Caring for People with Dementia and Problem Behaviors: A Step-by-Step Evidence-Based Approach

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This approach begins with evaluation and treatment of common causes of behaviors, then uses nondrug approaches to management. Antipsychotics are reserved for severe cases due to potential side effects, which include death. **Document** all behaviors, symptoms, interventions and outcomes. Sections are color-coded to help guide you to accompanying resources, which are *italicized* in ***bold***.

Blue=Evaluation. Yellow=Nondrug. Pink=Antipsychotics.

1. **Evaluation**
   - Clearly characterize and document behavior or symptom, including frequency, severity, triggers and consequences.
   - Consider environmental factors and triggers.
     —Are they modifiable?
   - Perform medical evaluation (delirium, medical conditions, pain, depression, drugs). See **Common Causes of Problem Behaviors** (on other side), **Delirium Assessment and Management, and Drugs that May Cause Delirium or Problem Behaviors.**
     —Address these causes if they are identified.
   - Discuss with family any history that may explain or manage the behavior, e.g. resident habits, preferences, activities they enjoy.

2. **Manage with nondrug approaches**
   - Engage in meaningful activities, redirect, provide clear communication, etc. See ***Nondrug Management***.

3. **Does the behavior pose risks to the resident or others, or is the resident severely distressed?**
   - If yes, nondrug approaches fail, and medical workup does not reveal another cause, consider drug therapy targeted at behaviors.

4. **Monitor** drug therapy for effectiveness and side effects. Continue nondrug management.

5. **Consider antipsychotic dose reduction or discontinuation** if the drug is not effective, side effects occur, or the behaviors have been manageable.

   Re-assess need for drug therapy periodically, at least twice a year.

6. **Use prevention and maintenance approaches to reduce further exacerbations**
   - Clear communication, meaningful activities, etc.
   - Simplify and create a calm environment
   - Manage medical conditions, depression, pain, etc.
   - See **Nondrug Management**

Evaluation of Problem Behaviors in Residents with Dementia

Common Causes of Problem Behaviors

Physical:
- Pain
- Hunger
- Constipation, urinary retention
- Fatigue, insomnia, poor sleep

Psychological:
- Anxiety, fear, depression
- Impaired speech, frustration
- Boredom
- Autonomy/privacy

Environmental:
- Caregiver approaches
- Institutional routines, expectations and demands
- Misinterpretation of events/settings
- Over/under-stimulation
- Changes from normal routine

Delirium, secondary to medical issues such as:
- Medication side effects
- Infections
- Metabolic/electrolyte disturbances
- Dehydration

Consider the Following Assessments

Check Vitals:
- Temperature, pulse, blood pressure, respiration, oxygen saturation

Physical Assessment:
- Signs of constipation or urinary retention
- Changes in breath sounds
- Peripheral edema
- Fluid status: orthostatic blood pressure, mucous membranes

Common Sources of Pain:
- Pressure ulcers, other skin lesions, eye pain from corneal abrasion
- Joint pain, other musculoskeletal pain, foot pain (poorly fitting shoes)
- Oral pain related to dentures/mouth ulceration

Sensory:
- Hearing: check hearing aids, ear wax
- Vision: check glasses

Delirium Assessment:
- See ***Delirium Assessment and Management***

Urinalysis or other urinary symptoms

Blood glucose, CBC with differential, electrolytes if appropriate

Drug side effects:
- See **Drugs that May Cause Delirium or Problem Behaviors**

Recent Changes: environmental, routine, family, drugs, medical

Delirium Assessment and Management

Definition of Delirium

Acute onset of impaired attention, cognition (memory, orientation, language), consciousness, perception, behaviors and/or emotions that may fluctuate, **have a medical cause** and are not due to dementia. Often called "acute confusion." Terminal delirium: irreversible and can occur in the days before dying; antipsychotics used more liberally for comfort in these cases.

