



American Hospital Association

Optimizing the Patient Experience with Behavioral Health Services in Post-Acute Settings

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Background

- Joint call between AHA's Section for Long-Term Care and Rehabilitation and Section for Psychiatric and Substance Abuse Services
- Speakers from Highland Hospital, Highlands at Brighton and University of Rochester
 - Daniel Ari Mendelson, MS, MD, FACP, AGSF, CMD
 - Joseph A. Nicholas, MD, MPH, CMD
- Speakers from McLean Hospital
 - James M. Ellison, MD, MPH
 - Maureen Malin, MD, MBA, PhD
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MEDICINE *of* THE HIGHEST ORDER

Disclosures

- Drs. Ellison, Malin, and Adkison report no relevant conflicts of interest.
- Dr. Ellison will discuss unapproved or investigational uses of products during this presentation.

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Highlands at Brighton

- <https://www.urmedicine.org/locations/highlands-at-brighton/>
- 145 Bed Academic Nursing Home
 - 30 Sub-acute Rehabilitation Beds – Post-acute Care Unit
 - 20 Ventilator Dependent Beds – Wean Unit
 - 15 Neurobehavioral Beds – Behavior Unit
 - 22 Dementia Beds – Behavior Unit Step-Down
 - 58 Long Term Care Beds – Traditional SNF/LTC
- An affiliate of the University of Rochester
- Staffed by University of Rochester Physicians

Highlands at Brighton

- <https://www.urmedicine.org/locations/highlands-at-brighton/>
- Located in suburbs just outside city limits
 - 3 miles from 2 primary referring academic hospitals
 - Medical office park setting with many services proximate
- ~210,000 city population
- ~1,000,000 catchment population
- Acquired in 2005 by University of Rochester
- Specialty mission redesign in 2006
 - New Medical Director, New Administrator
- No LTACH in upstate NY – essentially bridges for LTACH services

Highlands at Brighton

- Neurobehavioral Unit
- “Neurological and behavioral disorders can cause a wide variety of issues, making each case unique and often complex. If your loved one needs specialized care, there's no better place to find it. Our patients benefit from our collaboration with UR Medicine, providing the expertise of neurologists, neuropsychologists and therapists to help us determine the right care options for your loved one's individual case.”

Highlands at Brighton

- 1 of 5 Neurobehavioral Units in NY State
- Regulatory Mandates
 - All private rooms
 - Secure Unit – Double Locked
 - 1 primary care visit per month
 - 1 psychiatry visit per month
 - Monthly interdisciplinary care rounds
 - Staff must be trained
 - Secure outside area

Highlands at Brighton

- Approximate Staffing
 - 0.5 FTE Primary Care APP (NP)
 - 0.1 FTE Primary Care Physician
 - 0.2 FTE Psychiatry APP (NP)
 - 0.1 FTE Psychiatry Physician
 - 1 FTE Nurse Manager - RN
 - 1 FTE Charge Nurse – RN
 - 2 FTE LPN Days, 1 FTE LPN Nights/Evenings
 - 3-4 FTE CNA's Days, 1-2 FTE CNA's Nights/Evenings
 - 0.5 FTE Recreational Therapist
 - 0.5 FTE MSW

Highlands at Brighton

- Primary Care
 - Primary care physician sees at least once per month
 - Internal Medicine Boarded
 - Palliative Care Boarded
 - Special interest and experience in Geriatrics
 - Primary care advanced practice provider
 - Acute Visits, Admissions, Discharges
 - Coordinates Interdisciplinary rounds
 - Screens New Admissions

Highlands at Brighton

- Administration
 - Mission is to provide throughput for high census academic hospital
 - Specialty Units Designed to provide discharge options of last resort
 - Committed to placing “unplaceable” residents
 - 95% of admissions come from two academic hospitals
 - 810 bed University hospital
 - 261 bed community but tertiary University owned hospital
 - Goal of 500+ admissions per year
 - 2005 Admissions were 140; 2013 was 510
 - University underwrites losses and provides technical expertise

