Psychotropic Medications and Management Behavioral Symptoms in Long-Term care and Assisted Living Facilities
Composed By

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Goals of Program

- Review behavioral symptoms and management of behavior in residents residing in Assisted Living, Supported Living and Long-Term Care Communities
- Improve knowledge of diagnosis and treatment of behavioral symptoms
- Discuss long-term care facility regulations associated with psychotropic medications
- Review the role of non-medication interventions as first line management for behavioral symptoms
- Discuss the current pharmacotherapy options for patients with dementia and related behavioral symptoms
Number of Persons 65 + by Age Group (1900 to 2050)

U.S. Bureau of the Census
ALF Residents with Mental Illness

- Alzheimer's early stage
- Alzheimer's mid-stage
- Alzheimer's late stage
- Other dementia, mild
- Other dementia, severe
- MR/DD
- Depression

% of Residents

NCAL Facts and Trends 2010: The Assisted Living Sourcebook
### LTC Residents With a Diagnosis of Mental Illness

#### Nursing Home Survey

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>1985</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia and related disorders</td>
<td>7.8%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Depression</td>
<td>4.1%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Dementia and related disorders</td>
<td>27.8%</td>
<td>51.8%</td>
</tr>
<tr>
<td>Other mental disorders</td>
<td>7.2%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Any mental disorder</td>
<td>44.4%</td>
<td>58.1%</td>
</tr>
</tbody>
</table>

Behavioral Symptoms

- Leading cause for admission into ALFs and SNFs
- Frequently occur in residents with dementia
- Disturbing to caregivers and others
- Interfere with quality of life and care giving
- Increase stress between residents and caregivers
- Create more intensive and costly levels of treatment

Estimated Costs of Dementia and Behavioral Symptoms

Cost of care estimate (in 2012) $ 157 - 215 billion
Average direct cost of nursing home care for a patient with dementia: $50,000-$90,000/yr
Average cost assisting living: $38,000-$60,000/yr

Source: severson 2012 The Sapling
Possible Underlying Conditions of Behaviors

- Dementia/Delirium
- Behavioral Symptom
- Environmental Stressor
- Medication Therapy
- Mood Disorder
- Psychotic diagnosis
- Anxiety Disorder/Agitation
- Interpersonal Stressor
- Dementia/Delirium
- Environmental Stressor
## Dementia vs. Delirium

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Dementia</th>
<th>Delirium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>Poor</td>
<td>Lucid Periods</td>
</tr>
<tr>
<td>Sleep</td>
<td>Undisturbed</td>
<td>Disturbed</td>
</tr>
<tr>
<td>EEG</td>
<td>Normal</td>
<td>Abnormal</td>
</tr>
<tr>
<td>Hallucination</td>
<td>Rare</td>
<td>Vivid</td>
</tr>
</tbody>
</table>

Tueth MJ et al. *Geriatrics* 2001
Possible Causes of Delirium and Behavioral Changes

- Dehydration
- Electrolyte imbalance
- Hyper-/hypoglycemia
- Hypoxia
- Long-standing constipation
- Medications
- COPD
- Diabetes
- Congestive heart failure
- Infection
- Insomnia
Medications Which May Cause Behavioral Changes

- Antiarrhythmic agents
- Antibiotics
- Anticholinergic agents
- Anticonvulsants
- Antidepressants
- Antiemetics
- Antihistamines/
  Decongestants
- Antihypertensive agents
- Antineoplastic agents
- Anti-Parkinson’s agents
Medications Which May Cause Behavioral Changes Cont.

- Benzodiazepines
- Beta-blockers
- Digoxin
- Corticosteroids
- H2 receptor antagonists
- Immunosuppressive agents
- Narcotic analgesics
- Muscle relaxants
- NSAIDs
What is Agitation?