1. **Is the resident more confused today than usual?** If yes, the resident might have delirium and a brief cognitive assessment should be done.

2. **Brief Cognitive Assessment**: Resident with the level of dementia indicated can usually perform these attention-based tasks, while those with delirium cannot. Severe dementia is difficult to test. Change in cognitive status is usually determined by observation. Compare current status to recent baseline.
   - Mild Dementia: list days of week and months of year backwards.
   - Moderate Dementia: count backwards from 20 to 1.

3. **Delirium Screening**: See the screening tool, derived from the Confusion Assessment Method (CAM), CAM-ICU and MDS, on the ***other side***.

4. **If the screening suggests delirium, assess and treat possible causes**:
   - Vitals (pulse, blood pressure, temperature, respiratory rate, pulse oximetry, pain).
   - Physical examination to diagnose infections or other acute medical conditions such as constipation, pneumonia, pressure ulcers, MI (heart attack), CVA/TIA (stroke).
   - Basic laboratory evaluation (urinalysis, creatinine, sodium, potassium, calcium, glucose, CBC with differential).
   - Review medications with particular attention to anticholinergics, benzodiazepines or new medications **(see Drugs that May Cause Delirium or Problem Behaviors)**. Discontinue if benefit does not outweigh potential harm.
   - Review restraints (foley catheter, IV lines, other tethers) and discontinue if benefit does not outweigh potential harm.
   - Assess pain—Is pain management adequate and appropriate?

5. **Use nondrug management**:
   - Sleep: Allow continuous sleep at night. Keep noise down. Recognize that an altered sleep-wake cycle is often a symptom of delirium.
   - Orientation: Orient to date and place. Clock and calendar in room. Light on from 7 a.m. to 7 p.m. (sunrise to sunset). Always introduce yourself.
   - Environment: Keep hearing aids and glasses accessible. Offer beverage of choice frequently for hydration. Encourage low-key family visits.

6. **Use antipsychotic short-term for agitation or distressing psychotic symptoms**, e.g. hallucinations.
   - E.g. haloperidol 0.5 mg PO/IM q1 hour PRN agitation or distressing hallucinations. Can double dose if ineffective. Schedule once or twice daily dose based on the total amount needed to achieve treatment goal in 24 hours. When delirium resolves, discontinue the antipsychotic. Haldol is not recommended for dementia behaviors.

Delirium Screening Tool

Suspect delirium if answer is yes on items 1 + 2 + (3 or 4) below. First perform a brief Interview of Mental Status, Staff Assessment, or brief cognitive test described on ***other side***.

1. **Acute onset** [ ] yes [ ] no [ ] uncertain*
   Is there evidence of an acute change in mental status from the resident's baseline?
   *If uncertain, gather more information.

2. **Inattention** [ ] yes [ ] no [ ] uncertain*
   Does the resident have difficulty focusing attention (i.e., easily distracted or can't follow what is being said)?
   *If uncertain, perform an Attention Screening Examination (ASE):

   Directions: Say to the resident, **"I am going to read you a series of 10 letters. Whenever you hear the letter 'A', indicate by squeezing my hand**." Read letters from the following letter list in a normal tone.

   S A V E A H A A R T

   Scoring: Errors are counted when resident fails to squeeze on the letter "A" and when the resident squeezes on any letter other than "A." Inattention is present if **3** or more errors are observed.

3. **Disorganized thinking** [ ] yes [ ] no [ ] uncertain*
   Is the resident's thinking disorganized or incoherent, as evidenced by rambling or irrelevant conversation, unclear or illogical flow of ideas, unpredictable switching from subject to subject?
   *If uncertain, conduct the following question/command assessments:

   Questions:
   1. Will a stone float on water?
   2. Are there fish in the sea?
   3. Does one pound weigh more than two pounds?
   4. Can you use a hammer to pound a nail?

   Score: Resident earns 1 point for each correct answer out of 4.

