



**Quality Improvement  
Organizations**

Sharing Knowledge. Improving Health Care.  
*CENTERS FOR MEDICARE & MEDICAID SERVICES*



# **Reducing Inappropriate Use of Antipsychotics in Nursing Homes**

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# Presentation Outline/ Questions To Think On

- ▶ Why is this initiative important?
- ▶ What resources are there to address this concern?
- ▶ What are my next steps?

# Polling Question #1

## Who is represented in the room today?

1. Nursing Home Administrators
2. Director of Nursing / Nursing Leadership
3. MDS Coordinators / other nursing
4. Physicians
5. Pharmacy
6. Industry / Corporations
7. Other

## Polling Question #2

**Who has already started work on this initiative?**

**GREEN**

Have a team identified and meetings begun

**YELLOW**

Committed but not yet started

**RED**

Interested by not sure this is for us

## Polling Question #3

**Who has a Medical Director already interested in this initiative?**

**GREEN**

Have had discussions and is on board

**YELLOW**

Not sure of their interest

**RED**

May be reluctant to work on this

## Polling Question #4

**Who has access to pharmacy data for this initiative?**

**GREEN**

Have seen the data

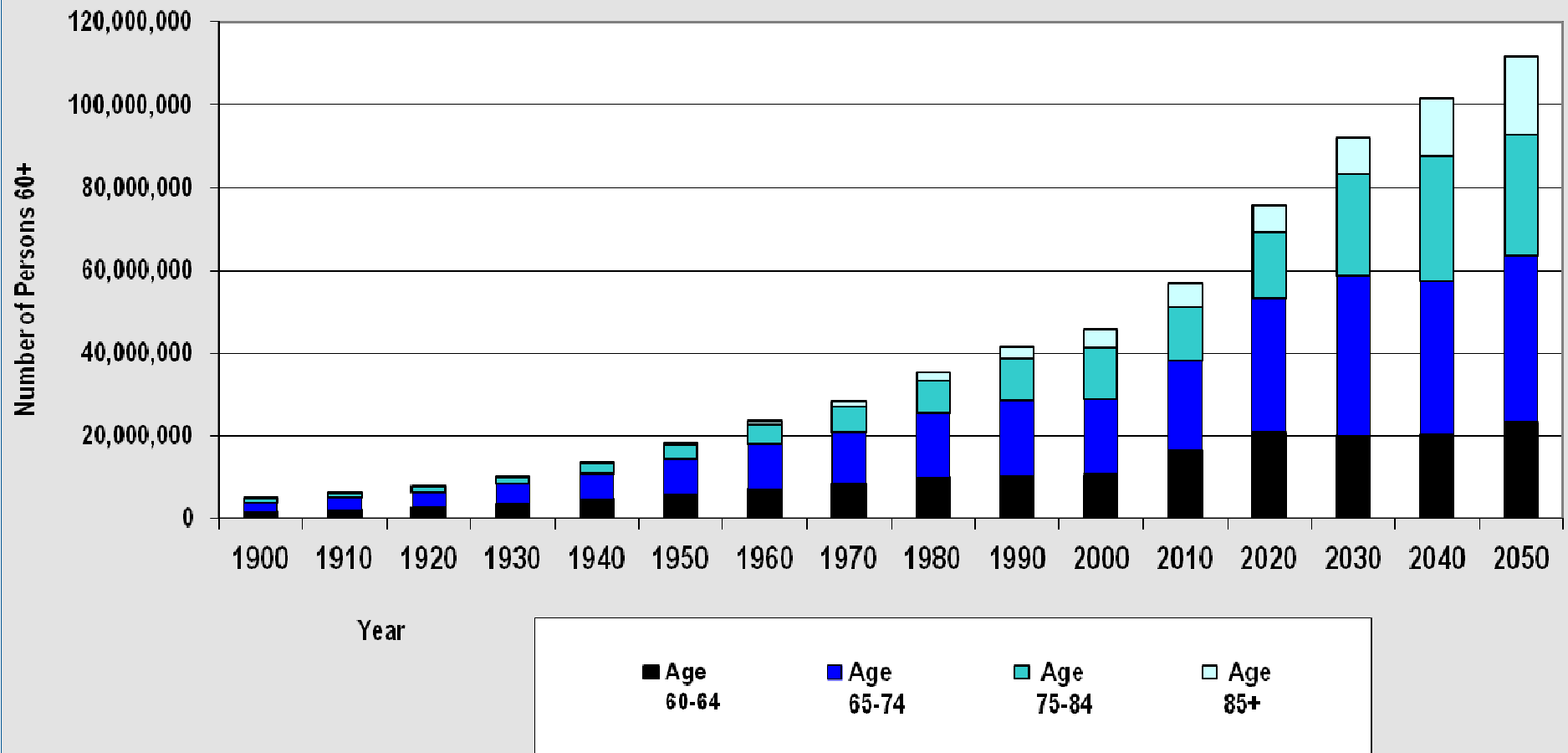
**YELLOW**

I think I have it but have not seen it

**RED**

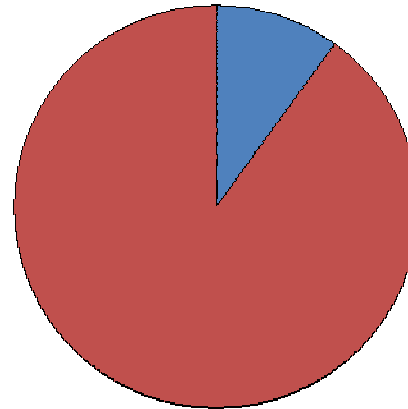
I don't think / am not sure if we get this

