onset in adolescence or young adulthood

- American Psychiatric Association, 2000



Personality Disorders

- Often associated with socially inappropriate behavior, agitated mood, and related physical or verbal aggression
- Patient typically aware of what they are doing and able to rationalize actions



Key Step: Consider Dementia

- Consider dementia-related causes
- Behavioral and psychological (also called “neuropsychiatric”) symptoms related to dementia (BPSD)
- BPSD essentially implies no other medical or psychiatric cause of behavior can be identified beyond the underlying dementia



Dementia-Related Symptoms

- Symptoms include agitation, aggression, delusions, hallucinations, repetitive vocalizations, and wandering
- Level of consciousness is not generally affected
- Seek and identify environmental factors that could be causing or contributing to problematic behavior



Validate Conclusions

- *Establish working diagnosis and validate conclusions*
- Important to base treatment choices on
 - Clear rationale
 - Understanding of overall clinical situation
- Educated guesses, based on evidence, are sometimes necessary
 - Uneducated guesses often hazardous



TREATMENT / MANAGEMENT



The “ABC” Approach

- *How can an “ABC” framework help in planning and providing care?*



Approach to Problematic Behavior: “ABC” Framework

- “A-B-C” concept
 - A: What are the **a**ntecedents to the behavior?
 - B: What is the **b**ehavior?
 - C: what are the **c**onsequences of the behavior?
- Helps sum up the findings and provide a basis for interventions

Approach to Problematic Behavior



- Physical restraints and sedation directly address behavior (B) by disabling the individual
 - Both are undesirable in most situations
- Short of restraining or sedating, management is based on addressing
 - Antecedents (causes and contributing factors) (A)
 - Consequences (C)

Approach to Problematic Behavior



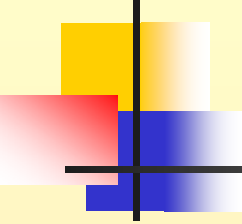
- Medical interventions—including medications—often can address underlying organic causes and contributing factors (A)
- Consequences (C) are managed primarily by
 - Addressing antecedents (A)
 - Various nonmedical interventions



Problematic Behavior Risks

- Use recognized environmental and interpersonal approaches
 - Try to prevent behavioral problems
 - Minimize escalation of such problems by implementing soon after symptoms develop

Applying “ABCs” to Care Planning



- Care planning and related discussions should include
 - Known or likely causes (A)
 - For example, address pain and discomfort and minimize sleep disruption
 - Identified target behaviors (B)
 - Individualized goals and strategies for addressing target behavior and its causes and consequences (C)



Coordinating Approaches

- Uncoordinated activity =>
 - Unnecessary transfers
 - Improper management
 - Use of inappropriate medications Control information reporting
- Limit staff seeking new telephone orders, including medications
 - Especially on evenings and weekends
 - Essential to oversee phone calling!



Treatment Principles

- Identify treatment rationale and goals
 - Before or upon initiating interventions
- Sometimes, interventions must be started quickly
 - Often, time to assess and discuss situation in detail before or soon after intervening
- Even empirical interventions should have rational basis, not just guesswork

Treatment Rationale and Goals

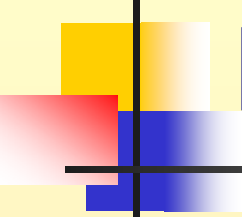


- Key questions
 - Why is patient's behavior problematic?
 - Why does behavior require an intervention
 - Why it cannot be accepted / tolerated as is
 - How was likely cause determined?
 - Distinguished from other possibilities
- How will proposed interventions address causes / contributing factors?
- How will proposed interventions improve well-being and quality of life?

Treatment Rationale and Goals



- What is expected outcome; e.g., complete or partial resolution, continued decline?
- What is likely time frame for expecting some significant changes?
- What are likely side effects or complications?