Highlands at Brighton

- Nursing
 - Director of Nursing has longest tenure of any senior staff – 15+ years
 - Special interests:
 - Neurobehavioral issues & Dementia
 - Ventilator/Respiratory Care
 - Post-acute Care
 - Expertise in complex care transitions and care management
 - Expertise in staff education
 - Lower than community average turnover
 - Many staff have 5+ year tenure

Highlands at Brighton

- Medical Staff
 - Closed Medical Staff Model
 - 5 physicians – Total ~1.5 FTE
 - Full-time University faculty
 - 4 IM and Palliative Care certified
 - » 2 Geriatrics Certified
 - 1 Physiatry certified
 - 4 APP – Total ~2.8 FTE
 - 2 NP's, 2 PA's
 - Each with at least 8 years of experience
 - Highly focused on person-centered care

Highlands at Brighton

- Unit Design
 - 15 private rooms
 - 15 private baths
 - Double-locked unit
 - Secure windows
 - Secure court yard
 - Activities/Multipurpose room
 - Dining room
 - Quiet room
 - Shower room

Highlands at Brighton

- 15 Bed Neurobehavioral Unit
 - ~45 discharge per year
 - ~1/2 of discharges are step down to other unit or SNF
 - ~1/2 of expected deaths
 - Mean LOS is ~4 months with wide range
 - ~90% admissions from partner hospital
 - ~5% from other nursing homes
 - With agreement to take patient back when stabilized
 - ~5% from home or other hospitals
 - 100% occupancy with waiting list

Highlands at Brighton

- On-site Services
 - Basic radiography (plain films, ultrasound)
 - Suturing, wound glue
 - EKG, echocardiography, event monitors, Holter
 - Basic laboratory services
 - Advanced respiratory therapy including high flow and ventilator care
 - Intermediate rehabilitative services
 - Consultants:
 - Psychiatry, Physiatry, Podiatry, Dental, Optometry, Urology, Palliative Care, Hospice, Otolaryngology

Highlands at Brighton

- Behavior Management
 - Weekly behavior management interdisciplinary care rounds
 - Primary Care APP
 - Nurse Manager
 - Psychiatry APP
 - Social Work
 - CNA's
 - Recreational Therapy
 - Other services as needed: Pharmacy Consultant, Rehabilitation, Hospice, Home Care Discharge Planner, etc

Highlands at Brighton

- Behavior Management
 - Protocols for non-medication management
 - Protocols for medication management
 - Person-centered care planning
 - Staff Development
 - Family Engagement
- LTC Staff Training
 - Role Modeling
 - Experiential Learning
 - Shared Learning/Case Finding/Case Discussion

Highlands at Brighton

- Admission Management
 - Most referrals come from acute hospital
 - Chart review
 - Care conference
 - Must have adequate behavior care plan prior to admit
 - Pharmacy review
 - Medical review
 - Goals of Care Assessment

Highlands at Brighton

- Discharge Planning
 - Step down unit in house
 - Partnerships with outside LTC/SNF's
 - Transferring of Behavior Plan
 - Observation on unit prior to transfer
 - Behavior unit staff goes to new unit to consult
 - Agreements if patient came from outside SNF to remain responsible for patient

Highlands at Brighton

- Recommendations for typical community post-acute care
 - Protocols
 - Non-medication management
 - Medication management
 - Staff training
 - Non-medication management
 - Identifying triggers
 - Flexibility
 - Controlling environment
 - Goals of Care Assessment & Palliative Care
 - Family/Caregiver Education
 - Psychiatry/Geriatrics consultation

Highlands at Brighton

- Recommendations for typical community post-acute care
 - “The right staff”
 - Patient
 - Calm
 - Cognitively flexible
 - Good at redirecting patient and caregivers
 - Good communicators
 - Not task oriented but person-centered
 - Adequate staffing/resources
 - Avoiding burnout/turnover
 - EAP/support



MEDICINE *of* THE HIGHEST ORDER

McLean Hospital

Managing Noncognitive Behavioral Symptoms in Patients With Major Neurocognitive Disorders: The McLean Hospital Approach

McLean Hospital - Agenda

- Definitions
 - Who is *McLean*?
 - What are *Major Neurocognitive Disorders*?
 - What are *Noncognitive Behavioral Symptoms*?
- Nonpharmacologic Management
- Medications
 - How are they used?
 - What harm can they do?

