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AND FAMILY SERVICES

Assessing Antipsychotic Use: Strategies & Challenges for Medication Optimization

Kentucky Medicaid Polypharmacy Initiative

Muhammad Babar, MD MBA MSc

Reyna VanGilder, PhD PharmD

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Outline

- Introduction to antipsychotic use in long-term care facilities (LTCF)
- Discuss evidence-based recommendations for deprescribing or optimizing antipsychotic therapy.
- Review atypical antipsychotic mechanism of action and FDA-approved therapies.
- Evaluate antipsychotic drug therapy through patient case studies.
- Examine the potential for anticholinergic burden use with antipsychotics and different prescribing cascades.
- Compare antipsychotic side effect profiles and evaluate drug therapy selection.
- Assess instances to enhance patient monitoring and consider how long-term healthcare professional roles can act to optimize antipsychotic use in LTCF.



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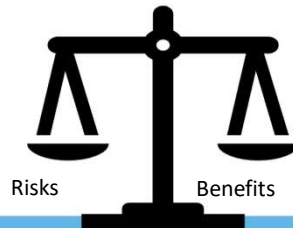
Anti-psychotic & Psychotropic Trends – Fun Facts

- From 2011-2019, approximately 80% of Medicare’s long-stay nursing home residents were prescribed a psychotropic drug.
- From 2011 to 2023, Kentucky reduced the prevalence of anti-psychotic use for long-stay residents from 26% to 16.6%.
 - Ranks 25th in the nation
- Increase in the number of unsupported schizophrenia diagnoses

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Deprescribing vs Medication Optimization

- Planned & supervised process of dose reduction or stopping a medication that might be causing harm, or no longer be of benefit
- Managing chronic conditions avoiding adverse effects and improving outcomes



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High-Risk Medications

2023 Beers Criteria

- ✓ List of problematic medications in older adults—grouped into 5 categories:
 - Potentially Inappropriate
 - Typically Avoided (in certain medical conditions)
 - To be Used with Caution
 - Involved in Drug-Drug Interactions
 - Requiring Renal Adjustment
- ✓ Provides a list of safer alternatives to consider

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High-Risk Medications

- ✓ **STOPP** (Screening Tool For Older Persons' Prescriptions) &
- ✓ **START** (Screening Tool to Alert to Right Treatment) Criteria:
 - Suggest when medications are to be both avoided or used
 - Categorized by systems in the body, such as cardiovascular, respiratory & nervous system

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Evidence-based Antipsychotic Deprescribing

- Per STOPP: if used >1 month as hypnotic; in Parkinson's/Lewy Body Dementia; w/ fall in the past 3 months; w/moderate-severe anticholinergic side effects
- Per BEERS: in dementia, CI, delirium d/t risk of stroke, cognitive decline and death; w/ hx of falls/fractures; or w/2 or more CNS agents d/t risk of falls
- Clinically: in BPSD if ineffective after 4 weeks or after 4 months of use; for non-FDA indications (insomnia); or with significant side effects (EPS, hyperglycemia, hyperlipidemia)

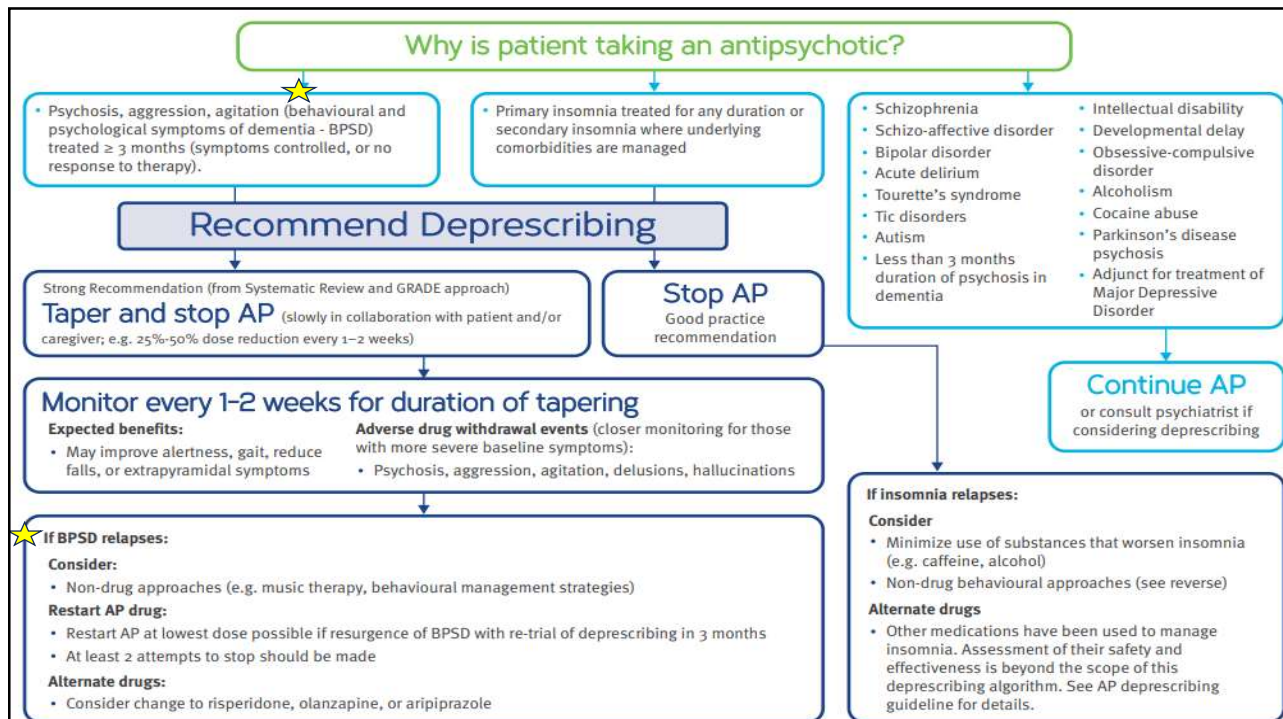
Taper: 25-50% reduction every 1-2 weeks; Use of behavioral/environmental tx