# Population by Age: 1900 – 2050

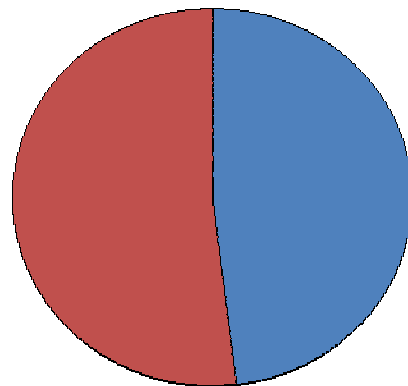


# Prevalence of Alzheimer's Disease

- ▶ Most people with dementia do not complain of memory loss
- ▶ Cognitively impaired older persons are at ↑ risk for accidents, delirium, medical non-adherence, and disability



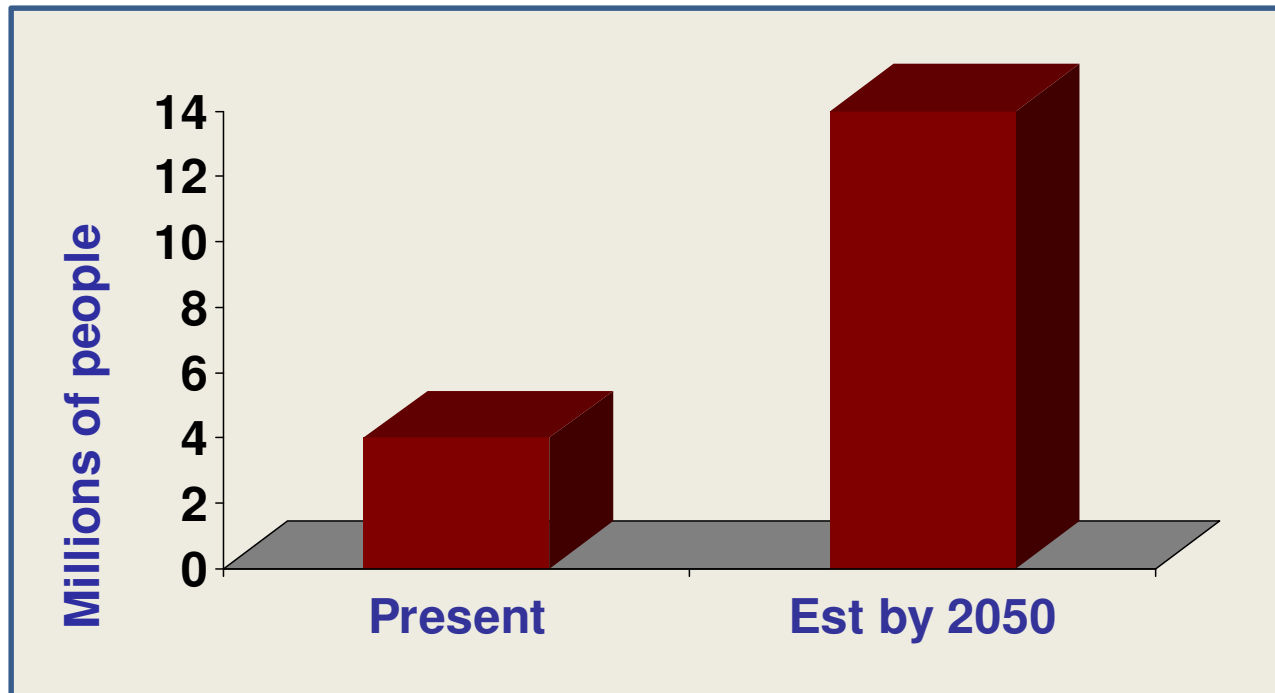
**10% of those  
aged 65+**



**Nearly 50%  
of those  
aged 85+**



# The Prevalence of ALZHEIMER'S DISEASE



- ▶ 4 million in U.S. currently – 14 million in U.S. by 2050
- ▶ Life expectancy of 8 -10 years after symptoms begin

# DSM-IV Diagnostic Criteria for Alzheimer's Disease

- ▶ Development of cognitive deficits manifested by:
  - Impaired memory *and*
  - Aphasia, apraxia, agnosia, disturbed executive function
- ▶ Significantly impaired social, occupational function
- ▶ Gradual onset, continuing decline
- ▶ Not due to CNS or other physical conditions (e.g., PD, delirium)
- ▶ Not due to an Axis I disorder (e.g., schizophrenia)