McLean Hospital

- 182 bed, free-standing psychiatric hospital
- Flagship mental health hospital and largest psychiatric teaching affiliate of Harvard Medical School.
- Large commitment to geriatric population
 - **Inpatient Services**
 - Older Adults Unit
 - Geriatric Psychiatry Unit / Palliative Care Model
 - **Outpatient Services**
 - Memory Diagnostic Clinic
 - Mood Disorders Clinic
 - SAGE Enhanced Outpatient Services
 - **Geriatric Research Program**
 - Investigating new therapeutic agents
 - Exploring pathophysiology of NCBS

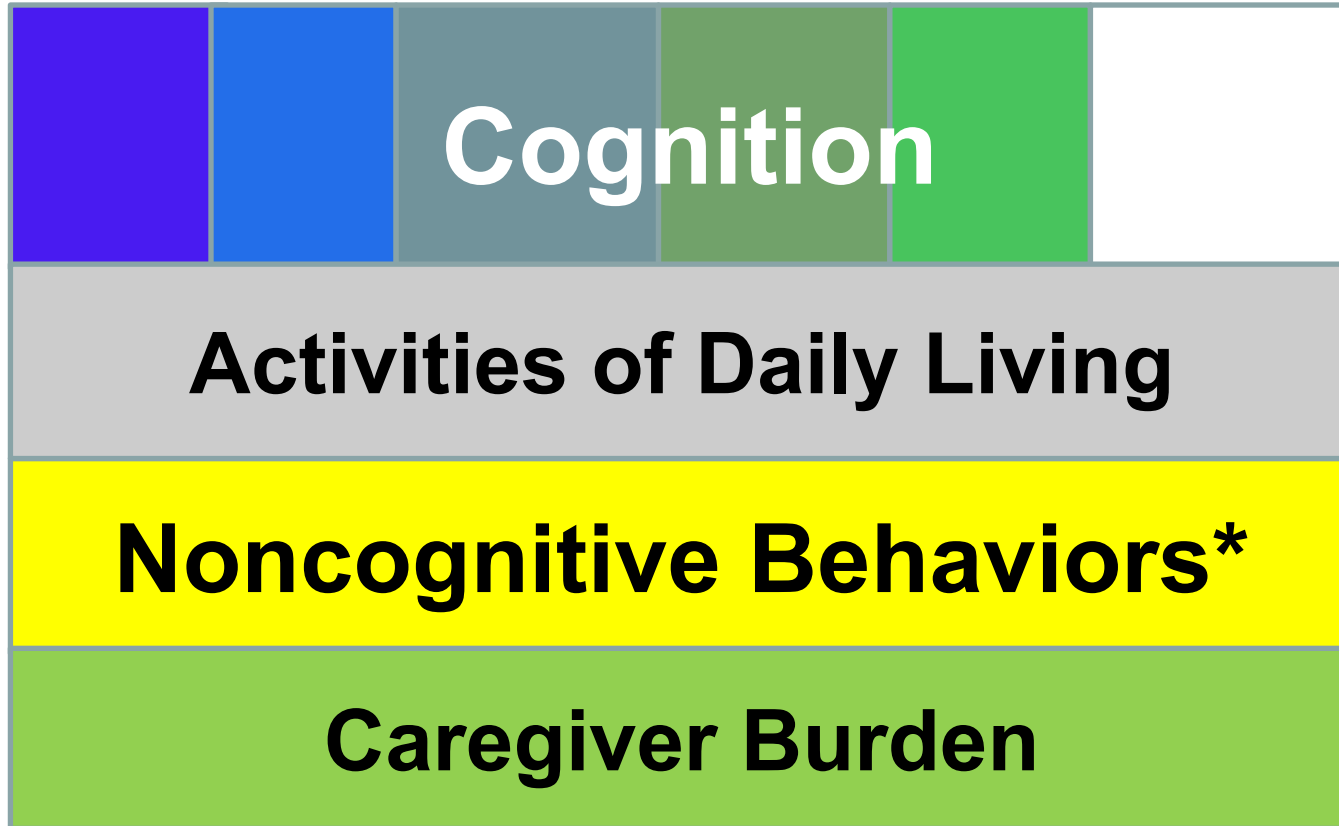
Background: Demographics of the Elderly

- >36 million in US: the fastest growing population segment at present and for years to come
- 20% with mental health concerns
 - Major Neurocognitive Disorder:
 - The most frequent neuropsychiatric disorder of later life
 - 5.4 million in the US with Alzheimer's Disease (40% by age 85)
 - Millions with Lewy Body Dementia and with Vascular Dementia
 - Noncognitive symptoms: over 90% of those with major neurocognitive disorder