Watch for: psychosis, aggression, hallucinations

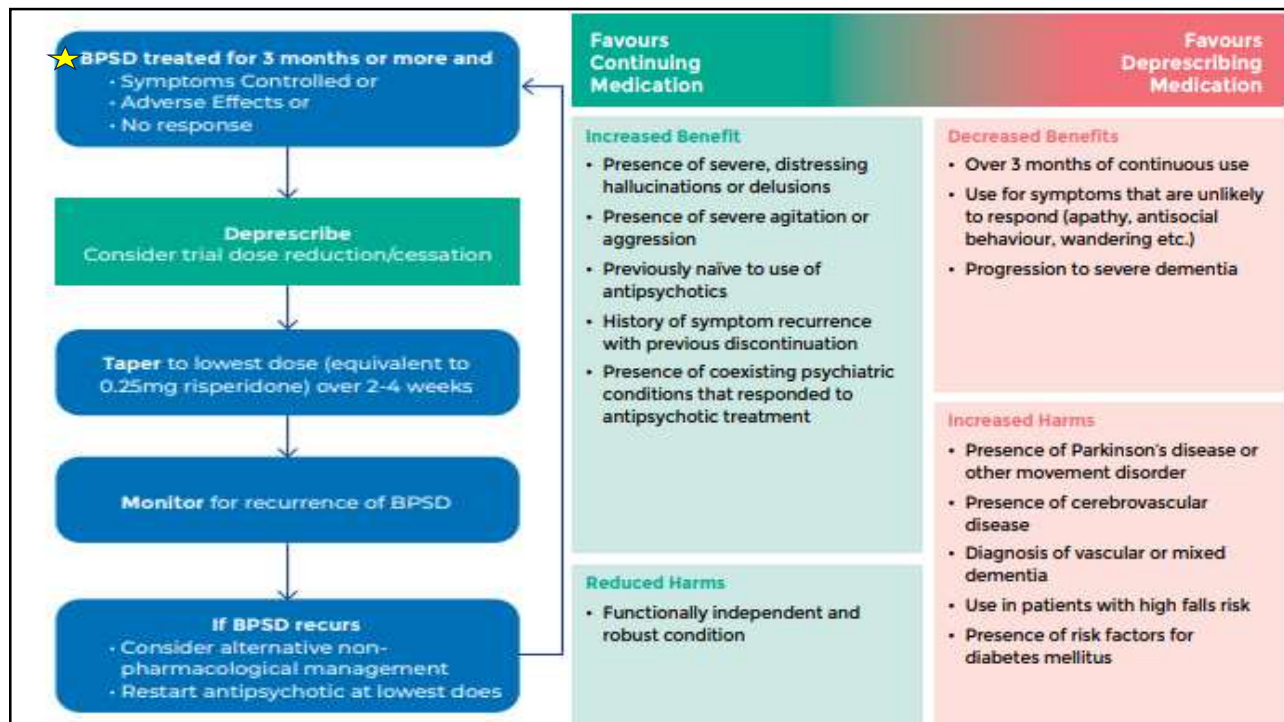
Alternatives: In BPSD, non-pharmacological interventions & environmental adjustments



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Deprescribing Antipsychotics – Low Hanging Fruit

- ANY anti-psychotic prescribed PRN
- Quetiapine instant release QHS
 - dosed bid for labeled indications
 - off-label use for insomnia
- Carefully evaluate a new admission being discharged from the hospital

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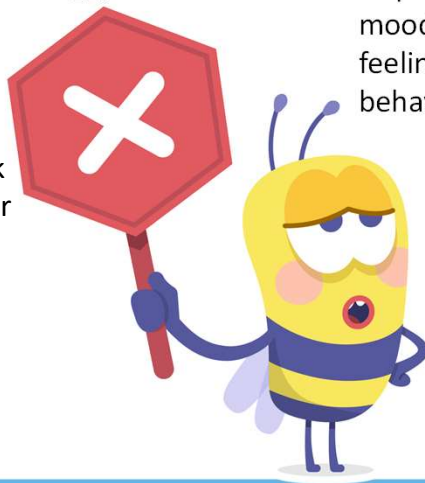
Second Generation Antipsychotic Review

- Review the pharmacology of a second-generation antipsychotic
- Assess second-generation antipsychotic formulations & commercial strengths
- Review injectable second-generation antipsychotic formulations available & dosing frequency

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Second Generation Antipsychotic (SGA) Pharmacology

- First and second-generation antipsychotics block dopamine and other receptors.
- SGA also block serotonin receptors (5-HT_{2A}).



- Dopamine is a neurotransmitter involved in mood regulation and movement. It connects feelings of positive emotion to motivate behavior.



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Novel SCZ Treatment – Muscarinic Modulation

- Muscarinic receptors regulate numerous functions in the central and peripheral nervous system by modulating acetylcholine.
 - Excitatory: M1, M3 and M5
 - Inhibitory: M2, M4
- Cobenfy (xanomeline/tropium)
 - SCZ in adults
 - Xanomeline thought to target M1 & M4 in CNS; tropium antagonizes muscarinic receptors in peripheral tissues
 - CI: urinary retention, untreated narrow-angle glaucoma, and moderate-severe liver impairment
 - Clinical studies show efficacy in positive and negative symptoms
- Ongoing studies evaluating other chemical entities targeting this pathway
- Side effect profile: Anticholinergic effect

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Branded Products	Generic name	Dosage Form & Strength	Clinical Pearls
Abilify (oral) Abilify Mycite (oral)	Aripiprazole	Tablet: 2mg, 5mg, 10mg, 15mg, 20mg, 30mg ODT: 10mg, 15 mg Solution: 1 mg/ml	- Dose adjustment CP A-C (existing): initiate the lowest effective dose CP A-C (new): reduce to lowest effective dose; d/c if liver injury is suspected - PG testing: CYP2D6
Saphris Secuado	Asenapine	Tablet (SL): 2.5mg, 5mg, 10mg Patch: 3.8mg/24hr, 5.7mg/24hr, 7.6mg/24hr	- Dose adjustment CP C: CI
Rexulti	Brexpiprazole	Tablet: 0.25mg, 0.5mg, 1mg, 2mg, 3mg, 4 mg	- Dose adjustment CrCl <60 ml/min: 2-3mg/day CP B-C: 2-3 mg/day - PG testing: CYP2D6
Vraylar	Cariprazine	Capsule: 1.5mg, 3mg, 4.5mg, 6mg	- Dose adjustment CrCl <30 ml/min: Not recommended CP C: Not recommended
Clozaril Versacloz	Clozapine	Tablet 25mg, 50mg, 100mg, 200mg ODT: 12.5mg, 25mg, 100mg, 150mg, 200mg Suspension: 50mg/ml	- Dose adjustment eGFR <60 ml/min/1.73 ² : initiate on the lower end of indication-specific dose and titrate per patient response - PG testing: CYP2D6
Fanapt	lloperidone	Tablet: 1mg, 2mg, 4mg 6mg 8mg, 10mg, 12 mg	- Dose adjustment CP B: Use with caution CP C: Not recommended - PG testing: CYP2D6
Caplyta	Lumateperone	Capsule: 10.5mg, 21mg, 42mg	- Dose adjustment CP B&C: Reduce to 21mg qd
Latuda	Lurasidone	Tablet: 20mg, 40mg, 50mg, 80mg, 120mg	- Dose adjustment CrCl <50 m/min: Initial 20mg; max 80mg CP B: Initial 20mg; max 80mg CP C: Initial 20mg; max 40mg