- Any inappropriate verbal, vocal, or motor activity that is not an obvious expression of need or confusion
- May be verbal or physical
- May be aggressive or non-aggressive
- It is not a diagnostic term but a group of signs and symptoms that can result from a variety of medical or psychiatric conditions

Dimensions of Agitation

Physically Aggressive

- Verbally Aggressive: Hitting, kicking, pushing, scratching
- Verbally Nonaggressive: Pacing, repetitious mannerisms, inappropriate disrobing

Physically Nonaggressive

- Verbally Aggressive: Screaming, cursing, temper outbursts
- Verbally Nonaggressive: Constant requests for attention, complaining, whining, negativism
Syndromes of Agitation

- Delirium
- Aggression or anger
- Depression
- Anxiety
- Insomnia
- Episodic Agitation ("Sundowning")
- Psychosis
MANAGEMENT OF BEHAVIORAL SYMPTOMS
Characterize and Identify Target Symptoms
Behaviors and Patterns

- Onset, duration, pattern, relief
- Frequency, timing, length of episodes
- Factors that may precipitate behavior
- Feelings of restlessness, tension, loss, insecurity, anxiety, etc.
It is critical to document agitation for all residents using descriptors of specific behaviors, as well as frequency, time, and place.

Documentation allows for monitoring response to management strategies- both medication and non-medications.
General Treatment Guidelines

Prevention
Maximize function, cognition, behavior, and independence
Set realistic treatment goals
Increase quality of life
PSYCHOTROPIC MEDICATIONS IN LONG-TERM CARE AND ASSISTED LIVING FACILITIES
F TAG 758:

DRUG REGIMEN IS FREE FROM UNNECESSARY PSYCHOTROPIC MEDICATIONS/PRN USE
Psychotropic medications in long-term care

- §483.45(c)(3) A psychotropic drug is any drug that affects brain activities associated with mental processes and behavior. These drugs include, but are not limited to, drugs in the following categories:
  - (i) Anti-psychotics
  - (ii) Anti-depressants
  - (iii) Anti-anxiety agents
  - (iv) Sedative/Hypnotic
Psychotropic medications in long-term care

- §483.45(e) Based on a comprehensive assessment of a resident, the facility must ensure:
  
  1. Residents who have not used psychotropic drugs are not given these drugs unless the medication is necessary to treat a specific condition as diagnosed and documented in the clinical record;

  2. Residents who use psychotropic drugs receive gradual dose reductions, and behavioral interventions, unless clinically contraindicated, in an effort to discontinue these drugs;
(3) Residents do not receive psychotropic drugs pursuant to a PRN order unless that medication is necessary to treat a diagnosed specific condition that is documented in the clinical record; and PRN orders for psychotropic drugs are limited to 14 days. Except as provided:

(4), if the prescribing practitioner believes that it is appropriate for the PRN order to be extended beyond 14 days, he or she should document their rationale in the resident’s medical record and indicate the duration for the PRN order.
Psychotropic medications in long-term care

- **New Admissions** to long-term care on psychototropic meds:

- The attending physician in collaboration with the consultant pharmacist and facility staff must re-evaluate the use of the psychotropic medication and consider whether or not the medication can be reduced or discontinued upon admission or soon after admission.
Psychotropic medications in long-term care (GDR’s)

- Within the first year in which a resident is admitted on a psychotropic medication OR after the prescribing practitioner has initiated a psychotropic medication, the facility must attempt a GDR in two separate quarters (with at least one month between the attempts), unless clinically contraindicated.

- After the first year, a GDR must be attempted annually, unless clinically contraindicated.
Psychotropic medications in long-term care (GDR’s)

- For any individual who is receiving a psychotropic medication to treat expressions or indications of distress related to dementia, the GDR may be considered clinically contraindicated for reasons that include, but that are not limited to:
  - The resident’s target symptoms returned or worsened after the most recent attempt at a GDR within the facility; and
  - The physician has documented the clinical rationale for why any additional attempted dose reduction at that time would be likely to impair the resident’s function or increase distressed behavior.
Psychotropic medications in long-term care (GDR’s)

- For pts receiving a psych med to treat a disorder other than expressions or indications of distress related to dementia (for example, schizophrenia, bipolar mania, depression with psychotic features, or another medical condition, which may cause psychosis), the GDR may be considered clinically contraindicated for reasons that include, but that are not limited to:

  - The continued use is in accordance with current standards of practice and the MD has documented the clinical rationale for why any attempted dose reduction would be likely to impair the pt’s function or exacerbate an underlying medical or psychiatric disorder; or
  - The pt’s target symptoms returned or worsened after the most recent attempt at a GDR within the facility and the MD has documented the clinical rationale for why any additional attempted dose reduction at that time would be likely to impair the pt’s function or exacerbate an underlying medical or psychiatric disorder.
KEY ELEMENTS OF NONCOMPLIANCE

- Inadequate Monitoring
- Excessive Dose (including duplicate therapy)
- Adverse Consequences
• Failure to present to MD the need to attempt GDR in the absence of identified and documented clinical contraindications;

  or • Use of psych medication(s) without documentation of the need for the medication(s) to treat a specific diagnosed condition;

  or • PRN psych medication ordered for longer than 14 days, without a documented rationale for continued use;

  or • Failure to implement person-centered, non-pharmacological approaches in the attempt to reduce or discontinue psychotropic medication
NON-MEDICATION MANAGEMENT
General Guidelines

Prevent new occurrences

Educate resident, family, and staff

Identify and reduce causative factors

Part of evaluation to determine clinical necessity of psychoactive medications in the long-term care survey process.
Safety Precautions When Performing Assessment and Non-Medication Treatment

- Do not startle the resident
- Approach the resident slowly
- Do not touch a physically aggressive resident
- Use a soothing tone
- If agitation persists, come back later
- Get help if needed
Areas of Non-Medication Interventions

- Sensory
- Environmental
- Behavioral
- Communication
- Caregiver Support and Education
Sensory Interventions

- Distraction
- Music, aroma or pet therapy
- Massage
- Light therapy
- Food or snacks
- Eliminating physical discomfort (clothes too tight, etc.)
Environmental Interventions

- Reduce excess noise
- Appropriate temperature
- Appropriate lighting
- Provide safety and security
- Individualize environment
- Increase personal space, if possible
Behavioral Interventions

- Reinforcement of alternative behaviors
- Positive reinforcement
- Redirect
- Psychotherapy if necessary
Communication

- Keep communication simple, supportive, and positive
- Foreshadowing (e.g., tell resident bath time in 10 minutes, remind again in 5 min., remind again on way to shower, etc.)
- Don’t argue; speak calmly and with respect
Possible **Non-medication Interventions** specific to behaviors

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Possible Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Anger/Abusive Language</td>
<td><strong>Distract &amp; redirect</strong>; introduce a “favorite” of resident (activity, food, music, etc.)</td>
</tr>
<tr>
<td>Verbal Anxiety (feeling lost, scared, etc.)</td>
<td>Approach slowly, use gentle touch, <strong>reassure</strong> with familiar objects, locations, activities, etc.</td>
</tr>
</tbody>
</table>
Possible **Non-medication Interventions** specific to behaviors

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Possible Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wandering, Pacing</td>
<td>Involve in <strong>physical or movement activities</strong>, dancing, normalization activities (e.g. sorting &amp; folding laundry, sweeping)</td>
</tr>
<tr>
<td>Aggression (hitting, yelling, verbal abuse, etc.)</td>
<td><strong>Remove resident from situation</strong>, physical activity (walking, ball activities), decrease stimuli, use comforting smells or food</td>
</tr>
</tbody>
</table>
Non-medication interventions requires teamwork!!