The Physician's Map of Dementia

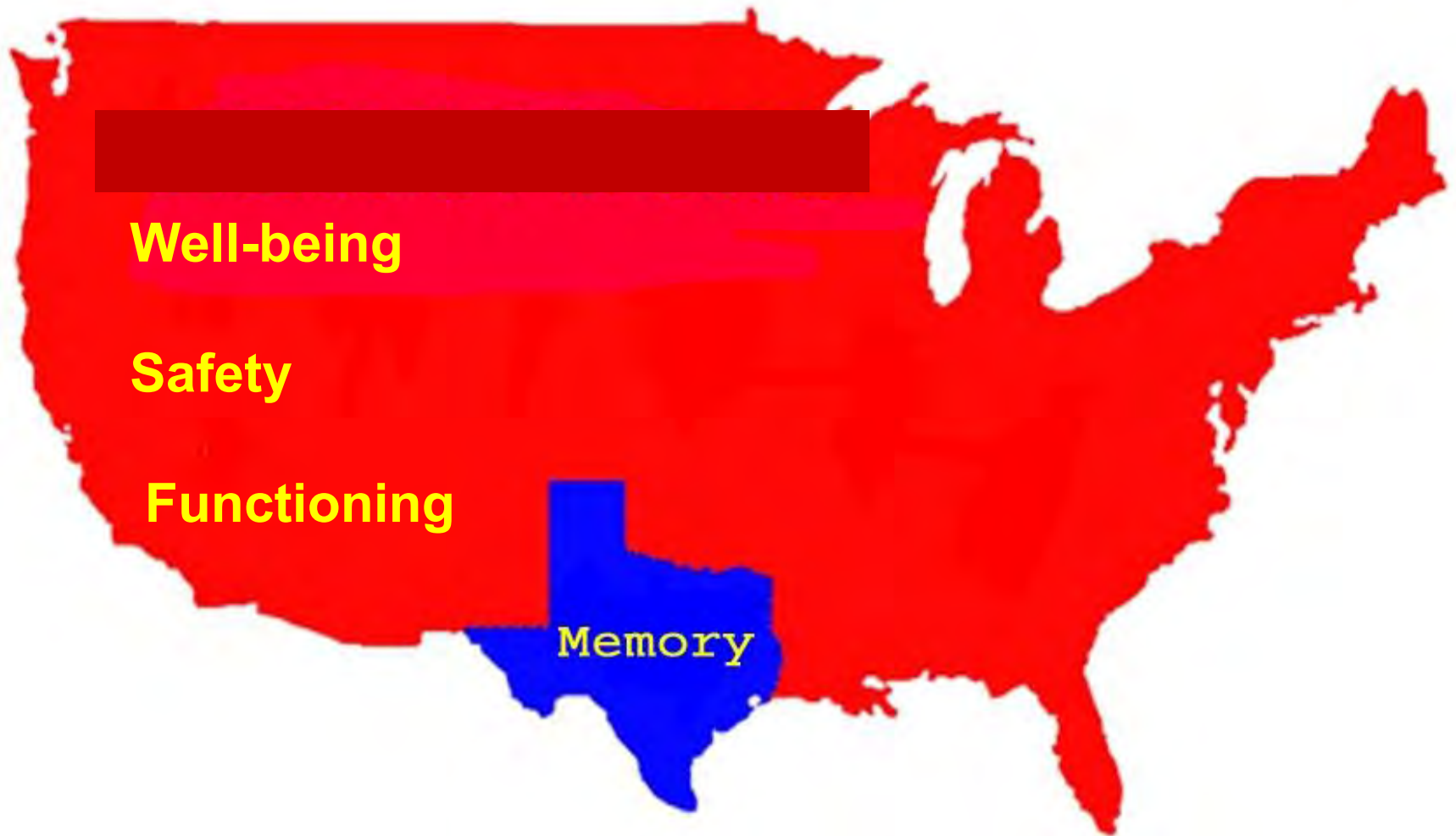


Other Aspects of MNDs Are As Important As Cognition



*behaviors in persons with dementia not attributable to other medical or psychiatric cause