   Command:
   Say to resident: "Hold up this many fingers" (Examiner holds two fingers in front of resident then puts them back down) "Now do the same thing with the other hand" (Not repeating the number of fingers).

   Score: Resident earns 1 point if does entire command.
   Disorganized thinking is present if combined scores are less than 4.

4. **Altered Level of Consciousness** [ ] yes [ ] no
   Is the resident anything other than alert, calm and cooperative (at current time)? This may include **vigilant** (easily startled), **lethargic** (frequently dozed off when asked questions), or **stuperous** (very difficult to arouse and keep aroused), or **comatose** (could not be aroused).

   Psychomotor retardation: (sluggishness, staring into space, staying in one position, moving slowly) may also count as a "yes" for this domain.

Nondrug Management of Problem Behaviors and Psychosis in Dementia

Step 1: Assess and Treat Contributing Factors

FOCUS on one behavior at a time

- Note how often, how bad, how long and document specific details
- Ask: "What is really going on?" "What is causing the problem behavior?" "What is making it worse?"

IDENTIFY what leads to or triggers problems

- **Physical:** pain, infection, hunger/thirst, other needs
- **Psychological:** loneliness, boredom, nothing to do
- **Environment:** too much/too little going on, lost
- **Psychiatric:** depression, anxiety, psychosis

REDUCE, ELIMINATE things that lead to or trigger the problems

- Treat medical/physical problems
- Offer pain medications for comfort or to help cooperation
- Address emotional needs: reassure, encourage, engage
- Offer enjoyable activities to do alone, 1:1, small group
- Remove or disguise misleading objects
- Redirect away from people or areas that lead to problems
- Try another approach; try again later
- Find out what works for others; get someone to help

DOCUMENT outcomes

- If the behavior is reduced or manageable, go to Step 3
- If the behavior persists, go to Step 2

Step 2: Select and Apply Interventions

CONSIDER retained abilities, preferences, resources

- Cognitive level
- Physical functional level
- Long-standing personality, life history, interests
- Preferred personal routines, daily schedules
- Personal/family/facility resources

DEVELOP a person-centered plan

- Adjust caregiver approaches
- Adapt/change the environment
- Select/use best evidence-based interventions tailored to the resident's unique needs/interests/abilities

Step 2: Select and Apply Interventions, Continued

ADJUST your approach to the resident

- **Personal approach:** cue, prompt, remind, distract; focus on resident's wishes, interests, concerns; use/avoid touch as indicated. Do not try to reason, teach new routines, or ask to "try harder."
- **Daily routines:** simplify tasks and put them in a regular order; offer limited choices; use long-standing patterns & preferences to guide routines & activities.
- **Communication style:** simple words and phrases; speak in short sentences; speak clearly; wait for answers; make eye contact; monitor tone of voice and body language.
- **Unconditional positive regard:** do not confront, challenge or explain misbeliefs (hallucinations, delusions, illusions); accept belief as real to the resident; reassure, comfort and distract.

ADAPT or CHANGE the environment

- **Eliminate things that lead to confusion:** clutter, TV, radio, noise, people talking; reflections in mirrors/dark windows; misunderstood pictures or decor.
- **Reduce things that cause stress:** caffeine; extra people; holiday decorations; public TV.
- **Adjust stimulation:** if overstimulated—reduce noise, activity and confusion; if under stimulated (bored)—increase activity and involvement.
- **Help with functioning:** signs, cues, pictures help with way finding; increase lighting to reduce misinterpretation
- **Involve in meaningful activities:** personalized program of 1:1 and small group or large group as needed.
- **Change the setting:** secure outdoor areas; decorative objects; objects to touch and hold; home-like features; smaller, divided recreational and dining areas; natural and bright light; spa-like bathing facilities; signs to help way finding.

SELECT and USE evidence-based interventions

- Work with the team to fit the intervention to the resident.
- Check care plan for additional information.
- Contact supervisor with problems/issues.