- Resident
- Family and friends
- Consultant Pharmacists in LTC
- Nurses and CNAs
- Physicians and physician extenders
- Social workers
- Psychologist
- Physical/occupational therapists
Medication Management

- There is no FDA approved treatment for agitation associated with dementia
- Dementia with agitation is not viewed as a specific medical “disease”
- Proper documentation and diagnosis leads to better choice of class of medications and increases probability of success
Management of Behaviors

Before starting medication, ask the following questions:

- Does symptom warrant medication treatment and why?
- Is the symptom likely to be medication responsive?
- Which medication category is most suitable?
- What are the potential side effects of particular medications?
- For how long should treatment be continued?
Behaviors Unlikely to Respond to Medication

- Wandering, pacing, exit seeking
- Screaming, inappropriate verbalizing, using foul language
- Resistance with toileting
- Inappropriate voiding, defecation, or spitting
- Inappropriate sexual behaviors
Specific Classes of Psychotropic Medications

- **Antipsychotics (1\textsuperscript{st} and 2\textsuperscript{nd} Generation)**
- **Mood Stabilizers**
- **Antidepressants**
  - tricyclic antidepressant (TCA)
  - selective serotonin reuptake inhibitor (SSRI)
  - serotonin–norepinephrine reuptake inhibitor (SNRI)
  - selective dopamine reuptake inhibitor (SDRI)
- **Anxiolytics**
- **Sedative Hypnotics**
Antipsychotics (First Generation or Typical)

- **High Potency**:
  - Fluphenazine (Prolixin) has decanoate formulation
  - Haloperidol (Haldol) has decanoate formulation

- **Low Potency**:
  - Thioridizine (Mellaril)
  - Loxapine (Loxitane)
  - Chlorpromazine (Thorazine)
  - Thiothixene (Navane)
  - Perphenazine (Trilafon)
### Antipsychotic (SGA or Atypical) Dosing for Elderly with Dementia and Associated Behaviors

<table>
<thead>
<tr>
<th>Antipsychotic</th>
<th>Common Starting Dose</th>
<th>Maximum Dose (Federal NF Guidelines)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Atypical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>5-10 mg qd</td>
<td>10 mg qd</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>2.5-5 mg qhs</td>
<td>7.5 mg/day (qd)</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>25–150 mg qhs</td>
<td>150 mg/day (qd to bid)</td>
</tr>
<tr>
<td>Risperidone</td>
<td>0.25-0.5 mg qd</td>
<td>2 mg/day (qd to bid)</td>
</tr>
</tbody>
</table>
Newer Second Generation Antipsychotic agents

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose Range</th>
<th>Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lurasidone (Latuda)</td>
<td>40 – 120 mg</td>
<td>Drowsiness, akinesia, no weight gain/metabolic</td>
</tr>
<tr>
<td>Asenapine (Saphris)</td>
<td>20 – 80 mg</td>
<td>Drowsiness, no weight gain/metabolic</td>
</tr>
<tr>
<td>Iloperidone (Fanapt)</td>
<td>6 – 12 mg</td>
<td>Dizziness, dry mouth, fatigue</td>
</tr>
</tbody>
</table>
Antipsychotics in the Elderly: Issues to Consider

- Pharmacokinetics
- EPS
- Efficacy
- Orthostasis, falls, fractures
- Anticholinergic effects and cognition
Antipsychotics in the Elderly: Issues to Consider Cont.

- Weight gain and associated effects
- Cardiac effects
- Ocular effects
- Economic/Cost
- Black Box Warning with Atypical Antipsychotics in residents with Dementia
## Antipsychotic Side Effect Profile

<table>
<thead>
<tr>
<th>Side Effect</th>
<th>EPS</th>
<th>Sedation</th>
<th>Hypotension</th>
<th>Anti-cholinergic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Atypical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>Low</td>
<td>Low-Mod</td>
<td>Low</td>
<td>Low-Mod</td>
</tr>
<tr>
<td>Risperidone</td>
<td>Low</td>
<td>Low</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>Low</td>
<td>Moderate</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>Low</td>
<td>Mod-High</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Conventional</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haloperidol</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>
Atypical (Second Generation) Antipsychotics