The Nurse's Map of Dementia



For Caregivers, the Map of Major Neurocognitive Disorder Care Is:



Importance of NCBS

- More than 90% of people with MND will experience NCBS
- NCBS are associated with significant morbidity, increased likelihood of institutionalization, and more rapid functional decline^{1,2}
- **No medication is FDA approved for NCBS**
- **There is no established standard for the management of NCBS**

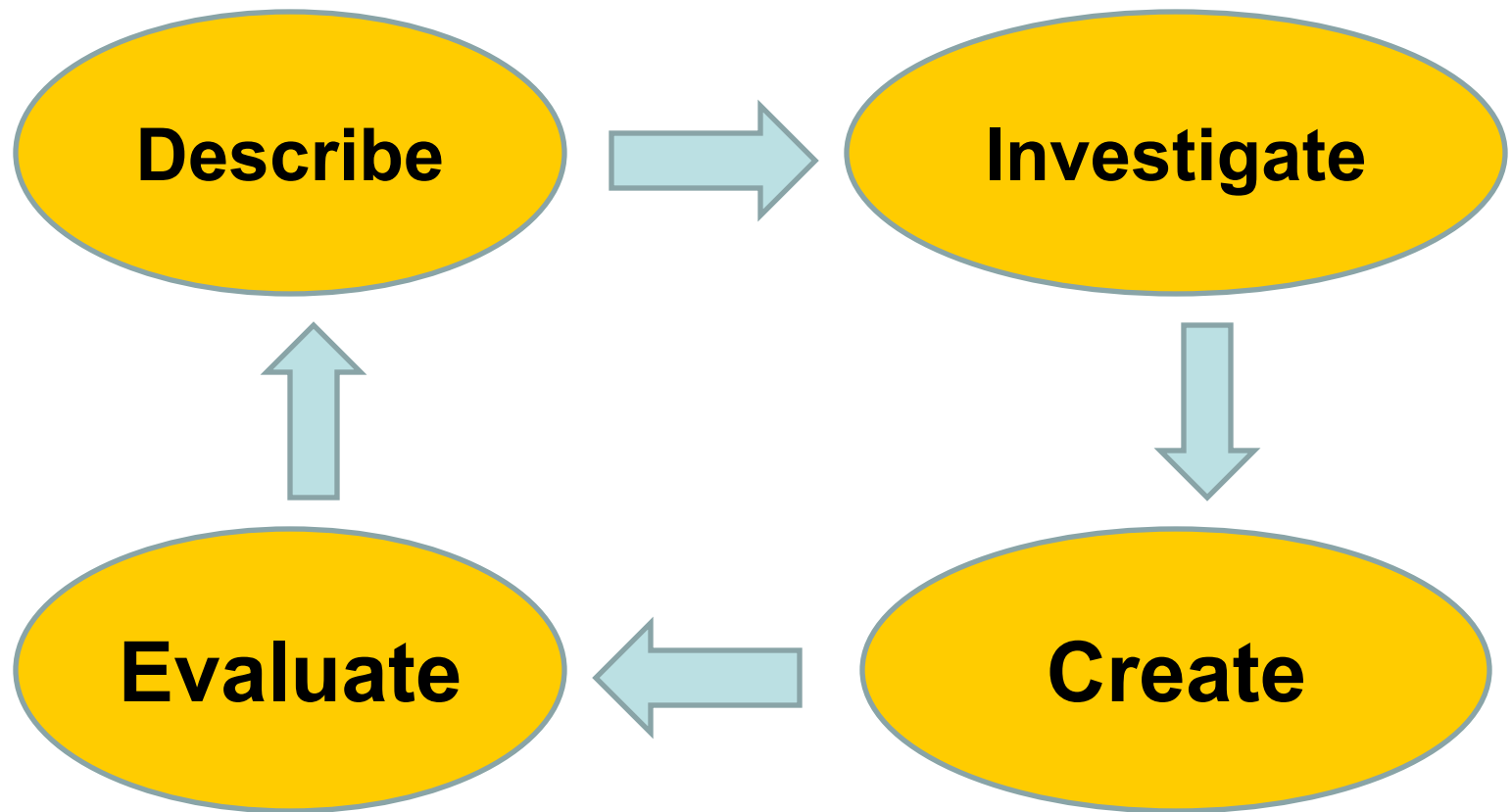
1. Lyketsos CG et al. Am J Psychiatry 2000;157:708-714.