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Brand & Other Names	Generic name	Form	Clinical Pearls
Zyprexa	Olanzapine	Tablet 2.5mg, 5mg, 7.5mg, 10mg ODT: 5mg, 10mg, 15mg, 20mg	<ul style="list-style-type: none"> - Dose adjustment (Zyprexa) CP A-C (existing): initiate the lowest effective dose; titrate per indication-specific dosing as tolerated CP A-C (new): reduce to lowest effective dose; d/c if liver injury is suspected
Symbyax	Olanzapine/Fluoxetine	Capsules: 3-25mg, 6-25mg, 12-25mg, 12-50mg	
Lybalvi	Olanzapine/samidorphan	Tablet: 5-10mg, 10-10mg, 15-10mg, 20-10mg	
Invega	Paliperidone	Tablet: 2mg, 6mg, 9 mg	<ul style="list-style-type: none"> - Dose adjustment (oral) CrCl 50-80: 3-6mg CrCl 10-<50: 1.5-3mg
Nuplazid	Pimavanserin	Capsule: 34mg Tablet: 10mg	<ul style="list-style-type: none"> - Dose adjustment CrCl <30ml/min: use caution due to increased exposure - Only indicated for PD psychosis
Seroquel	Quetiapine	Tablet IR: 25mg, 50mg, 100mg, 150mg, 200mg, 300mg, 400mg Tablet ER: 50mg, 150mg, 200mg, 300mg, 400mg	<ul style="list-style-type: none"> - Dose adjustment IR/CP A-B: Initiate 25mg and titrate 25-50mg/day based on patient response (qd, bid or tid) ER/CP A-B: Initiate 50mg and titrate 50mg/day based on patient response - PG testing: CYP3A4
Risperdal	Risperidone	Tablet: 0.25mg, 0.5mg, 1mg, 2mg, 3mg, 4mg ODT: 0.25mg, 0.5mg, 1mg, 2mg, 3mg, 4mg Solution: 1mg/ml	<ul style="list-style-type: none"> - Dose adjustment CrCl 30-60 ml/min: 50-75% of the dose per indication CrCl 10-30 ml/min: 50% of dose per indication CP C: Initiate 0.5 mg bid, titrate by 0.5mg bid \geq1 week - PG testing: CYP2D6
Geodon	Ziprasidone	Capsule: 20mg, 40mg, 60mg, 80mg	

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Injectable Antipsychotic Brand (Chemical Entity)	Dose & Frequency
Abilify Maintena (Aripiprazole monohydrate)	300mg or 400mg; Monthly
Abilify Asimtufii (Aripiprazole monohydrate)	720mg or 960mg; 2-months
Aristada (Aripiprazole lauroxil)	441mg; monthly (10 mg/day) 662mg; monthly (15 mg/day) 882mg; monthly or every 6 weeks (\geq 20 mg/day) 1064mg; 2-months
Aristada Initio (Aripiprazole lauroxil)	675 mg; Single dose for initiation of Aristada along with one oral dose of 30mg
Invega Sustenna (Paliperidone palmitate)	50mg, 75mg, 100mg, 150 mg; Monthly Injection
Invega Trinza (Paliperidone palmitate)	175mg, 263mg, 350mg, 525mg; 3-months
Invega Hafyera (Paliperidone palmitate)	1,092mg, 1560mg; 6-months
Olanzapine pamoate	300mg every 2 weeks or 405mg every 4 weeks In older adults can consider starting dose of 150mg every 4 weeks
Rykindo (Risperidone)	12.5mg, 25mg, 37.5mg, 50 mg; 2 weeks
Persersis (Risperidone)	90mg, 120mg; Monthly
Uzedy (Risperidone)	50mg, 75mg, 100mg, 125mg; Monthly or 2- months
Risperdal Consta (Risperidone)	12.5mg, 25mg, 37.5mg, 50 mg; 2 weeks

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Schizophrenia Medication Optimization

- Neurodevelopmental disorder that becomes a neurodegenerative disorder with the onset of the first psychotic episode
- Progressive brain atrophy with psychotic episodes
- Bipolar Mania is also associated with progressive brain atrophy



Risks

Benefits

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Case Study 1 – Off-labeled use

A 61 year old man presented to the emergency room with AMS and a history of clear renal cell carcinoma. While in the hospital, he had surgery to place a brain shunt to treat accumulating ventricle fluid for a newly diagnosed brain tumor. The patient has been stabilized and is ready for discharge. Although he is in good physical, he can no longer return home due to a substantial change in mental status and limited ADL. He displays rapid mood swings resulting in occasional physical leading to altercation and verbal aggression towards the hospital staff. His medications are as follows:

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Case Study 1 – Medication List

His medications are as follows:

- Metformin 500 mg bid for high BS
- Lisinopril 30 mg qd for HTN
- Tamsulosin 0.4 mg qd for BPH
- Quetiapine 100 mg bid for psychosis/aggression PRN
- Omeprazole 20 mg qd
- Amitriptyline 25 mg qd for mood and nerve pain
- Zolpidem 5 mg qhs for sleep
- Pantoprazole 40 mg bid for GERD
- Sertraline 50 mg qd for depression

Upon admission, which medications need further clinical review per the federal regulatory requirements?

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42 CFR §483.45(d), F757 Unnecessary Drugs

Each resident's drug regimen must not include unnecessary drugs. An unnecessary drug is any drug when used in an excessive dose (including duplicate drug therapy) for an excessive duration; or without adequate monitoring; without adequate indications for its use; in the presence of adverse consequences which indicate the dose should be reduced or discontinued; or any combinations of the reasons stated.

