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Don't Fence me In
Cognitive Disabilities and Falls

FOCUS 2012 Special Session:
The Art and Science of Fall Prevention

Kalahari Convention Center
Wisconsin Dells, WI
November 28, 2012
presented by
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+ Objectives

- Describe essential characteristics of common cognitive disabilities
- Discuss relationship between cognitive disabilities and falls
- Describe strategies for recognizing and mitigating risks

+ Outline

- Review
 - Landscape of Care
 - Data
 - Prevention
- Common Cognitive Disabilities
- Interplay with Falls
- Action steps

+ **The Landscape of Care**

- Shifting Populations
- Changing Culture
- Quality Care
- Quality Jobs

+ **By the numbers**

- At least 50% of residents in long term care facilities have some cognitive impairment
- Studies show an annual falls incidence as high as 60% among people with dementia (Shaw, 1998) and as many as 400 falls per 100 persons with dementia (Edwards and Lee, 1998).
- Falls and unsafe walking about (wandering) are two consequences of dementia that have led to use of physical restraints in a misguided attempt to prevent injury
- Persons with dementia have highest risk of being restrained when hospitalized. Higher restraints → more falls
- Close to 89% of long term care residents with dementia experience mobility impairment (Williams, Williams, et al., 2005)

+ **Common cognitive disabilities**

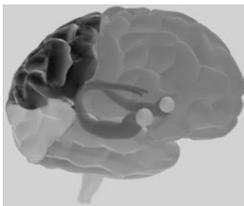
- Dementia
 - Alzheimer's Disease
- Traumatic Brain Injuries

+ Understanding cognitive disabilities

- Increases staff patience
- Reduces staff judgment
- Enhances empathy
- Tailor intervention

Brain-Behavior Relationships

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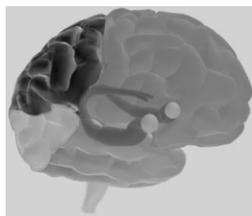


- Frontal
- Parietal
- Occipital
- Temporal
- Brain stem
- Hippocampus
- Amygdala

+ *Frontal lobe = Chief Executive

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- Initiation
- Self-monitoring
- Inhibition
- Judgment



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Processing speed

The following exercise will help you understand the cognitive issues that people with brain injury face every day.

Quickly state the WORDS:

Pink	Black	Orange
Blue	Yellow	Blue
Red	Orange	Black
Yellow	Red	Yellow
Black	Blue	Green
Orange	Orange	Red
Yellow	Black	Yellow

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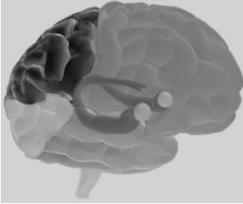
Processing speed (continued)

Now, quickly state the COLORS:

Pink	Black	Orange
Blue	Yellow	Blue
Red	Orange	Black
Yellow	Red	Yellow
Black	Blue	Green
Orange	Orange	Red
Yellow	Black	Yellow

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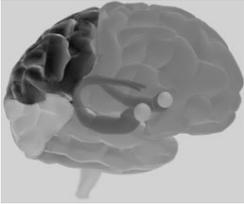
Temporal Lobe



- Memory
- Understanding language
- Organizing and sequencing
- Hearing

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*Amygdala



- Regulates emotions
 - Fear
 - Anger
- Apathy
- Paranoia
- Outbursts

Who Are You?



WHERE AM I?

+
What to Do

+ Prevention

Risk Factors	Protective Factors
■ Internal	■ Improve resistance
■ External	■ Moderate physical activity
■ Organizational	■ Diet
	■ Social connection

+ Prevention: Risk

- Assess risk factors
- Analyze circumstances after a fall
- Correct problems
- Minimize risk on a *daily* basis

+ Extrinsic: Your turn

Risk	Mitigation
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+ Extrinsic Risk Factors

Physical environment	Organizational
<ul style="list-style-type: none">■ Poor lighting■ Wet or shiny floors■ Physical obstacles■ Walkers/wheelchairs■ Restraints■ Inappropriate footwear or clothing	<ul style="list-style-type: none">■ Staff■ Levels■ Training■ Culture■ Policies

+ Mitigating Risk:

Physical environment	Organizational
<ul style="list-style-type: none">■ Lighting■ Gait or unit entryway■ Decoration/Pictures■ Non-skid surfaces■ No overhead paging■ Simple carpeting■ Staff education and awareness	<ul style="list-style-type: none">■ Consistent assignment■ Quality improvement■ Individualized care■ Fall assessment polices■ Staff training

Most effective strategies for managing falls in long term care facilities involves

everyone

who works at the facility and also includes support from families.