# Psychotic Symptoms

- ▶ As many as 80% - 90% of patients with dementia develop at least one psychotic symptom or behavioral disturbance over the course of their illness
- ▶ Behavioral disturbances or psychotic symptoms in dementia often precipitate nursing home placement
- ▶ Disturbances are potentially treatable, so it is vital to recognize them early

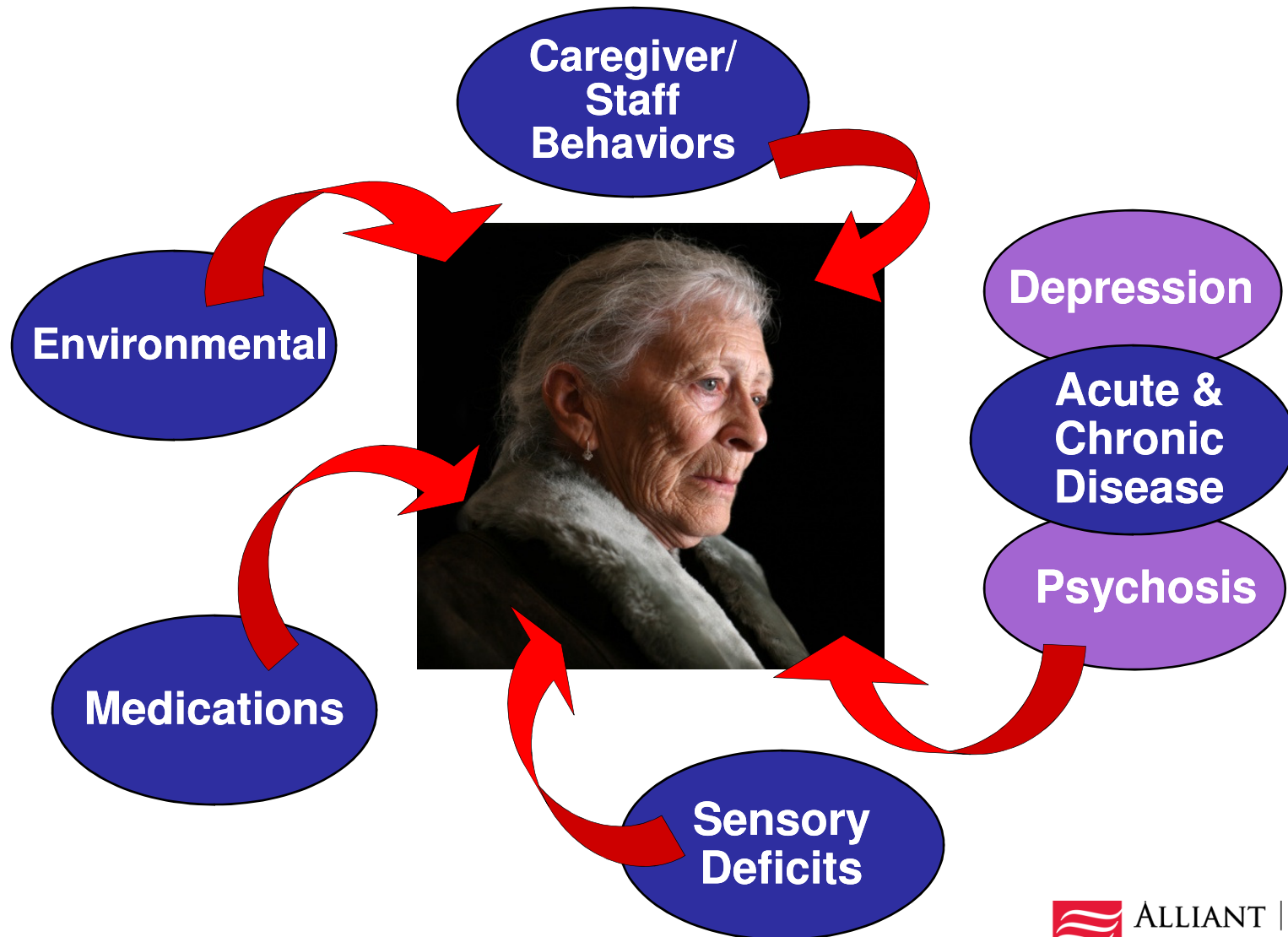
# CLINICAL FEATURES: AGITATION (1 of 2)

- ▶ Reflects loss of ability to modulate behavior in a socially acceptable way
- ▶ May involve verbal outbursts, physical aggression, resistance to bathing or other care needs, and restless motor activity such as pacing or rocking
- ▶ Often occurs concomitantly with psychotic symptoms such as paranoia, delusional thinking or hallucinations