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F756 Drug Regimen Review

- Irregularities include, but are not limited to, any drug that meets the criteria for an unnecessary drug.
- Any irregularities noted by the pharmacist during this review must be documented on a separate, written report that is sent to the attending physician and the facility's medical director and director of nursing and lists, at a minimum, the resident's name, the relevant drug, and the irregularity the pharmacist identified.
- The attending physician must document in the resident's medical record that the identified irregularity has been reviewed and what, if any, action has been taken to address it. If there is to be no change in the medication, the attending physician should document his or her rationale in the resident's medical record.

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F756 Drug Regimen Review

- The drug regimen of each resident must be reviewed at least once a month by a licensed pharmacist. This review must include a review of the resident's medical chart. The pharmacist must report any irregularities to the attending physician and the facility's medical director and director of nursing, and these reports must be acted upon.
- The facility must develop and maintain policies and procedures for the monthly drug regimen review that include, but are not limited to, time frames for the different steps in the process and steps the pharmacist must take when he or she identifies an irregularity that requires urgent action to protect the resident.

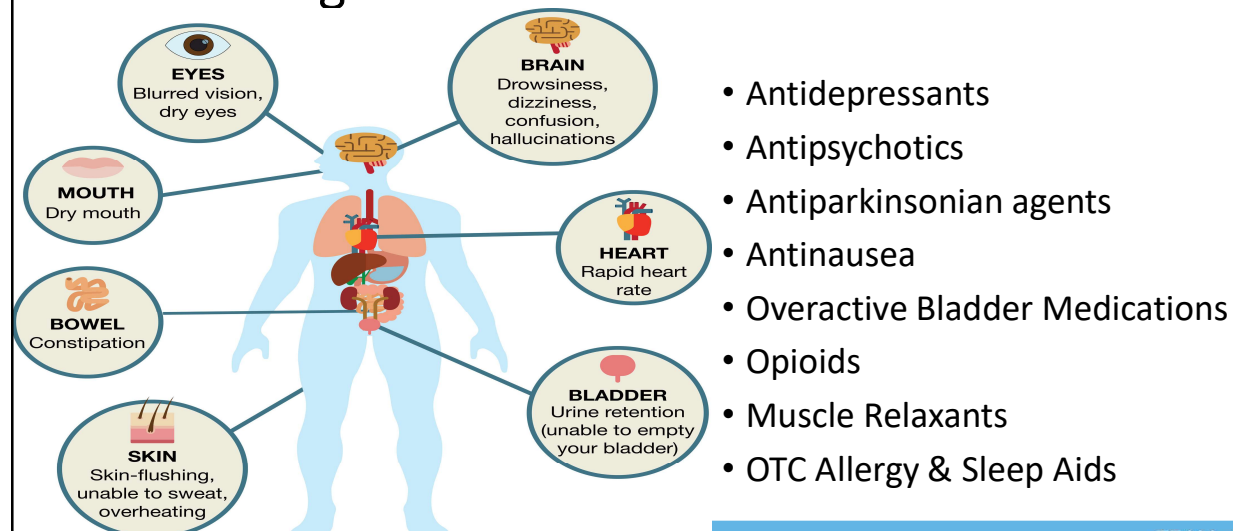
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F758 Psychotropic Drugs

- 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.
- Residents who use psychotropic drugs receive gradual dose reductions and behavioral interventions, unless clinically contraindicated, to discontinue these drugs.
- Residents do not receive psychotropic drugs according to a PRN order unless that medication is necessary to treat a diagnosed specific condition that is documented in the clinical record.
- PRN orders for psychotropic drugs are limited to 14 days, except if prescribing practitioners believe that it is appropriate for the PRN order to be extended beyond 14 days, they should document their rationale in the resident's medical record and indicate the duration for the PRN order.
- PRN orders for anti-psychotic drugs are limited to 14 days and cannot be renewed unless the attending physician or prescribing practitioner evaluates the resident for the appropriateness of that medication

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Anticholinergic Medications & the Additive Burden



- Antidepressants
- Antipsychotics
- Antiparkinsonian agents
- Antinausea
- Overactive Bladder Medications
- Opioids
- Muscle Relaxants
- OTC Allergy & Sleep Aids

Anticholinergic medications — Do I still need this medication? Is deprescribing for you?
(deprescribingnetwork.ca)

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Anticholinergic Burden



- Adverse Drug Events (ADEs)
- Drug-Drug Interactions
- Risk of Medication Errors
- Geriatric Syndromes
(falls, confusion, incontinence)

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Antipsychotics & Anticholinergic Burden

- **Higher Risk**
 - Clozapine
- **Medium Risk**
 - Olanzapine, Pimavanserin
- Lower Risk**
 - Lumateperone, Paliperidone, Quetiapine, Risperidone, Ziprasidone
- Little Risk**
 - Aripiprazole, Asenapine, Brexpiprazole, Cariprazine, Iloperidone, Lurasidone, Risperidone, Ziprasidone

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ACB Calculator

- Important because risk of dementia has shown a linear, dose-dependent relationship with anticholinergic use
- Assigns each drug a score of 0 - 3
 - 0 (none); 1 (possible); 2 or 3 (definite)
 - Cumulative score of ≥ 3 indicates higher risk of confusion, falls, & death

Lansoprazole 

Score: **1**
 Medicine: Lansoprazole
 Brands:

Ranitidine 

Score: **2**
 Medicine: Ranitidine
 Brands: Zantac™

Zyprexa™ 

Score: **3**
 Medicine: Olanzapine
 Brands: Zyprexa™

[+ Add new medicine](#) [Reset](#)

Total ACB Score: **6 High Risk**

Your patient has scored ≥ 3 and is therefore at a higher risk of confusion, falls and death.

Please review their medications and, if possible, discuss this with the patient and/or relatives/carers. Please consider if any of these medications could be switched to a lower-risk alternative.