+ **Fall risk assessments**

Fall risk assessments are used to identify fall risk factors and assist to develop care plan approaches to prevent falls

Every member of the care team-including family-should be aware and understand risk factors that are specific to a resident

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A formal assessment of fall risk should be completed:

Prior to or at time of admission

At re-admission from hospital

A resident's health status changes

+ **Intrinsic factors**

Common in aging

- Gait instability
- Lower limb weakness
- Balance problems
- Urinary incontinence
- Drugs
- Visual impairments
- Dizziness

Common in dementia

- Disorientation
- Anxiety
- Impaired judgment
- Impaired perception
- Impaired communication
- Impaired memory
- **Behavioral communication**
- **Risk of medication**

Note well

Intrinsic risk factors for each resident will change over time as their physical and mental health status changes, and individualized care plans and fall-prevention strategies must be modified to accommodate these changes.

+ Unsafe walking about (aka wandering)

- Across the literature on people with dementia, estimates of the prevalence of wandering range from 6 to 100%(Kiely et al., 2000).
- Key long-term care resident characteristics associated with wandering include cognitive impairment, discomfort, medication use, experience of pain, and ability to wander (Kiely et al., 2000).
- Unsafe wandering and elopement have negative consequences, including injury to oneself or others, and death. Benefits of wandering can include promotion of circulation and oxygenation, exercise, and decreased contractures (Lai and Arthur, 2003).

+ Restraints

- Extensive literature reviews document the negative effects of restraints on nursing home residents, which include agitation, infections, and physical de-conditioning (Capezuti, 2004; Castle and Mor, 1998). These reviews also show that restraints do not prevent falls and that there is no evidence to suggest that restraints were ever useful in the nursing home setting.

+ Exercise Programs

A randomized control trial of an exercise program consisting of strength training or Tai Chi found low adherence to the program and no significant differences between the experiences of the intervention and control groups (Nowalk et al., 2001).

Nowalk and colleagues suggest individually-tailored exercise programs.

+ What the data shows

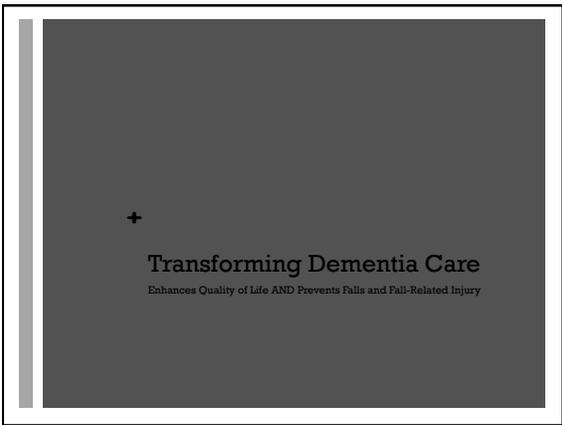
- Ability to adhere is compromised among residents with cognitive impairment is difficult to achieve, particularly for those with moderate or severe impairments.
- Thus, interventions designed to prevent falls must focus on staff and environmental change, rather than resident change.
- A combination of staff training, reduction of environmental hazards, and individually-tailored exercise, mobility aids, and medication management, as well as hip protectors and post-fall problem solving conferences. This combination of interventions significantly reduced the number of falls for residents in the higher cognition group, but not for those with low cognition. (Jensen et al., 2003)

+ What the data shows

- Some falls interventions cause more harm than good for the population with dementia.
- Two studies found multi-factorial falls risk and assessment and management programs generally were not effective in older adults with significant cognitive impairment (Chang et al., 2004).
- Thirteen intervention studies
 - the most successful interventions are those that are designed to meet residents' individual needs

Residents with dementia are more apt to fall when they are not engaged in an activity, are unattended or when they wander.

Risk reduction strategies focus on ways to provide engaging activities for residents and increase interaction.



+ Dementia from the Inside out

The Person with **DEMENTIA**

The **PERSON** with dementia

■ Tailor the intervention by focusing on **person-centered** care

+ The Many Faces of Dementia



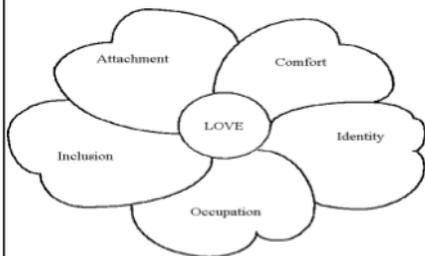
+ Dementia from the Inside Out

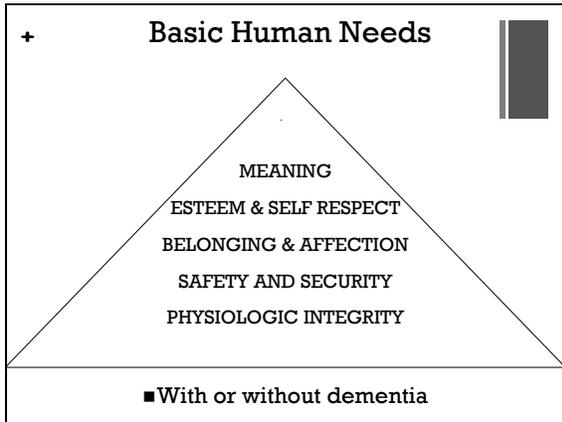
- All behavior has meaning
 - NOT JUST SYMPTOMS