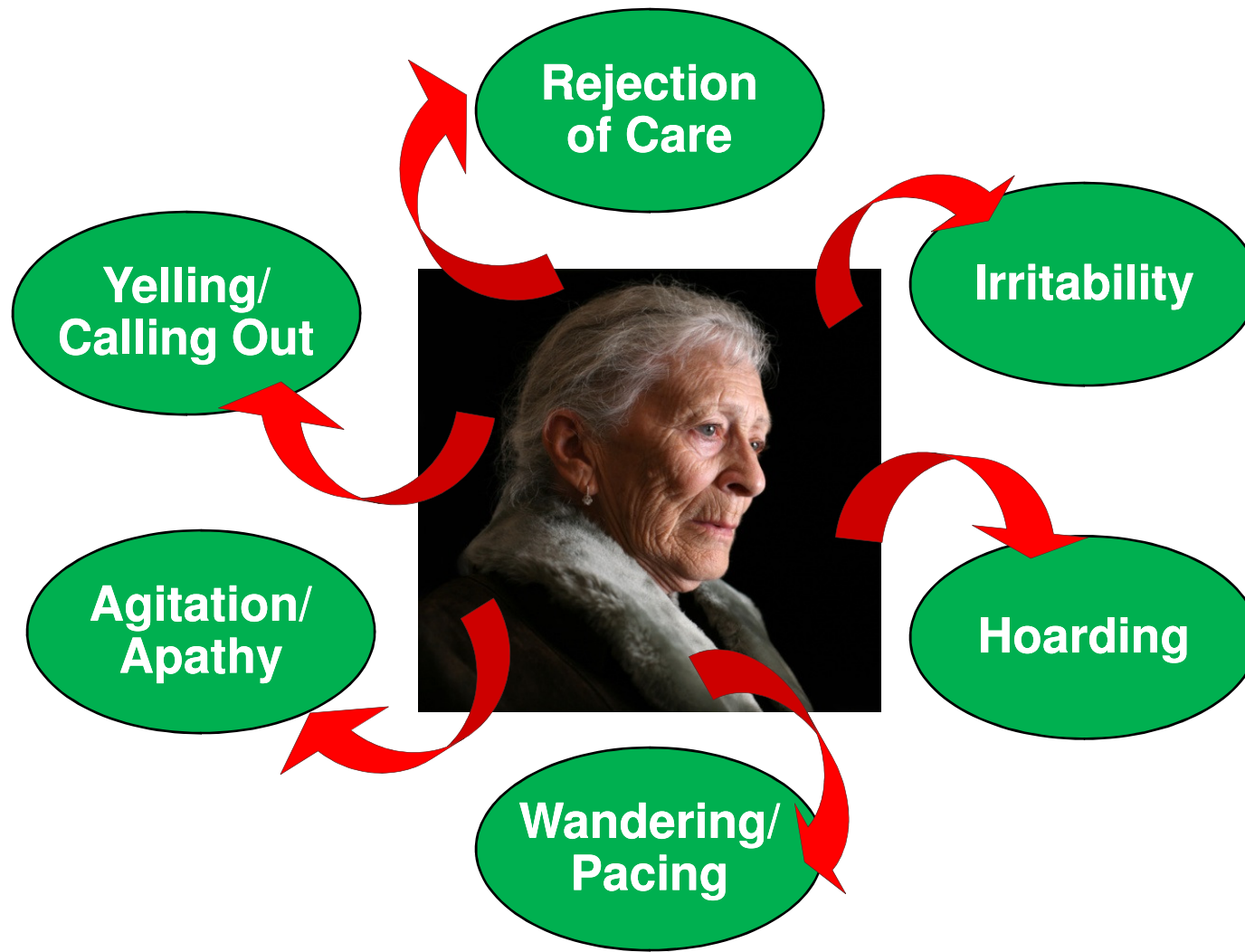
## CLINICAL FEATURES: AGITATION (2 of 2)

- ▶ Caregivers, both professional and family, may use the word *agitation* to describe a variety of behaviors and psychologic symptoms
- ▶ The clinician must consider agitation to be a nonspecific complaint and pursue further history of the problem
- ▶ Overt resistance to care is most often seen in later stages of dementia, but it may be a first sign of incipient cognitive decline in earlier stages as well

# Triggers



# Behavioral Symptoms



# Modifiable Causes of Behavioral Symptoms

- ▶ **Medical / Physical:** PAIN, infection, hunger, thirst, hypoxia, sleep disturbance, constipation
- ▶ **Medications:** that cause anti-cholinergic reactions (including psychosis), delirium, depression, sleep disturbance
- ▶ **Communication:** Inability to communicate perceptions or expectations



# Modifiable Causes of Behavioral Symptoms

- ▶ **Environmental:** Noise, physical barriers, visual barriers, temperature
- ▶ **Cognitive impairment:** Lack of understanding (agnosia), inability to communicate perceptions or expectations
- ▶ **Psychiatric conditions:** Depression, Anxiety, Psychosis