For help choosing medicines to reduce anticholinergic burden, [click here](#)

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Case Study 2

- 62-year-old female presents to the ER with confusion, agitation and urine retention. Head CT and UA are both negative.
- Home medications: Gabapentin 600 mg tid nerve pain, Clonazepam 1 mg tid prn anxiety, Aripiprazole 15 mg qam, Amitriptyline 50 mg qhs, Quetiapine 25 mg qhs, Solifenacin 10 mg qd for OAB, Hydroxyzine 50 mg 1 bid and 1 qhs prn for anxiety, Lansoprazole 30 mg 1 qd for heart burn, Chlorpheniramine 4 mg 1 q 4-6 h prn allergies, Docusate 100mg 1 qd constipation, Bisacodyl "follows the directions on the box" prn constipation
- Symptoms resolved once medications held

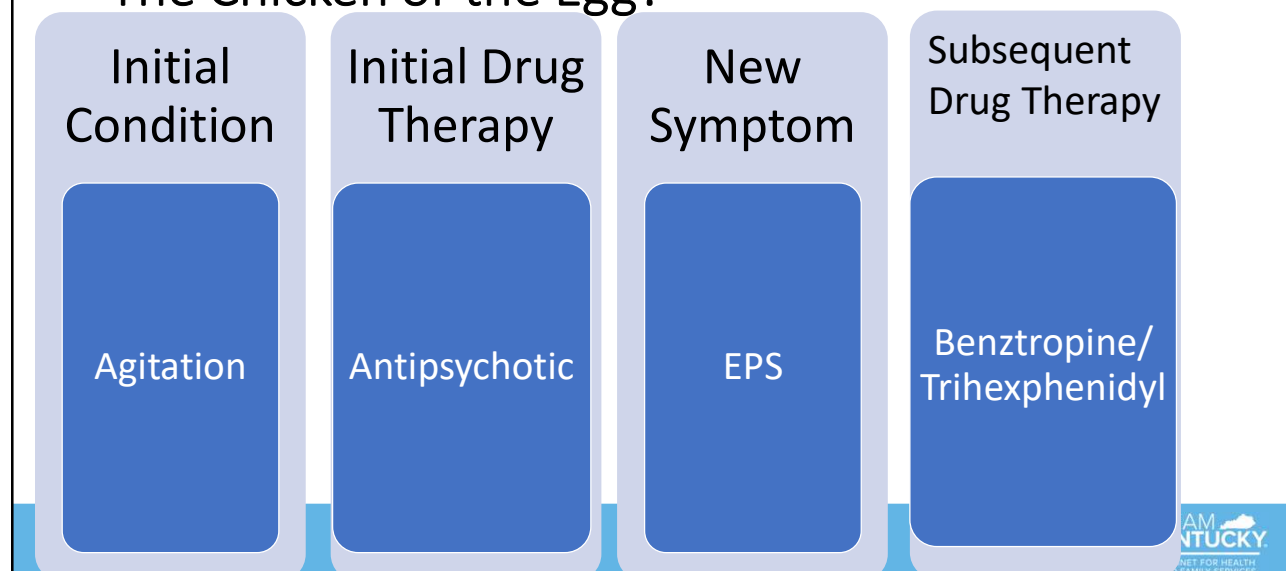
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Case Study 2 – Drug Therapy Concerns

- Antipsychotic therapy: Lacks diagnosis for use, duplicate therapy, dose of one is not maximally titrated, Seroquel 25 mg qhs
- Anticholinergic burden: Amitriptyline, Solifenacin, Quetiapine, Chlorpheniramine, Hydroxyzine, Lansoprazole, Bisacodyl
- Disease state: Amitriptyline – nerve pain, anxiety/depression?
- Gabapentin – Bioavailability is inversely proportional to the dose due to saturable absorption, 34 -47% of the 1800 mg/day is absorbed
- Constipation might also be a consequence of anticholinergic burden.

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Anticholinergic Burden Prescribing Cascade: The Chicken or the Egg?



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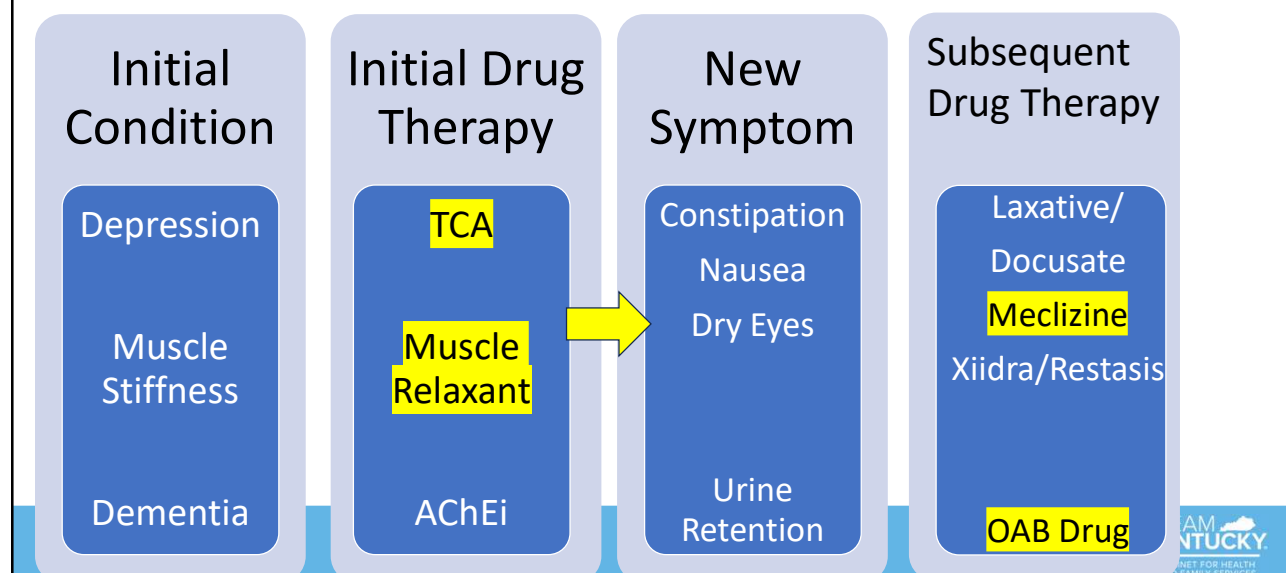
Neurological Paradox of Anticholinergic Burden

Common neurological side effects that could be mistaken for other organic brain diseases:

- Sedation
- Confusion
- Agitation
- Delirium

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Prescribing Cascade: Antipsychotics & Anticholinergics



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Anticholinergics

Deprescribe:

- Per STOPP: in narrow angle glaucoma, bladder outflow obstruction, or dementia/delirium; if treating EPS
- Per BEERs: in BPH/outflow obstruction or dementia/delirium/cognitive impairment
- Clinically: if any hallmark side effect becomes significant; when total ACB is > 3

Taper: Varies based on drug class/medication

Watch for: Varies based on drug class/medication

Alternatives: Varies based on drug class/medication

Agitation
Blurred Vision
Constipation/Confusion
Dry Mouth
Stasis of Urine/Sweating

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Case Study 3

A 69-year-old female with a past medical history of dementia, CVA, CAD, hypertension, hyperlipidemia and obesity was initiated on olanzapine 5 mg PO daily by psychiatry due to increased behavior issues. The dose was titrated to 10 mg daily. Baseline metabolic labs were normal. Three months later, she had a finger stick BS reading of 376 mg/dl. Subsequently, metabolic labs were ordered. She had a Hemoglobin A1c and 7.8 and LDL of 220 mg/dl.