2. Tractenberg RE et al. J Neuropsychiatry Clin Neurosci 2002; 14:11-18.

Common Noncognitive Behavioral Symptoms

| Changes in: | Timing | Frequency | Examples |
|-------------|-------------------|-----------|---|
| Mood | Early | Frequent | Anxiety Depression Mania |
| Thinking | Early Later | Frequent | Suicidal ideation Delusions Hallucinations |
| Activity | Early and Late | Frequent | Apathy Agitation/Aggression Wandering Disordered eating behavior Sexual inappropriate behavior Sleep/activity cycle disruption |

DICE: A Systematic Nonpharmacologic Approach to NCBS



Behavioral Intervention Examples

- Important role of “front line staff”
- Caregiver education
- Prosthetic (habilitative) environment
- Distraction and redirection
- Activity/exercise
- Simulated presence/Reminiscence
- Individualized music therapy
- Aromatherapy / massage

Interventions must take into account the limited new learning capacity of a person with dementia

Pharmacologic Interventions

- Cognitive enhancers?
- Antipsychotics?
- Antidepressants?
- Anticonvulsants?
- Novel approaches?

Medications: Cognitive Enhancers

Better for Cognitive Symptoms Than for NCBS

| Specific Agents | Evidence Says | Suggested Use |
|----------------------------------|---|---|
| Cholinesterase Inhibitors | | |
| Donepezil | Modest benefits in cognition, ADLs, Caregiver Burden, but questionable benefit for NCBS | Begin with 5 mg/d Increase to 10 mg/d (23 mg/d?) |
| Rivastigmine | | Begin with 1.5 mg bid po Increase up to 6 mg bid po Or begin 4.6 mg patch and increase up to one 9.5 or 13.3 mg/patch per day |
| Galantamine ER | | Begin with 8 mg ER q d Increase up to 24 ER q d |
| NMDA Receptor Antagonist | | |
| Namenda (memantine) | Modest benefits in cognition, ADLs, Caregiver Burden, but questionable benefit for NCBS | Begin with 5 mg IR bid and increase to 10 mg bid |
| and Namenda XR | | Begin with 7 mg q d and Increase to 28 mg q d |

Medications: Atypical Antipsychotics

Modest Effects, Significant Drawbacks

| Syndromes | Usual Agents | Evidence Says | Suggested Use |
|---|--------------|----------------|---|
| Psychosis Agitation Aggression | Risperidone | Modest benefit | Begin with 0.25 mg/d Increase up to 2 mg/d |
| | Olanzapine | Modest benefit | Begin with 2.5 mg/d Increase up to 15 mg/d |
| | Quetiapine | Questionable | Begin with 12.5 mg/d Increase up to 200 mg/d |
| | Aripiprazole | Questionable | Begin with 2 mg/d Increase up to 10 mg/d |
| | Clozapine | Questionable | Begin with 6.25 mg/d Increase up to 300 mg/d |

Medications: Typical Antipsychotics

| Syndromes | Usual Agents | Evidence Says | Suggested Use |
|---|---------------------------|---|--|
| Psychosis Agitation Aggression | Haloperidol (PO or IM) | No better than atypicals –EPS including TD, sedation, weight, anticholinergic, hypotension; Less metabolic syndrome; no less mortality | 0.5 to 2 mg/d can be used for acute sedation |
| | Perphenazine | | Not recommended |
| | Trifluoperazine | | |
| | | | |
| | | | |
| | | | |
| | | | |