<table>
<thead>
<tr>
<th>Medication</th>
<th>Diabetes</th>
<th>EPS</th>
<th>QT Interval</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aripiprazole</td>
<td>+/-</td>
<td>+</td>
<td>+/-</td>
<td>+</td>
</tr>
<tr>
<td>Asenapine</td>
<td>+</td>
<td>+++</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Clozapine</td>
<td>++++</td>
<td>+/-</td>
<td>+</td>
<td>+++++</td>
</tr>
<tr>
<td>Iloperidone</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Lurasidone</td>
<td>+/-</td>
<td>++</td>
<td>+/-</td>
<td>+/-</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>++++</td>
<td>+</td>
<td>+</td>
<td>+++++</td>
</tr>
<tr>
<td>Paliperidone</td>
<td>++</td>
<td>+++</td>
<td>+</td>
<td>+++</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>++</td>
<td>+/-</td>
<td>+</td>
<td>+++</td>
</tr>
<tr>
<td>Risperidone</td>
<td>++</td>
<td>+++</td>
<td>+</td>
<td>+++</td>
</tr>
<tr>
<td>Ziprasidone</td>
<td>+/-</td>
<td>+</td>
<td>++</td>
<td>+/-</td>
</tr>
</tbody>
</table>
# Mood Stabilizers

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
<th>Side Effects</th>
<th>Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium</td>
<td>Varies – start at 300 mg hs</td>
<td>Polyuria, GI, renal, thyroid, wt chgs</td>
<td>12 hr trough TSH Cr</td>
</tr>
<tr>
<td>Valproic Acid/Divalproex Na</td>
<td>Varies – start at 500 mg</td>
<td>Hepatic, wt, Platelets, GI Sedation,</td>
<td>12 hr trough LFTs CBC</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>Varies – start at 200 mg</td>
<td>Sedation, wt WBC, GI, Hepatic</td>
<td>12 hr trough WBC LFTs</td>
</tr>
<tr>
<td>Lamotrigine</td>
<td>50 – 400mg</td>
<td>Rash, slow titration</td>
<td>None</td>
</tr>
<tr>
<td>Gabapentin</td>
<td>Varies start at 100mg</td>
<td>Sedation, gait, confusion</td>
<td>Cr</td>
</tr>
</tbody>
</table>
# Antidepressant Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective Serotonin Reuptake Inhibitors (SSRI)</td>
<td>fluoxetine, paroxetine, citalopram, sertraline, escitalopram</td>
</tr>
<tr>
<td>Selective Dopamine Reuptake Inhibitors (SDRI)</td>
<td>bupropion</td>
</tr>
<tr>
<td>Selective Norepinephrine Reuptake Inhibitors (SNRI)</td>
<td>venlafaxine, duloxetine</td>
</tr>
<tr>
<td>Tricyclic Antidepressants (TCA)</td>
<td>nortriptyline, imipramine, desipramine, amitriptyline</td>
</tr>
<tr>
<td>Others</td>
<td>mirtazapine, trazodone</td>
</tr>
</tbody>
</table>
# Antidepressant Dosing for Agitation and Aggression

<table>
<thead>
<tr>
<th>SSRI Antidepressants</th>
<th>Initial Dose (titration)</th>
<th>Suggested Max Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citalopram</td>
<td>20 mg/day (20 mg/day)</td>
<td>40 mg/day</td>
</tr>
<tr>
<td>Escitalopram</td>
<td>10 mg/day</td>
<td>10 mg/day</td>
</tr>
<tr>
<td>Fluoxetine</td>
<td>5-10 mg/day (5-10 mg/day)</td>
<td>20-40 mg/day</td>
</tr>
<tr>
<td>Paroxetine</td>
<td>5-10 mg/day (5-10 mg/day)</td>
<td>20 mg/day</td>
</tr>
<tr>
<td>Sertraline</td>
<td>25-50 mg/day (25-50 mg/day)</td>
<td>100-150 mg/day</td>
</tr>
</tbody>
</table>
## Antidepressant Dosing for Agitation and Aggression