Goals of Treatment and Management: Examples

- Correct underlying causes of problematic behavior
- Reduce frequency of aggressive behavior
- Stabilize mood
- Reduce undesirable medication side effects



Determine Need For Transfer

- Hospitalization of patients with problematic behavior and delirium only sometimes helpful and may be very problematic for the patient
 - Many patients have recurrent symptoms even after multiple hospitalizations
- Understanding clinical picture can help in determining whether to transfer
 - Many cases managed effectively in facility



Interventions

- *How do we select symptomatic and cause-specific approaches?*



Key Step: Interventions

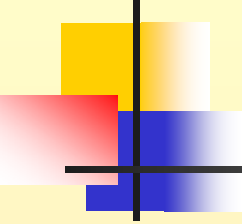
- *Provide symptomatic and cause-specific management*
 - Usually, both types of interventions are needed simultaneously
- Symptomatic Interventions
 - Not specifically targeted to causes
 - May be less effective if used without adequately managing treatable causes



Symptomatic Interventions: Examples

- Encourage independence as tolerated
- Address triggers for disruptive behavior
- Involve the individual differently in care
- Maintain structured routine in calm, quiet environment
- Use different approaches to bathing, feeding, and other ADLs

Treating Underlying Causes: Examples



- Manage delirium
 - Address key medical conditions
 - For example, correct fluid / sodium imbalances
- Treat acute exacerbations of psychotic disorders
 - Appropriate medications / supportive measures
- Address contributing factors
 - Reduce excessive noise, manage other aggressive residents



Treatment

- Appropriate treatment depends on accurate diagnosis
- ; for example
 - Hypo or hyperglycemia, hypercalcemia
 - Acid-base disturbances
 - Severe anemia
 - Hypoxemia / hypercapnea
 - Fever / infections
- Most of all



Rational Medication Use

- Rational approach based on
 - Understanding mechanisms of action
 - Targeting medications to the identified or likely underlying causes of the problem
- No “magic bullets” that routinely or predictably improve or stop behavioral symptoms

Rational and Irrational Medication Use



- Even rational medication use only sometimes successful and may be associated with significant risks and complications
- Random or irrational medication ordering and use often reflects uneducated guesswork, including misinterpretation of regulatory requirements

“Hit-and-Miss” Medication Interventions



- May be problematic for several reasons
 - Inappropriate medication fails to address the problem
 - Wrong medication often causes serious adverse consequences
 - More medications added, further aggravate symptoms
 - Improperly treating underlying condition or situation often results in preventable crises and hospital transfers

Key Considerations In Using Medications



- Behavior influenced by
 - Brain's chemical and electrical activity
 - Function of every organ system
 - Other diverse factors



Effects of Medications

- Medications for behavioral symptoms and psychiatric disorders generally affect only one or, at best, several of the many chemicals that influence brain function and behavior



Effects of Medications

- Examples
 - Cholinesterase inhibitors affect acetylcholine levels
 - Antidepressants may affect serotonin, norepinephrine, dopamine, and other neurotransmitters associated with mood
- Effective medications should be part of the overall approach to the patient, but rarely are the sole solution



Example: Agitated Behavior

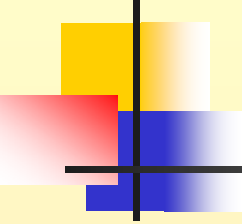
- Intervention possibilities
 - Needs more or less of current medications
 - Needs additional medications
 - Needs substantially or totally different approach with or without medications
- How many medications?
 - Sometimes, one medication will address root cause of multiple symptoms
 - At other times, multiple concurrent problems require multiple medications



Before Adding Medications

- Review current medication regimen including any recent changes
- Identify any medications that, either alone or in combination, could adversely affect behavior and mental function

Classes of Medications For BPSD



- Antipsychotics
- Cholinesterase inhibitors
- N-methyl-D-aspartate–receptor modulators
- Anticonvulsants
- Antidepressants
- Anxiolytics



Medication Principles for BPSD

- No “magic bullets”
- No medication class demonstrated to have consistent, predictable benefits
- No established ways to predict who will respond or have long-term benefits
- Even apparently successful medication interventions require reevaluation
 - May need to be changed or discontinued, depending on subsequent results