Step 3: Monitor Outcomes and Adjust Course As Needed

- Track behavior problems using rating scale(s).
- Assure adequate "dose" (intensity, duration, frequency) of interventions.
- Adapt/add interventions as needed to get the best possible outcomes.
- Make sure all people working with the resident understand and cooperate with the treatment plan and are trained as needed.

Drugs that May Cause Delirium or Problem Behaviors

This reference card lists common and especially problematic drugs that may cause delirium or contribute to problem behaviors in residents with dementia. This does not always mean the drugs should not be used and not all such drugs are listed. If a resident develops delirium or has new problem behaviors, a careful review of all medications is recommended.

Anticonvulsants

All can cause delirium, e.g.
Carbamazepine – *Tegretol*
Gabapentin – *Neurontin*
Levetiracetam – *Keppra*
Valproic acid – *Depakote*

Pain

All opiates can cause delirium if dose is too high or increased too quickly.
Codeine – *Empirin, many others*
Fentanyl – *Duragesic*
Hydrocodone – *Lortab*
Hydromorphone – *Palladone, Dilaudid*
Meperidine – *Demerol*
Morphine – *MS Contin, MS IR*
Oxycodone – *OxyContin*
Tramadol – *Ultram*

Parkinson's/Restless Legs

Most Parkinson's disease medications can cause psychosis.
Amantadine – *Symadine, Symmetrel*
Bromocriptine – *Parlodel*
Levodopa – *Sinemet , Stalevo*
Pramipexole – *Mirapex*
Rasagiline – *Azilect*
Ropinrole – *Requip*
Rotigotine – *Neupro*
Selegiline – *Eldepril, Emsam, Zelapar*

Steroids

Corticosteroids *e.g.*
Prednisone – Deltasone, etc.
Testosterone – Androgel, etc.

Psychiatric

All psychiatric medications should be reviewed as possible causes, as effects are unpredictable. Notable offenders include:
Benzodiazepines *e.g.*
Alprazolam – *Xanax*
Clonazepam – *Klonopin*
Lorazepam – *Ativan*
Stimulants *e.g.*
Methylphenidate – *Ritalin*
Hypnotics *(Sleep Medications) e.g.*
Eszopiclone – *Lunesta*
Zaleplon – *Sonata*
Zolpidem – *Ambien*
Tricyclic Antidepressants e.g.
Amitriptyline – *Elavil*
Doxepin – *Silenor, Sinequan*
Nortriptyline – *Pamelor*

Antibiotics/Antivirals

Difficult to distinguish drug effects from effects of infection. Others may contribute as well.
Antiviral
Acyclovir – *Zovirax*
Valacyclovir – *Valtrex*
Fluoroquinolones *e.g.*
Levofloxacin – *Levaquin*
Ciprofloxacin – *Cipro*
Metronidazole – *Flagyl*
Vancomycin – *Vancocin*

Cardiac Medications

Antiarrhythmics
Digoxin – *Digitek, Lanoxin*

Drugs that May Cause Delirium or Problem Behaviors

Anticholinergics—all drugs on this side of the card. May impair cognition and cause psychosis. Drugs available over-the-counter marked with *.

Tricyclic Antidepressants

Amitriptyline – *Elavil*
Clomipramine – *Anafranil*
Desipramine – *Norpramin*
Doxepin – *Sinequan*
Imipramine – *Tofranil*
Nortriptyline – *Aventyl, Pamelor*

Antihistamines/Allergy/ Cough & Cold Medicines

***Azelastine** – *Astepro*
***Brompheniramine** – *Bromax, Bromfed, Lodrane*
Carbinoxamine – *Rondec*
***Chlorpheniramine** – *Chlor-Trimeton*
***Clemastine** – *Tavist*
Cyproheptadine – *Periactin*
***Dexbrompheniramine** –*Drixoral*
Dexchlorpheniramine – *Polaramine*
***Diphenhydramine** – *Benadryl*
Hydroxyzine – *Atarax, Vistaril*
Olopatadine – *Pataday, Patanol*
Promethazine – *Phenergan*
Triprolidine – *Triacin-C*