The patient was initiated on metformin mg bid, post-prandial insulin sliding scale and atorvastatin 20 mg qd.

How would you approach medication optimization with this member?

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Case Study 3 – Outcome

Zyprexa was titrated down and subsequently discontinued.

The member's metabolic labs returned to normal. Metformin, short-acting insulin and statin were also discontinued.

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SGA Antipsychotics Side Effect Profile Considerations

- Sedation
 - Clozapine, Olanzapine, Quetiapine
- Orthostatic hypotension
 - Clozapine, Iloperidone, Olanzapine, Quetiapine, Risperidone, Ziprasidone
- Akathisia
 - Aripiprazole, Brexpiprazole, Cariprazine, Clozapine, Risperidone, Ziprasidone
- Drug-induced Parkinson's
 - Asenapine, Cariprazine, Paliperidone, Risperidone

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SGA Antipsychotics Side Effect Profile Considerations

- Weight Gain
 - Clozapine, Iloperidone, Olanzapine, Quetiapine, Paliperidone
Risperidone
- Metabolic abnormalities (hyperlipidemia/hyperglycemia)
 - Clozapine, Olanzapine, Quetiapine
- QTC Prolongation
 - Clozapine, Olanzapine, Quetiapine, Risperidone, Ziprasidone

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Assessments & Patient Monitoring

- AIMS & Labs at baseline before starting antipsychotic therapy
- Consider monthly AIMS assessments
 - TD most often develops in the first 3 months
 - TD can occur faster in older adults
- Consider regular AIMS training for nurses and occasional refresher training
 - 1 hour AIMS training can improve comprehensive assessments and accuracy
- Quarterly examinations should be conducted to review medications, responses and side effects. During patient planning meetings, GDRs should be considered for ALL psychotropic medications to determine if they are needed or if the dose can be reduced.

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ADE Signs and Symptoms – Psychotropic Medication Review

- Recent falls
- Daytime drowsiness or sleepiness
- Confusion or disorientation
- Balance problems
- Dizziness
- Postural hypotension
- Reduced self-care
- Restlessness
- Dry mouth
- Abnormal movements (e.g. shaking, stiffness)

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Case Study 4

A 62 year old female presents to the emergency department with a broken clavicle due to a fall. It was repaired while in the hospital. Her medical records have not followed her to this hospital stay. She was not seen by behavioral health while in the hospital. She reports her psychiatrist recently retired and closed his private practice. She is now ready for discharge to be admitted into a short-stay nursing facility. Upon admission, she complains of dry mouth and constipation.

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Case Study 4

Her medications are as follows:

- Perseris 120mg IM once monthly for schizoaffective disorder
- Benztropine 3 mg qd for tremor
- Sertraline 50 mg for depression
- Oxybutynin 30 mg qd for OAB
- Pantoprazole 40 mg qd
- Oxycodone 10 mg tid PRN for back pain
- Carbidopa/levodopa 25/100 mg tid for tremor

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Case Study 4 – Medical Record Concerns

- Lack of comprehensive psychiatric evaluations by professional standards of the resident's mental, physical, psychosocial, and functional status
- Lack of behavior documentation in the medical record
- Sporadic behavior documented in the medical record, and behaviors related to dementia, rather than schizophrenia
- Documentation of persistent behaviors for the time-period required

****Refer resident for a psychiatric consult. If it determined that an appropriate diagnosis was not supported, consider making corrections before MDS assessments are completed.****

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Case Study 4 Potential Recommendations

- Perseris is a long-acting risperidone product with a higher likelihood of OH compared to an LAI-antipsychotic like Abilify.
- Carbidopa/levodopa might not be needed if a possible lower dose of antipsychotic is clinically appropriate.
- Benztropine and Oxybutynin can increase the anticholinergic burden and worsen the incidence of orthostatic hypotension. Evaluate clinical appropriateness and consider alternative therapies.
- Evaluate the clinical need for pantoprazole or possibly optimize to a lower dose.

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Black Box Warning – All First & Second-Generation Antipsychotics






- “The boxed warning will say that elderly patients with dementia-related psychosis and treated with antipsychotics have an increased risk of death”
- Includes Rexulti – Brexpiprazole which includes an FDA indication for agitation with dementia due to Alzheimer’s









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Black Box Warnings – Clozapine

Clozapine carries five black box warnings, including (1) severe neutropenia (low levels of neutrophils), (2) orthostatic hypotension (low blood pressure upon changing positions), including slow heart rate and fainting, (3) seizures, (4) myocarditis (inflammation of the heart), and (5) risk of death when used in elderly people with dementia-related psychosis.










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Best Practices – Ongoing Medication Stewardship

Existing Medications	New Medications
<ul style="list-style-type: none"> • Ensure ALL meds have a CURRENT indication & and appropriate DURATION of use • Look for potential prescribing cascades • Evaluate each medication for any observed benefits or side effects (continuance vs discontinuance) 	<ul style="list-style-type: none"> • Choose the best drug with the fewest side effects • Consider the impact on quality of life & residents' goals • Select the appropriate dose & duration • Monitor for effectiveness & adverse events



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Antipsychotic Stewardship - Consultant Pharmacist

- Partner with medical directors and prescribers to continually document the outcomes of drug therapy.
- Evaluate every dose to promote a gradual dose reduction when appropriate.
- Encourage documentation of the specific condition and the targeted behavior(s) of the antipsychotic.
- Verify that the nursing staff has assessed for pain or medication side effects as a behavioral cause.
- Suggest individualized non-drug interventions and approaches as additions to the care plan.
- Inquire about implementing non-drug therapy if there is no evidence of these interventions.