- Attempt to communicate
 - Need or feeling

- Effect a change
 - Start or stop

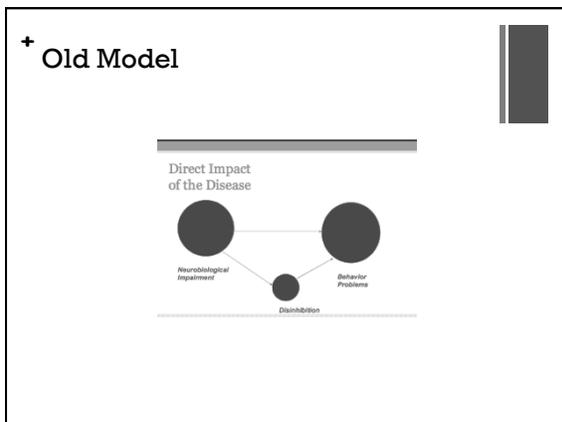
*What Does the Person Living With Dementia
Need to Maintain Personhood?*

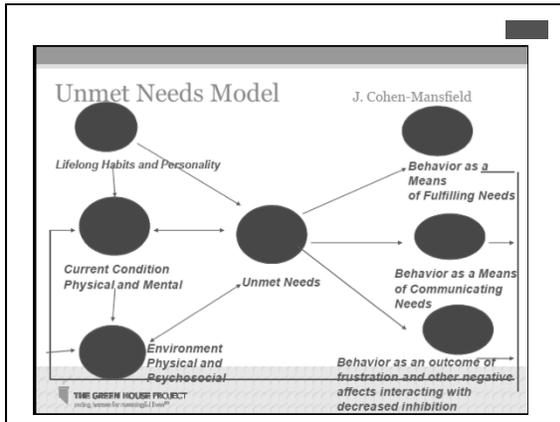




Unmet needs

Drive behavior





- + Individualizing care reduces falls**
- Assess the message
 - Ask
 - Consult knowledgeable others
 - Assess for unmet needs and behavioral changes
 - View increased confusion and agitation as a trigger to assess
 - Listen “beyond the words”

+ Post Fall Review

Circumstances of a fall are reviewed immediately after a fall when details of the fall are easier to remember.

The Post Fall tool is used to help determine “root cause” of a fall and possible care plan approaches to prevent another fall.

+ Post fall

- Review circumstances
- Determine root cause
- Be objective and identify details
- Encourage creativity and think imaginatively

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The huddle

Ask at least 5 “Why” questions when reviewing the circumstances that may have contributed to a fall.

Answers will help to find solutions to prevent another similar fall.

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Let's huddle



Don't hurry her!

Future staff!

- What do we know?
- How can we create
 - sense of safety
- How can we change our behavior?

+

Change? No Change?

If you always do
what you've always done,
you'll always get
what you always got



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Enlist the help of all staff (direct and indirect care) volunteers and families to "brainstorm" creative ways to reduce the risk of falls.



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The best ideas or solutions to reduce the risk of a fall are the ones created based on the unique mix of intrinsic and extrinsic risk factors for a specific resident in a particular situation and organizational factors.



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To get something different,
you have to do something different.

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Areas for Action

- Consistent assignment
- Individualized care plans
- Antipsychotic medication reduction

- (Exercise)
- (Calcium and Vitamin D)

- Change staff behavior

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Take Action:

- All staff members-direct care AND indirect care including volunteers- have an important role in looking for fall risks and
- Report changes (mental or physical) in residents
- Move or report environmental hazards
- Interact with and engage residents

+ Observe, observe, observe

- functional mobility and ADLs
- different setting and at different times of day

+ Become a success story

- Successful projects conclude with mobilization of a cadre of people who, *having participated*:
 - recognize their common purpose
 - look forward to setting new goals and,
 - work together to achieve them

**+ Good luck
Thanks for being here**

■ Resources

- My website: www.susanwehrymd.com
- MetaStar www.metastar.com
- AHCA www.ahcancal.org