Medications: Antidepressants

A Safer Alternative for Agitation?

| Syndromes | Usual Agents | Evidence Says | Suggested Use |
|---|---------------------|--|--|
| Agitation Aggression Psychosis Anxiety Depression Apathy | Citalopram | As good as antipsychotics – modestly beneficial ¹⁻³ | 5 mg/d up to 20 mg/d, but higher doses are discouraged by FDA in elderly |
| | Escitalopram | Not tested in treatment of agitation, aggression, psychosis in dementia but may have value as alternatives | 5 mg/d up to 20 mg/d |
| | Sertraline | | 25 mg/d up to 200 mg/d |
| | Fluoxetine | | Not well defined |
| Paroxetine | Not well defined | | |

1. Pollock BG. Am J Psychiatry. 2002;159:460-465; 2. Pollack BG, et al. Am J Geriatric Psychiatry. 2007; 15:942-952; 3. Porsteinsson et al. JAMA 2014;311:682-91.

Medications: Anticonvulsants Supported by Limited Evidence

| Syndromes | Specific Agents | Evidence Says | Suggested Use |
|----------------------------------|-----------------|---|---|
| Agitation Aggression Mania | Carbamazepine | Modest benefit ^{1,2} , limited data base | Start 100 mg/d, increase up to 300 mg/d |
| | Divalproex | Poor evidential support for use except possibly in secondary mania and aggression | Typical range used is 500 to 1250 mg/d (blood level 50 to 100 mcg/ml) |
| | Lamotrigine | Lacking evidence | |
| | Gabapentin | | |
| | Topiramate | | |
| Oxcarbazepine | | | |

1. Tariot et al. Am J Psychiatry. 1998;155:54-61;

2 . Olin et al. Am J Geriatr Psychiatry. 2001;9:400-405.

Medications: Anxiolytics

Rarely Helpful / Significant Risks

| Syndromes | Specific Agents | Evidence Says | Suggested Use |
|---------------------------------|-------------------|---|---|
| Agitation Aggression | Lorazepam | Sometimes useful for acute agitation ¹ | 0.5 to 1 mg po or IM |
| | Clonazepam | Possible modest benefit for some patients with significant potential adverse effects ² | 0.5 mg hs to 0.5 mg bid, but generally not recommended |
| | Alprazolam | Some support but problematic in practice ³ | 0.25 to 0.5 mg qd to bid, but generally not recommended |
| | Buspirone | Inconsistent support for use, but adverse effects are minimal ^{4,5} | 15 to 90 mg/d in divided doses |

Medications: Stimulants

Can Increase Agitation / Can Help Apathy

| Syndromes | Specific Agents | Evidence Says | Suggested Use |
|------------------------------|-----------------|--------------------------|--|
| Apathy Depression | Methylphenidate | Modest benefit in apathy | 5 mg/d up to 10 mg bid with monitoring |
| | Amphetamine | Evidence is lacking | Not recommended |
| | Modafinil | | |

Medications: Antidepressants

| Syndromes | Usual Agents | Evidence Says | Suggested Use |
|---------------|--------------|--------------------|---|
| Apathy | Bupropion | May benefit apathy | Start at 75 mg/d Increase in usual adult dose range with caution |

Landes et al. J Am Geriatr Soc. 2001;49:1700-7;
Galynker et al. J Neuropsychiatry Clin Neurosci. 1997;9:231-9.
Rosenberg et al. J Clin Psychiatry 2013;74:810-6 (ADMET trial).

Medications: Hypnotics

Use With Caution / Monitor Safety

| Syndromes | Specific Agents | Evidence Says | Suggested Use |
|-----------------|---|--|---|
| Insomnia | Trazodone | Mixed, but not consistent support for insomnia/agitation ^{1,2} | 25 to 250 mg/d, use divided doses in higher range |
| | Zolpidem | Possible benefit claimed in elderly psychiatric inpatients ³ , limited case reports in persons with dementia ⁴ | 5 to 10 mg at hs (lower doses now recommended) |
| | Mirtazapine | Anecdotal support in AD with depression+insomnia ⁵ | |
| | Not recommended: Diphenhydramine and other antihistamines, melatonin, ramelteon | | |

1. Teri et al. *Neurology*. 2000;55:1271-8. 2. Sultzer et al. *J Am Geriatr Soc*. 2001; 3. Shaw et al. *J Int Med Res*. 1992;20:150-61. 4. Shelton and Hocking *Ann Pharmacother*. 1997;31:319-227; 5. Raji and Brady. *Ann Pharmacother*. 2001 Sep;35(9):1024-7.