# **Off Label Antipsychotic Medications**

# Pharmacological Treatment

- ▶ In 2005 the FDA issued a black box warning on antipsychotics and the increased risk of cardiovascular mortality when used in the elderly for behavioral symptoms in dementia
- ▶ Antipsychotics are not FDA approved for behavioral symptoms in dementia
- ▶ No psychotropic medications are FDA approved for behavioral symptoms
- ▶ There is some evidence supporting cautious use of antipsychotics at low doses

# The Problem

**~22% of antipsychotic prescriptions in nursing homes are problematic per Centers for Medicare and Medicaid Services (CMS) standards**

Problem per CMS standards	% of claims
Excessive dose	10.4%
Excessive duration	9.4%
Without adequate indication	8.0%
Without adequate monitoring	7.7%
In the presence of adverse effects that indicate the dose should be reduced or discontinued	4.7%

## Number of Medicare Claims and Amount for Each Atypical Antipsychotic Drug (January 1 through June 30, 2007)

Generic Drug Name	Claims	Amount
Quetiapine	627,661	\$85,847,131
Risperidone	536,600	\$87,161,507
Olanzapine	356,695	\$94,055,067
Aripiprazole	83,756	\$29,565,887
Ziprasidone	44,681	\$10,067,477
Clozapine	27,294	\$1,691,718
Olanzapine/Fluoxetine	1,521	\$431,799
Paliperidone	666	\$207,731
<b>Total</b>	<b>1,678,874</b>	<b>\$309,028,317</b>

# ANTIPSYCHOTIC AGENTS (1 of 3)

selected agents used off-label  
for treatment of psychosis in dementia

Drug	Daily Dose	Adverse Effects	Comments
Aripiprazole (Abilify)	5 -15 mg	Mild sedation, mild hypotension	Warning about increased cerebrovascular events in dementia, possible hyperglycemia
Clozapine (Clozaril)	12.5 - 200 mg	Sedation, hypotension, anticholinergic effects, hyperglycemia, agranulocytosis	Weekly CBC required; poorly tolerated by older adults; reserve for treatment of refractory cases

## ANTIPSYCHOTIC AGENTS (2 of 3)

Drug	Daily Dose	Adverse Effects	Comments
Olanzapine (Zyprexa)	2.5 -10 mg	Sedation, falls, gait disturbance	Warning about hyperglycemia and cerebrovascular events in patients with dementia
Quetiapine (Seroquel)	25 - 200 mg	Sedation, hypotension	Warning about hyperglycemia; ophthalmologic exam recommended every 6 months



## ANTIPSYCHOTIC AGENTS (3 of 3)

Drug	Daily Dose	Adverse Effects	Comments
Risperidone (Risperdal)	0.5 - 2 mg	Sedation, hypotension, extrapyramidal symptoms with  doses > 1 mg/day	Warning about cerebrovascular events in patients with dementia, hyperglycemia warning
Ziprasidone (Geodon)	40 -160 mg	Higher risk of prolonged QTc interval, hyperglycemia	Little published information on use in older adults