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Antipsychotic Stewardship – Nursing Staff

- Engage in patient-centered care
 - Behaviors could emerge because of boredom or inability to communicate
- Assess for unmet basic needs (e.g pain, temperature, etc.)
- Be mindful of common side effects and document basic changes that may trigger a more detailed clinical review (e.g. thirst, bowel activity, appetite, qualitative comments related to dizziness)

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Antipsychotic Stewardship - Prescribers

- Complete a comprehensive evaluation of the person's condition, determining the continued appropriateness of the person's current medical regimen and relevant medical issues.
- Document and institute a plan for gradual dosage reduction, including non-pharmacological interventions, leading to complete discontinuation of the antipsychotic medication usage.
- Avoid potential liability by using antipsychotic medications in people with dementia as a last resort, in the lowest possible dose, for a limited time, and with well-defined reasoning.
- Review and discuss recommendations from the consulting pharmacists.
- Challenge the facility to enhance the implementing of non-drug interventions, particularly for dementia patients.

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Antipsychotic Stewardship – Facility Directors

- Non-Drug Therapy Initiatives
 - Person-Centered Thinking Training
 - Music & Memory Initiatives
 - Meaningful Engagement to Enhance Quality of Life
- Ensuring timely psychiatry consults, when needed
- Develop internal systems to coordinate patient monitoring and document side effects or emerging behaviors
- Institute facility deprescribing initiatives targeting certain drugs or drug classes

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KMPI Future direction

- Quarterly Newsletters & CE Initiatives
 - Would focusing on medications that can contribute to falls and fractures be helpful?
 - Proposed drug classes to address include: antihypertensives, overactive bladder medications, benign prostate hypertrophy, benzodiazepines and sedative-hypnotics
 - Deprescribing success that you would like to share?

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Psychotropic Medication Optimization Resources

1. [Improving Antipsychotic Appropriateness in Dementia Patients \(IA-ADAPT\)](#) is a collection of resources and tools help caregivers manage uncharacteristic behaviors while reducing the inappropriate use of antipsychotics in people with dementia.
2. [Choosing Wisely and The American Geriatrics Society \(PDF\)](#) identifies 10 treatments and tests that may not be effective and have a higher risk profile in older adults, including using antipsychotics to treat BPSD and the use of sedatives or hypnotics in older adults as a first-line treatment for insomnia, agitation or delirium.
3. [Key Guidelines for Gradual Dosage Reductions of Psychotropic Medications](#) identify the critical steps and considerations for implementing gradual dose reductions in the NF.
4. [Sane Use of Psychotropic Medications \(PDF\)](#) addresses behaviors, altered mental status and treatment options.
5. [Nursing Home Audit Tool for Psychotropic Medications-Final \(superiorhealthqa.org\)](#) is an antipsychotic medication safety decision algorithm.
6. [Deprescribing Guidelines and Algorithms](#) are evidence-based resources that can assist prescribers to implement safe deprescribing of specific medication classes, including antipsychotics and benzodiazepines.

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Antipsychotic Medication Optimization Resources

7. [The National Partnership to Improve Dementia Care in Nursing Homes](#) works to reduce the use of antipsychotic medications when not clinically indicated.
8. [Hand in Hand: A Training Series for Nursing Homes Toolkit](#) addresses the need for nurse aides' annual in-service training to care for NF residents with dementia.
9. [The Adverse Drug Event Trigger Tool \(PDF\)](#) was developed for use by surveyors but can be used to help NFs identify situations that may indicate an adverse drug event has occurred.
10. [Survey Resources: LTC Survey Pathways](#) are used by surveyors to evaluate specific areas of care, including medication administration, unnecessary medications and medication storage. These pathways can also be used by NFs to evaluate their systems
11. [Improving Antipsychotic Appropriateness in Dementia Patients \(IA-ADAPT\)](#) is a collection of resources and tools help caregivers manage uncharacteristic behaviors while reducing the inappropriate use of antipsychotics in people with dementia.



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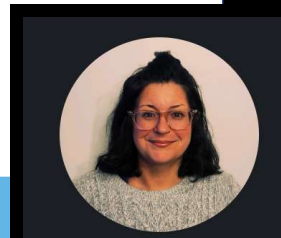
State-Academic Partnership Research Team Acknowledgements

Daniela Moga, MD, PhD
Associate Professor & Assistant Dean for Research
University of Kentucky

Fatima Ali, PharmD
Senior Pharmacy Director
Cabinet for Health and Family Services

Reyna VanGilder PhD, PharmD
Associate Pharmacy Director
Cabinet for Health and Family Services

April Prather, PharmD
Associate Pharmacy Director
Cabinet for Health and Family Services



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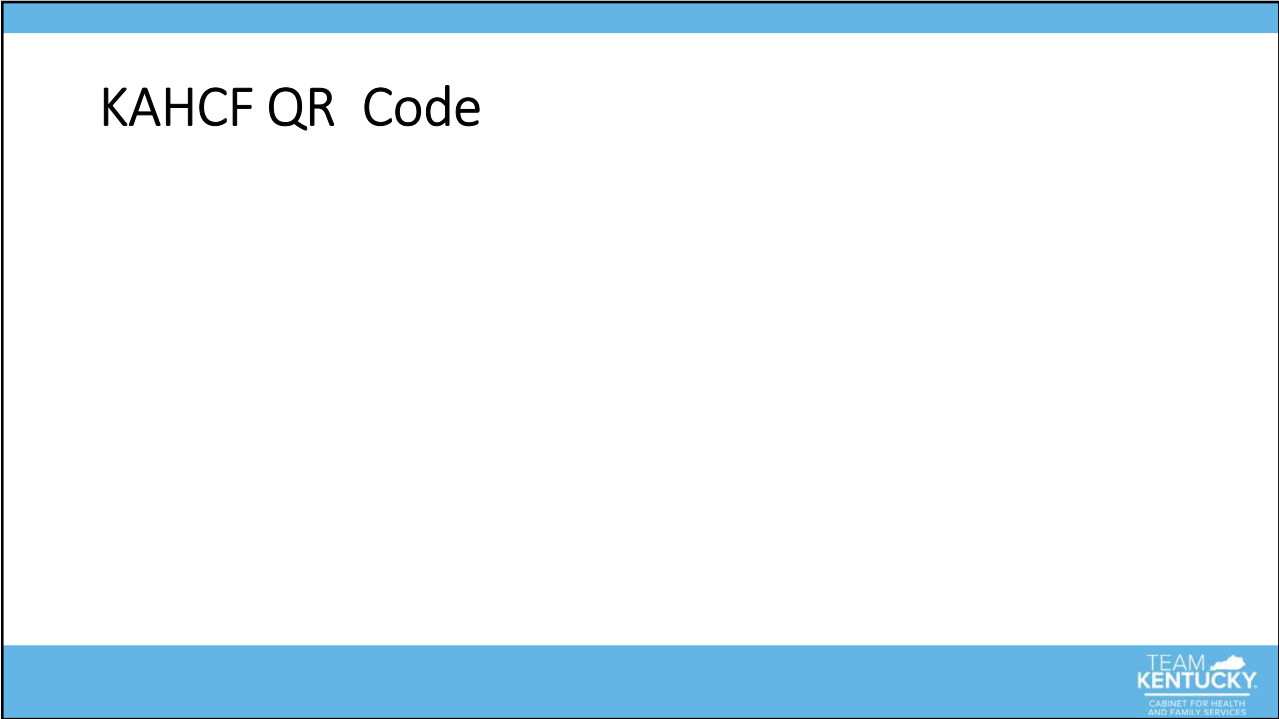
References