Medications: Others

| Specific Agents | Use | Evidence Says | Suggested Use |
|--------------------------------|---------------------------------|---|--|
| Prazosin¹ | Agitation | Small positive evidence base | 1 mg/d, can increase up to 6 mg/d |
| Dronabinol² | | Small positive evidence base | 2.5 mg/d Can increase to 10 mg/d |
| Paracetamol³ | | One positive RTC | |
| Opioids⁴ | | Support for use based on hypothesized presence of pain (comfort care level) | Long-acting oxycodone 10 mg q 12 h or long-acting morphine 20 mg q d |
| Cyproterone⁵ | Sexualized behavior, aggression | Small supportive evidence base (not first line) | 50 mg bid |
| ECT⁶ | | Small positive evidence base | |

CMS' State Operations Manual Guides Nursing Home Surveys

- Citation for use of “Unnecessary Drugs” (F-329), includes:
 - Excessive dose, includes duplicate therapy
 - For excessive duration
 - Without adequate monitoring
 - Without adequate indications for use
 - In presence of adverse consequences- dose should be decreased or discontinued
 - Any combination of the reasons above

State Operations Manual for Regulated Long Term Care Facilities

F329 - Unnecessary Meds

- Antipsychotics
 - ...**not** indicated for wandering, poor self care, restlessness, impaired memory, fidgeting, nervousness, uncooperativeness, verbal expressions, insomnia, mild anxiety, inattention or indifference to surroundings, behaviors that do not represent a danger to others
 - [only for] Danger to self or others, symptoms due to mania or psychosis, acute emergencies of 7 days or less.

F329 – Antipsychotic GDR

- Residents who use antipsychotic drugs receive gradual dose reductions (GDR), and behavioral interventions, unless clinically contraindicated, in an effort to discontinue these drugs
 - Within 1st year after admission on antipsychotic or after initiation
 - GDR in 2 separate quarters, with at least one month between attempts
 - After 1st year, GDR annually
 - GDR is clinically contraindicated if:
MD documents clinical rationale for use and worsening after GDR attempts (2 in last year or 1 within facility) – or specific approved diagnosis.

Vignette 1: Psychosis

- Mr. A, 78 years old with Lewy Body Dementia, has appeared intermittently psychotic and at times his delusions seem to precipitate agitated, aggressive, or wandering behavior. These symptoms threaten his continued residence at home, where his frail wife cares for him.
- In addition to behavioral interventions, what medication might be helpful?

Vignette 2: Agitation/Aggression

- The children of a 90 year old woman with moderate to severe AD are seeking your help. They have been informed by mother's nursing home that her behavior is intolerable. She aggressively resisted personal care – including changing of her Depends. She injured herself during a fall when she tried to bite her caregiver. She wanders anxiously day and night, seeking an exit. She is intrusive and frightening to other residents.
- Besides behavioral interventions, what medications might be of help?

Vignette 3: Apathy

- The husband of an 84 year old woman with moderate AD complains that his wife must be depressed. She no longer manages household chores or seems interested in doing anything. She was formerly an enthusiastic companion, but now seems content to watch TV and neglect other activities.
- What might help?

Summary: What Is “Best Practice” for Treatment of NCBS in AD?

- Differential diagnosis is a must – agitation is a “symptom” with diverse causes.
- Use nonpharmacologic interventions first when possible.
- Consider front line staff and caregiver perspectives, education, and roles.
- When using medication, choice is based on symptoms, side effects, drug interactions, and patient factors.
- Monitor effects of all interventions. With meds, aim for the lowest effective dose and shortest duration needed.
- Comply with regulatory guidelines for medication use.