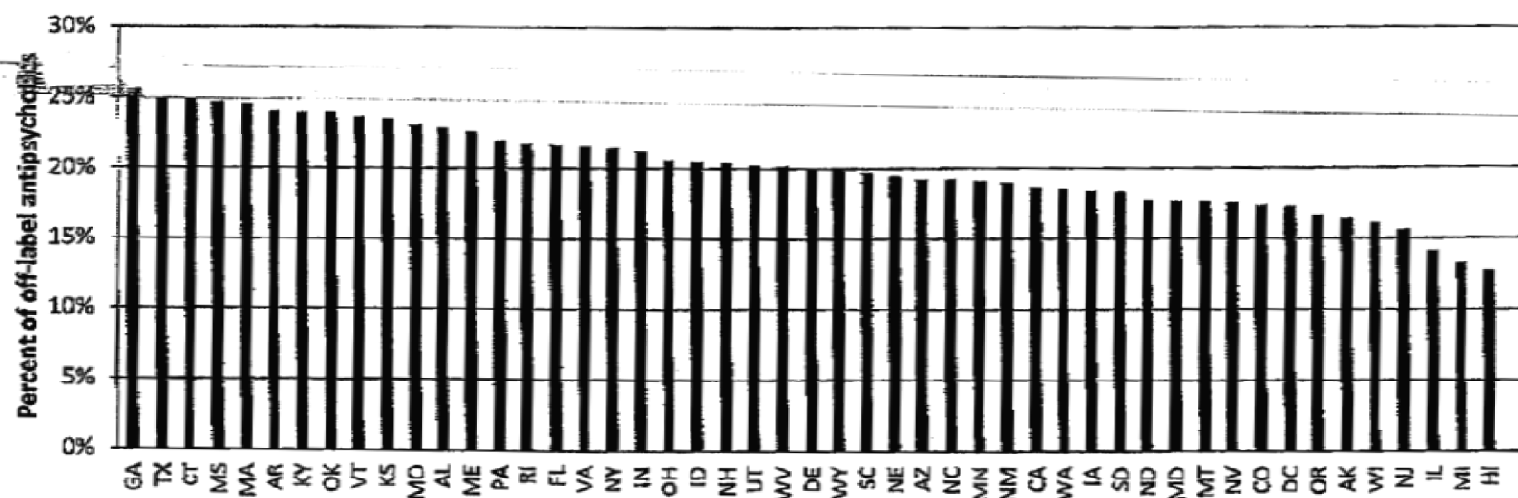


Georgia

## Off-Label Antipsychotics<sup>3</sup>

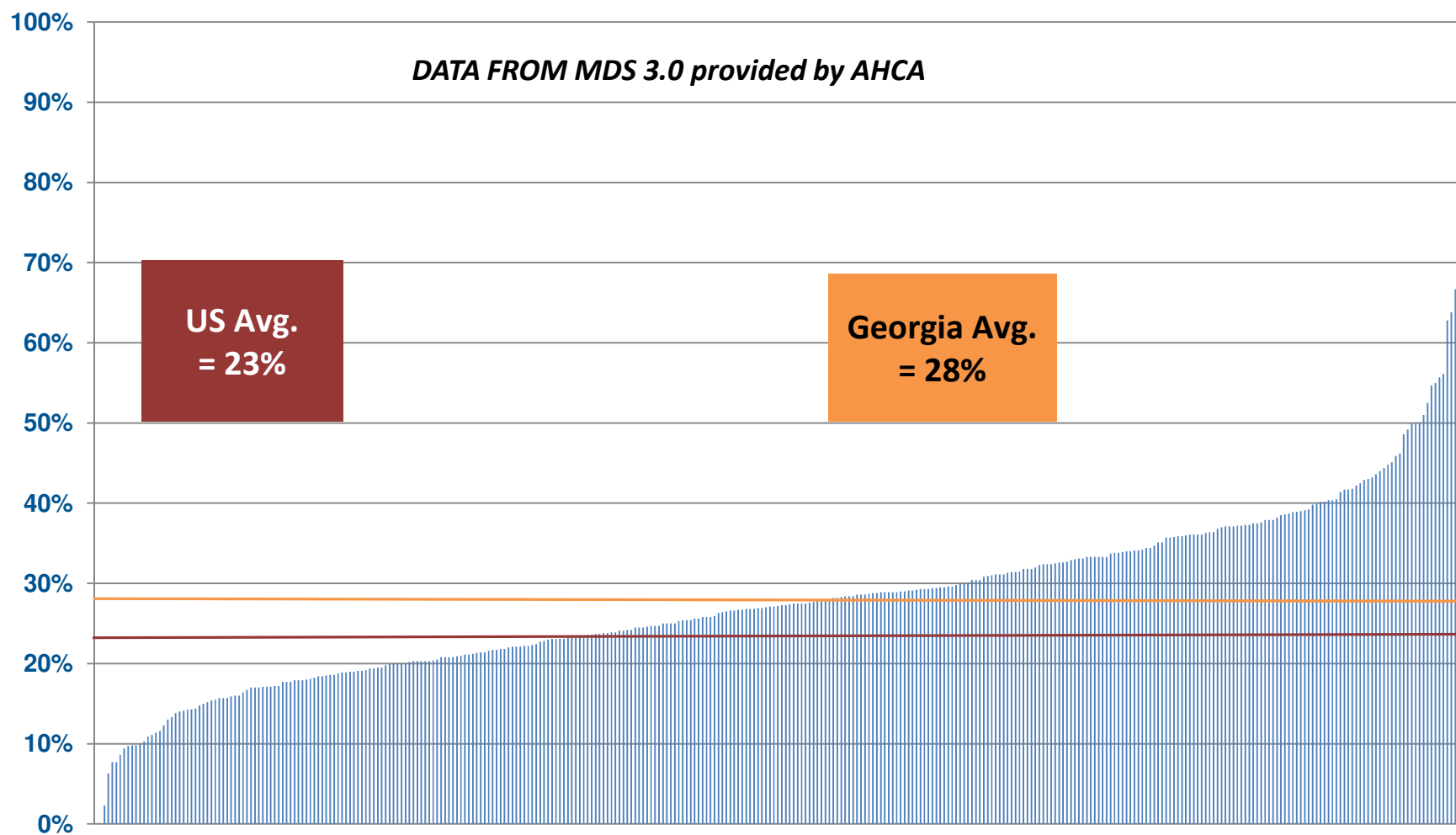


Distribution of AHCA Member Long Stay Residents on Off-label Antipsychotics



<sup>3</sup> Source: AHCA analysis of Brown University Center for Gerontology and Health Care Research data.  
Note: Preliminary data. Measure specifications and the target are likely to change, 2009.