<table>
<thead>
<tr>
<th>Other Antidepressants</th>
<th>Initial Dose (titration)</th>
<th>Suggested Max Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desipramine</td>
<td>10-25 mg/day (10-25 mg/day)</td>
<td>75 mg/day</td>
</tr>
<tr>
<td>Mirtazapine</td>
<td>7.5-15 mg/day (7.5 mg/day)</td>
<td>45 mg/day</td>
</tr>
<tr>
<td>Nortriptyline</td>
<td>10-25 mg/day (10-25 mg/day)</td>
<td>75 mg/day</td>
</tr>
<tr>
<td>Trazodone</td>
<td>25 mg daily to 2 times a day</td>
<td>200-300 mg/day</td>
</tr>
<tr>
<td>Venlafaxine</td>
<td>25-50 mg/day</td>
<td>150 mg/day</td>
</tr>
</tbody>
</table>
Side Effects: Antidepressants

- **Serotonergic (SSRIs)**
  - insomnia
  - sexual side effects
  - weight gain
  - activation
  - nausea/diarrhea

- **Norepinephrine (TCAs)**
  - blood pressure
  - sedation
  - weight gain
  - cardiac in overdose

- **Dopaminergic - bupropion**
  - activation
  - insomnia
  - no sexual SE
  - no weight gain
  - seizure risk

- **SNRI**
  - think combo SSRI and TCA
  - nausea
  - weight gain
  - blood pressure changes
Approaches to Anxiety

- SSRIs, SNRIs (first line med)
  - Fluoxetine, paroxetine, sertraline, citalopram
  - Duloxetine, venlafaxine

- Others
  - Benzodiazepines –
    - Alprazolam (3hr half life)
    - Lorazepam (8hr half life)
    - Clonazepam (18hr half life)
    - Diazepam (60hr half life)
  - Gabapentin – 300 – 3000 mg
  - Buspirone
  - Second Generation Antipsychotics
  - NOT Bupropion - can worsen anxiety
Rational Approach to Benzodiazepines for Anxiety

- Efficacy, rapid onset make them desirable
- Acute stress, fluctuating anxiety, severe panic are indications
- Limit use to acute episode if possible (4 weeks max) – can become difficult to stop this though
- Side effects include sedation, tolerance, cognitive impairment, concern with increased risk of dementia, early mortality

**Base choice by half-life:**
- short anxiety attacks, events – alprazolam (3 hours)
- sleep, intermediate coverage – lorazepam (6-8 hour)
- longer term coverage – clonazepam (18 hours)
Insomnia

Sleep hygiene (non-pharmacologic approach) first!
Naps common due to medication side effects and interfere with normal sleep patterns

- Trazodone 25 – 200 mg
- Gabapentin 300 – 900 mg
- Mirtazapine 15 mg
- SGAs – especially quetiapine
- Benzodiazepines
- Zolpidem – 5 mg
Chronic Pain

- **SNRIs** (Venlafaxine, duloxetine) — some additional benefit with chronic pain due to norepinephrine activity
- **Gabapentin** — up to 3,000 mg — watch dizziness, weight gain, renal clearance
- Many people with chronic pain also experience depression
Behavior Management Medication Algorithm

- **Aggression or Anger**
  - Mild Anger: Mood stabilizer, SSRI
  - Severe Anger: Mood stabilizer, SGA
- **Depressive Symptoms**
  - Without Psychosis: SSRI/SNRI
  - With Psychosis: Antidepressant + atypical antipsychotic
- **Anxious Symptoms**: SSRIs, Trazodone
- **Insomnia**: Trazodone, Mirtazapine
- **Episodic Agitation**: Mood stabilizer, Trazodone
- **Psychotic Symptoms**: SGA
Behavior Management Medication Algorithm

Presents with:
- general anger associated with activities
- aggression directed at caregivers, other residents, family or self such as slapping, pushing, hitting, biting, verbal outbursts such as accusations, name-calling, obscenities, threats

Aggression or Anger

Mild Anger → Mood Stabilizer, SSRI

Severe Anger → Mood Stabilizer, Atypical Antipsychotic
Behavior Management Medication Algorithm

Presents with:
- increase in wandering, confusion, disorientation that starts in the late afternoon and becomes especially severe at night (Down Syndrome)
- Possible result from fatigue, decrease in vision in the dark

Episodic Agitation

Mood Stabilizer, Trazodone
Psychotic Symptoms

Presents with:

• Hallucinations, delusions, disorganized speech and thought, paranoia

Atypical or conventional antipsychotic
Time to Determine Response to Therapy

<table>
<thead>
<tr>
<th>Medication / Class</th>
<th>Acute Treatment</th>
<th>Long Term Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antipsychotic</td>
<td>2 - 8 days</td>
<td>2 - 4 weeks</td>
</tr>
<tr>
<td>Benzodiazepine*</td>
<td>1 - 6 days</td>
<td>1 - 3 weeks</td>
</tr>
<tr>
<td>Trazodone</td>
<td>7 - 10 days</td>
<td>3 - 4 weeks</td>
</tr>
<tr>
<td>Buspirone</td>
<td>-</td>
<td>4 - 6 weeks</td>
</tr>
<tr>
<td>Divalproex</td>
<td>-</td>
<td>3 - 6 weeks</td>
</tr>
<tr>
<td>SSRI</td>
<td>-</td>
<td>4 - 6 weeks</td>
</tr>
<tr>
<td>Tricyclic antidepressants</td>
<td>-</td>
<td>4 - 6 weeks</td>
</tr>
</tbody>
</table>

*It is strongly recommended that a benzodiazepine be discontinued if not effective in 1-6 days.
Switching Therapy: Inadequate Response to Initial Medication (dependent on dx)

<table>
<thead>
<tr>
<th>Initial Treatment</th>
<th>Consider Changing To:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Antipsychotic</td>
<td>Atypical Antipsychotic&lt;br&gt;Also consider: Mood Stabilizer, Trazodone, or another conventional antipsychotic</td>
</tr>
<tr>
<td>Atypical Antipsychotic</td>
<td>Another atypical antipsychotic&lt;br&gt;Also consider: Mood Stabilizer, or Trazodone</td>
</tr>
<tr>
<td>Benzodiazepine</td>
<td>Atypical antipsychotic&lt;br&gt;Also consider: Mood Stabilizer, Trazodone, Buspirone, or conventional antipsychotic</td>
</tr>
</tbody>
</table>
Switching Therapy: Inadequate Response to Initial Medication (dependent on dx)

<table>
<thead>
<tr>
<th>Initial Treatment</th>
<th>Consider Changing To:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trazodone</td>
<td>Benzodiazepine</td>
</tr>
<tr>
<td></td>
<td>Also consider: SSRI or SNRI</td>
</tr>
<tr>
<td>Antidepressant</td>
<td>Another antidepressant</td>
</tr>
<tr>
<td>Buspirone</td>
<td>Trazodone or SSRI or SNRI</td>
</tr>
<tr>
<td>Mood Stabilizer</td>
<td>SSRI</td>
</tr>
<tr>
<td></td>
<td>Also consider: Trazodone, buspirone, or atypical antipsychotic</td>
</tr>
</tbody>
</table>
## Adjunctive Therapy

<table>
<thead>
<tr>
<th>Initial Treatment</th>
<th>Consider Adding:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional antipsychotic</td>
<td>Mood Stabilizer, trazodone, SSRIs</td>
</tr>
<tr>
<td>Atypical antipsychotic</td>
<td>Mood Stabilizer, trazodone, SSRIs</td>
</tr>
<tr>
<td>Benzodiazepine</td>
<td>Atypical antipsychotic, conventional antipsychotic, Mood Stabilizer, SSRIs (consider tapering benzodiazepine to discontinuation)</td>
</tr>
</tbody>
</table>
Pharmacotherapy
General Principles

- Use psychotropic medications only where appropriate
- Start low, go slow
- Assess target symptoms and toxicity
- Always try to get to lowest effective dose
- If ineffective, taper and reevaluate, consider second agent
- Medications don’t always work
SUMMARY

- Map, identify and define behaviors
- Try Non-medication Interventions first
- Remember regulations pertaining to psychotropic medications in long-term care facilities
- Start medication for behaviors only when absolutely necessary
- Try to reduce to lowest effective dose or to discontinuation whenever possible