Motion Sickness/Dizziness/ Nausea

***Dimenhydrinate** – *Dramamine*
***Meclizine** – *Antivert, Dramamine less drowsy*
Promethazine – *Phenergan*
***Scopolamine** – *Scopace, Transderm-scop, Maldemar*
Trimethobenzamide – *Tigan*

Movement Disorders

Benztropine – *Cogentin*
Trihexyphenidyl – *Artane*

Bladder Antispasmodics

Darifenacin – *Enablex*
Flavoxate – *Urispas*
Oxybutynin – *Ditropan*
Solifenacin – *VESIcare*
Tolterodine – *Detrol*
Trospium – *Sanctura*

Insomnia/Sleep

***Diphenhydramine** – *Sominex, Tylenol-PM, others*
***Doxylamine** – *Unisom, Medi-Sleep*

Stomach and GI Tract

***Ulcer and Reflux**:*
***Cimetidine** – *Tagamet*
Glycopyrrolate – *Robinul*
***Ranitidine** – *Zantac*
***GI Antispasmodics**:*
Atropine – *Sal-Tropine, Atreza*
Belladonna Alkaloids – *Donnatal, Bellamine S, Bel-Tabs, B&O suppreties*
Clidinium – *Librax*
Dicyclomine – *Bentyl*
Hyoscyamine – *Levsin, Anaspaz, Cytospaz*
Methscopolamine – *Pamine, Pamine Forte*
Propantheline – *Pro-Banthine*

Anticholinergic Antipsychotics

Chlorpromazine – *Thorazine*
Clozapine – *Clozaril*
Loxapine – *Loxitane*
Olanzapine – *Zyprexa*
Pimozide – *Orap*
Quetiapine – *Seroquel*
Thioridazine – *Mellaril*

Dementia Antipsychotic Guide

Monitoring for Response and Side Effects

Monitoring for Response

- **Clearly document** treatment target symptoms and whether they improve. The drug should be stopped if it does not help. Symptoms may change over time, with or without drug treatment.
- **Do not expect an immediate response.** Sedation from the drug may explain much of any effect seen in the first few days.
- **Do not ask for higher doses too quickly.** It may take several days to a week or more to see the full effect, depending on the drug (talk to prescriber for details). **Higher doses cause more side effects.**

Monitoring for Side Effects

Side Effect	Report to RN or prescriber if these problems occur
Movement Side Effects	Observe for tremors, tight muscles, changes in walking (gait), falls, abnormal movements (tardive dyskinesia) such as face or eye twitching, difficulty swallowing, signs of parkinsonism, restlessness (akathisia), drooling.
	Abnormal Involuntary Movement Scale (AIMS) at baseline, every 6 months, or if movement side effects are suspected.
Central Nervous System	
Sedation	Observe for sleepiness, slow to respond, hard to wake up. Use sedation scale if needed.
Confusion, delirium, or other cognitive worsening	Observe for worsening mental status or behavior changes compared to normal. Seems more confused; sedated or agitated; worsened communication abilities; problems paying attention; slower movements or speech. These may be a sign of a serious medical illness or a drug side effect. Delirium screening tool, e.g. CAM (Confusion Assessment Method) if delirium is suspected.
Psychotic symptoms (delusions or hallucinations)	Observe for: Hallucinations: seeing, hearing, smelling, tasting or feeling things that aren't there. Delusions: false fixed beliefs that a person holds in spite of evidence they are not true. Antipsychotics usually lessen these symptoms, but sometimes make them worse.
Cardiovascular / Metabolic	
Orthostatic Hypotension (rapid drop in blood pressure on standing)	Observe for signs of dizziness or falls. Check an orthostatic blood pressure by checking the blood pressure when lying down then again shortly after standing. Check monthly or if signs of dizziness occur. More frequent on initiation or after dose increase. Drugs sometimes cause an unwanted drop in blood pressure.