# Off-Label Anti-Psychotic Use in Georgia LTC



# AHCA

- ▶ 2011- HHS Inspector General found that 14% of NH residents were prescribed antipsychotics, but eight to 10% were off-label and thus, not for treatment of mental illness
- ▶ Goal - Reduce avoidable antipsychotic use by 15% by 12/31/12 (nationally, *18,400 fewer individuals will receive antipsychotic medications per year*).
- ▶ Move from 23% to 19.6%



# GHCA

- ▶ Goal - Reduce avoidable antipsychotic use by 15% by 12/31/12
- ▶ Move from 28% to an average of 23.8%



# Measure #1

- ▶ ***Incidence:*** % of individuals who have an antipsychotic drug initiated for an off-label use within the first 90 days of a nursing facility stay (regardless of payer source or length of stay)
- ▶ ***Calculation:***
  - # of short-stay individuals (100 or less cumulative days in the facility) with antipsychotic drug use indicated on an MDS assessment in the target quarter
  - # of short-stay individuals (100 or less cumulative days in facility) with one or more MDS assessments in the target quarter
- ▶ ***Exclusions:***
  - (1) Antipsychotic use identified on the initial assessment **OR**
  - (2) Diagnosis of: bipolar or schizophrenia

[http://www.ahcancal.org/quality\\_improvement/qualityinitiative/Documents/Goal%20-%20Measurement%20Summary.pdf](http://www.ahcancal.org/quality_improvement/qualityinitiative/Documents/Goal%20-%20Measurement%20Summary.pdf)

# Measure #2

- ▶ **Prevalence:** % of long-stay residents with off-label use of an antipsychotic drug
- ▶ **Calculation:**
  - # of long-stay residents (those with >100 cumulative days in the facility) with antipsychotic drug use indicated on one or more MDS assessments in the target quarter
  - # of long-stay residents (those with >100 cumulative days in the facility) with one or more MDS assessments in the target quarter.
- ▶ **Exclusions:**  
Diagnosis of bipolar or schizophrenia.

# Table Discussion

Turn to your neighbor and describe those behaviors occurring in your setting in patients with dementia.

# Polling of Behaviors

- GREEN** A rare occurrence or seldom drug use
- YELLOW** Monthly occurrence w/medication use
- RED** Weekly occurrence w/medication use



# Preferred Staff Reaction

- ▶ STOP & LISTEN
- ▶ What is the Target behavior?
- ▶ How often is it occurring & timing
- ▶ What are the circumstances?
- ▶ What may have precipitated behavior?
- ▶ What has already been done to modify the behavior?



# Tools to Support Staff Behavior Change

- ▶ Resources on AHCA website:  
[http://www.ahcancal.org/quality\\_improvement/qualityinitiative/Pages/ResourcesByGoal.aspx#4](http://www.ahcancal.org/quality_improvement/qualityinitiative/Pages/ResourcesByGoal.aspx#4)
- ▶ Dementia Beyond Drugs (book)  
<http://www.healthpropress.com/store/power-29562/>
- ▶ Improving Antipsychotic Appropriateness in Dementia Patients (IA-ADAPT) <https://www.healthcare.uiowa.edu/igec/IAADAPT>
- ▶ Quality of Life Outcomes for People with Alzheimer's Disease and Related Dementia  
<https://www.healthcare.uiowa.edu/IGEC/IAAdapt/>



# Change in Perspective About Behaviors

## Behavior in “old” language

- ▶ Agitation
- ▶ Rummaging or “Shopping”
- ▶ Wandering
- ▶ Egress or Elopement
- ▶ Refusing Personal Care
- ▶ Repetitive Crying Out

## New language for behavior

- ▶ Energetic/Assertive
- ▶ Seeking
- ▶ Exploring
- ▶ Assertive / Focused / Showing Initiative
- ▶ Cautious
- ▶ Assertive

# Strategies to Manage Behaviors

- ▶ Start with Consistent Assignment
- ▶ Sooth the anxiety – determine the cause – (noise, constipation, dehydration, hungry)
- ▶ Leave if they are escalating
- ▶ Let patient make a call to a family or friend – short list for day or night
- ▶ Switch TV or radio to a calming show

# Communication Techniques

- ▶ Talk slow
- ▶ Get their attention
- ▶ Listen
- ▶ Calm tone
- ▶ Yes or no questions
- ▶ Orient to task
- ▶ Use touch
- ▶ Don't argue
- ▶ Repeat rephrase and repair
- ▶ Smile and laugh
- ▶ Reinforce positive moments
- ▶ Affirmations
- ▶ Use humor
- ▶ Watch your language

# Alternative Medicine Approaches

- ▶ Chamomile tea or milk
- ▶ Magnesium 250-500mg
- ▶ Familiar or comfort foods
- ▶ Essential oils – lavender, rose, rosemary – tiny amounts
- ▶ Favorite cologne, aftershave, perfume
- ▶ Colored lights – pink, blue, outside sunlight
- ▶ Pets
- ▶ Small children
- ▶ Acupressure / shiatsu / swaddling
- ▶ Exercise
- ▶ Foot bath, shoulder massage / hydro therapy
- ▶ Neutral temperature bath
- ▶ Music



# F329 - Unnecessary Medications

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# Getting to Know Your Resident

- ▶ Activity – Interview your neighbor and determine what you can about them from the ages 15-25.

.....