1. Aripiprazole. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
2. Asenapine. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
3. Bjerre LM, Farrell B, Hogel M, Graham L, Lemay G, McCarthy L, et al. Deprescribing antipsychotics for behavioral and psychological symptoms of dementia and insomnia: Evidence-based clinical practice guideline. *Can Fam Physician* 2018;64:17-27 (Eng), e1-e12 (Fr).
4. Boyd C, Smith CD, Masoudi FA, Blaum CS, Dodson JA, Green AR, Kelley A, Matlock D, Ouellet J, Rich MW, Schoenborn NL, Tinetti ME. Decision Making for Older Adults With Multiple Chronic Conditions: Executive Summary for the American Geriatrics Society Guiding Principles on the Care of Older Adults With Multimorbidity. *J Am Geriatr Soc*. 2019 Apr;67(4):665-673. doi: 10.1111/jgs.15809. Epub 2019 Mar 10. PMID: 30663782.
5. Brexpiprazole. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
6. By the 2023 American Geriatrics Society Beers Criteria® Update Expert Panel. American Geriatrics Society 2023 updated AGS Beers Criteria® for potentially inappropriate medication use in older adults. *J Am Geriatr Soc*. 2023 Jul;71(7):2052-2081. doi: 10.1111/jgs.18372. Epub 2023 May 4. PMID: 37139824.
7. Cariprazine. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
8. Center for Medicare & Medicaid Services. National Partnership to Improve Dementia Care in Nursing Homes: Antipsychotic Medication Use Data Report, April 2022
9. Clozapine. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
10. Grimm, Christi. Long-Term Trends of Psychotropic Drug Use in Nursing Homes. OEI-07-20-00500, U.S. Department of Health and Human Services, 2022.
11. King, Rebecca, and Steve Rabino. "ACB Calculator." *ACB Calc*, Updated 17 Dec. 2023, www.acbcalc.com. Accessed 1 Feb. 2024.
12. Lurasidone. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>

References

13. Lumateprerone. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
14. McInerney BE, Cross AJ, Alderman CP, Bhat R, Boyd CM, Brandt N, Cossette B, Desforges K, Dowd LA, Frank C, Hartikainen S, Herrmann N, Hilmer SN, Jack L, Jordan S, Kitamura CR, Koujija E, Lampela P, Macfarlane S, Manias E, Martin C, Martinez-Velilla N, Moriarty F, Onder G, Quirke T, Silvis JL, Soulsby N, Stafford AC, Steinman MA, Sun W, Taguchi R, Todd A, Trenaman SC, Yap KZ, Zhao M, Bell JS, Turner JP. Top 10 Signs and Symptoms of Psychotropic Adverse Drug Events to Monitor in Residents of Long-Term Care Facilities. *J Am Med Dir Assoc*. 2024 Sep;25(9):105118. doi: 10.1016/j.jamda.2024.105118. Epub 2024 Jun 29. PMID: 38950588.
15. Olanzapine. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
16. O'Mahony D, Cherubini A, Guiteras AR, Denkinger M, Beuscart JB, Onder G, Gudmundsson A, Cruz-Jentoft AJ, Knol W, Bahat G, van der Velde N, Petrovic M, Curtin D. STOPP/START criteria for potentially inappropriate prescribing in older people: version 3. *Eur Geriatr Med*. 2023 Aug;14(4):625-632. doi: 10.1007/s41999-023-00777-y. Epub 2023 May 31. Erratum in: *Eur Geriatr Med*. 2023 Jun 16; PMID: 37256475; PMCID: PMC10447584.
17. Paliperidone. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
18. Peterson G and Deprescribing advisory Group. (December 2022). A guide to Deprescribing Antipsychotics [Brochure]. Primary Health Tasmania. <https://www.primaryhealthtas.com.au/wp-content/uploads/2023/03/A-guide-to-deprescribing-antipsychotics.pdf>
19. Quetiapine. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
20. Risperidone. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>
21. Reus VI, Fochtmann LJ, Eyler AE, Hilty DM, Horvitz-Lennon M, Jibson MD, Lopez OL, Mahoney J, Pasic J, Tan ZS, Wills CD, Rhoads R, Yager J. The American Psychiatric Association Practice Guideline on the Use of Antipsychotics to Treat Agitation or Psychosis in Patients With Dementia. *Focus (Am Psychiatr Publ)*. 2017 Jan;15(1):81-84. doi: 10.1176/appi.focus.15107. Epub 2017 Jan 11. PMID: 31997967; PMCID: PMC6519629.
22. Spinewine A, Dumont C, Mallet L, Swine C. Medication appropriateness index: reliability and recommendations for future use. *J Am Geriatr Soc*. 2006 Apr;54(4):720-2. doi: 10.1111/j.1532-5415.2006.00668_8.x. PMID: 16686895.
23. Trimble J and Currie J. *What you need to know about anticholinergic medications. Canadia Medication Appropriateness and Deprescribing Network. Anticholinergic medications — Do I still need this medication? Is deprescribing for you? (deprescribingnetwork.ca)*
24. Ziprasidone. In: *Lexi-Drugs*. Lexicomp; 2021. Updated April 2, 2024. Accessed April 2, 2024 <http://online.lexi.com>

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