Dementia Antipsychotic Guide
Monitoring for Response and Side Effects cont'd

Edema (swelling)	Observe for swelling; most common in legs and ankles, but can occur in other areas.
Weight gain	Check weight monthly. Consider weekly weight for 1 month if overweight. Observe for big increases in appetite; hungry even after eating; unwanted increases in weight.
Hyperglycemia/ Diabetes (high blood sugar)	Blood glucose at baseline, 3 & 6 months, then every 6 months. Also PRN if symptoms or mental status change. Observe for confusion, increased thirst, frequent urination, unusual tiredness, blurred vision or weakness.
High Triglycerides	Fasting blood lipid panel at baseline, 3 & 6 months, then every 6 months. Especially if resident has cardiovascular risk factors: e.g. obesity, diabetes, hyperlipidemia.
Urinary Symptoms	Observe for changes in frequency – increased or decreased with urinary retention; worsened incontinence. Pain on urination. May be infection or drug-related problems.
Constipation	Observe for fewer bowel movements; hard stools; poor appetite; gut pain or distention.
Other possible adverse effects include: stroke, arrhythmias and neuroleptic malignant syndrome	

Guidance for Special Populations

Parkinson's disease (PD) and Lewy body dementia (LBD):

Movement disorder treatments (with dopamine agonists, carbidopa-levodopa, anticholinergics) can cause psychosis or delirium. Prior to antipsychotic use, consider reducing the dose of these drugs to see if the psychosis or behaviors resolve or become manageable.

Residents with PD or LBD are very sensitive to adverse effects, particularly movement side effects and neuroleptic malignant syndrome. If antipsychotics are used, expert guidelines recommend **quetiapine** or **clozapine** due to lower movement side effect risk.

Renal Impairment: Need to reduce the risperidone dose. Titrate slowly.

Hepatic Impairment: Will possibly need to reduce dose of olanzapine, quetiapine, risperidone. Use caution with all.

Dementia Antipsychotic Guide for Care Providers

General Guidelines

1. Look for reversible causes of challenging behaviors or other target symptoms prior to asking for a drug to treat them. Examples include medical problems, drugs, modifiable stressors.

2. Try nondrug strategies first. Keep using these strategies even if antipsychotics are used.

3. Clearly document treatment targets (symptoms) before and after a strategy or drug is tried. Include frequency, severity, time of day, and environmental or other triggers of symptoms.

4. Use of an antipsychotic should be well justified. The treatment target symptom must present **a danger to the person or others**, or cause the resident to have one of the following:

- inconsolable or persistent distress
- a major decline in function
- substantial difficulty receiving needed care

Appropriate and inappropriate treatment targets from CMS are listed in the boxes below. Generally antipsychotics should not be used for inappropriate treatment targets.

5. Monitor for effectiveness and side effects. (see previous card)

6. If the drug doesn't help, it should be stopped.

Appropriate Antipsychotic Treatment Targets:

- **Aggressive behavior** (especially physical)
- **Hallucinations:** seeing, hearing, smelling, tasting or feeling things that seem real to the resident but not others. For example, hearing voices or seeing people who are not there.
- **Delusions:** false personal beliefs that a resident has in spite of evidence they are not true. For example, thinks husband or wife is having an affair without reason, or family members are imposters. Note: memory problems are sometimes mistaken for delusions, e.g. thinks people are stealing items that were misplaced and forgotten.
- **Other severe distress** as described above in #4 General Guidelines.

Inappropriate Antipsychotic Treatment Targets:

- Wandering
- Not being social or friendly
- Poor self-care
- Restlessness
- Nervousness
- Fidgeting
- Mild anxiety
- Impaired memory
- Uncooperativeness without aggressive behavior.
- Not caring about what is going on around them.
- Speech or behaviors that are not dangerous to the resident or others.

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