- ▶ What did you learn that could be helpful if they were now in their 80s living in your nursing home with dementia and become...

**The Best Friends™ Approach to Alzheimer's Care**

[http://www.healthpropress.com/sos/BestFriends\\_Overview.pdf](http://www.healthpropress.com/sos/BestFriends_Overview.pdf)



# Reducing Off-label Antipsychotics



## *Requires Change:*

- ▶ Systems
- ▶ Process
- ▶ Personal behavior changes
- ▶ Workflow

# Potential Impact

- ▶ Culture change of family, staff and clinicians
- ▶ Fewer accidents and injury rates
- ▶ Fewer residents on antipsychotics
- ▶ Lower doses of antipsychotics
- ▶ Improved staff satisfaction
- ▶ Avoid future potential penalties

# Strategy - FOCUS

- F**ind a process to improve
- O**rganize a team
- C**larify current knowledge
- U**nderstand the variation
- S**elect the process changes

# FOCUS

## Find a process to improve

- ▶ *Identify* a care/service process that is “**KEY**” to your success
- ▶ *Select* the **AIM** of your improvement
- ▶ *Determine* if there is a **BEST PRACTICE** internally or externally
- ▶ *Establish* if there is a **POLICY** or **REGULATION** that is prescriptive

# FOCUS

## Organize a team

- ▶ Include Key Stakeholders
  - Stakeholders have the most knowledge about the process
  - Stakeholders are key to making successful and sustainable improvements

# FOCUS

## Clarify current knowledge

- ▶ Identify how the process is currently taking place (the **real practice**)
- ▶ Generate a **Process Map** to represent the sequential order of each step
- ▶ Collect/Gather **Baseline Data** about the current process

# FOCUS

## Understand the variation

- ▶ Compare the current process steps to the steps in the process that you would like to model
  - *This could be based on Policy, Regulations or a Best Practice Model*
- ▶ Understand the differences between the two practices and determine where non-value added steps exist
- ▶ Analyze Baseline Data compared to Best Practice Data if available

# FOCUS

## Select the process changes

- ▶ Using the Baseline Date, determine the improvement actions you need to take
- ▶ Prioritize the list through Rank Order of importance



# Strategy

- 1) Obtain Leadership Commitment – build the will to work on this and develop the buy-in to understand, taking a thoughtful approach, use QA&A (or QAPI) review
- 2) Convene a local interdisciplinary committee for oversight
- 3) Review Baseline data – the nation, state, facility data to determine the issue (pull own data, understand the numbers, follow regularly)
  - a) Rate of use of antipsychotics for all reasons; rate of off-label use; rate and pattern of PRN use
  - b) Behaviors that trigger use of medications
  - c) Initial patient list of impacted individuals

## Strategy *(continued)*

- 4) Assess current practices – i.e., consistent assignment, CNA meetings, environmental assessment, culture change processes, pharmacy processes, Medical Director and staff MD involvement
- 5) Education of CNAs to increase skills and give new tools
- 6) After the above – (months into project) – ask CNAs which residents could benefit from this new approach
- 7) Routine monitoring of facility MDS 3.0 data

# Next Steps

- ▶ Alliant | GMCF is ready to partner with you
  - Identify and tailor educational tools
    - AHCA website, CMS or other videos
  - Host webinars
    - Monthly 30-minute educational sessions
    - Monthly 30-minute project tracking and support sessions
  - Data interpretation and analysis
    - Assist you in tracking your blinded data

# Timeline

**June**

- Kickoff Workshop
- Collection of baseline data
- Report baseline data

**July**

- Obtain leadership buy-in
- Identify team members
- Discuss topic at QA&A (QAPI) meetings
- Monthly data monitoring
- Participate in monthly webinar

**August**

- Discuss project with front-line staff
- Begin educational plan with front-line staff
- Identify processes for improvement – begin PDSA
- Monthly data monitoring
- Participate in monthly webinar

## September

- Continue educational program with staff
- Identify processes for improvement – begin and revise PDSA
- Participate in monthly webinar
- Monthly data monitoring and reporting

## October

- Continue educational program with staff
- Identify processes for improvement – begin and revise PDSA
- **Begin titration down medications on targeted patients**
- Monthly data monitoring and reporting
- Participate in monthly webinar
- **Attend GHCA Council session**

## November

- Continue educational program with staff
- Identify processes for improvement – begin and revise PDSA
- **Continue titration down medications on targeted patients**
- Monthly data monitoring and reporting
- Participate in monthly webinar

## December

- Continue educational program with staff
- Identify processes for improvement – begin and revise PDSA
- Continue titration down and stop medications on targeted patients
- Monthly data monitoring and reporting
- Participate in monthly webinar

## January

- Continue educational program with staff
- Identify processes for improvement – begin and revise PDSA
- Continue titration down and stop medications on targeted patients
- Monthly data monitoring and reporting
- Participate in monthly webinar

**Celebrate Improvement!**

# In Closing

## Questions

## Commitment Signing

## Photo

