# Toolbox for Improving Behavioral Health in Nursing Homes



Symposium presented at The Gerontological Society of America's 66th Annual Scientific Meeting New Orleans, LA November24, 2013

## Symposium Overview

- 8-8:10 Introduction- Kimberly Van Haitsma
- 8:10-8:25 Staff education & leadership programs- Ann Boseen
- 8:25-8:40 Process of assessment- Laura Gitlin
- 8:40-8:55 Implementation of feasible interventions - Rita Jablonski
- 8:55-9:10 Methods for system integration-Marie Boltz
- 9:10-9:25 Discussant- Alice Bonner
- 9:25-9:30 Q&A

# CMS National Partnership to Improve Dementia Care: First Year Goal

- Reduce national prevalence of antipsychotic medication use in long-stay nursing home residents by 15% by end of 2012
- Baseline: national rate based on MDS data (Nursing Home Compare takes an average of previous three quarters) in December 2011
  - National rate in long-stay residents was 23.9%
  - Denominator includes all residents except those with schizophrenia, Tourette's or Huntington's disease

## Acknowledgements

Ann Kolanowski, PhD & Kimberly VanHaitsma, PhD-Co-PIs on Commonwealth Foundation **Toolbox for Improving Behavioral Health in Nursing Homes Project ( Small Grant #20130170)** 

This work was supported by grants from the Commonwealth Foundation and the Hartford Foundation. The funding agencies had no role in the preparation of this presentation.

## **Goal of Project**

Convene a national, interdisciplinary group of geriatric behavioral experts to collaborate on the development of a behavioral health Toolkit for staff in nursing homes.



## **Toolbox Concept**



- Compendium of peer-reviewed/expert-endorsed resources that will assist staff in the implementation of non-pharmacological approaches for challenging behaviors.
- Readily accessible
- Components: staff educational and leadership development programs; methods for assessing behavior; non-pharmacological approaches (NPA) to challenging behaviors; system-wide methods for integrating approaches into the culture of care
- Plan for wide dissemination of the Toolbox.

## Subgroups Who Worked on Toolbox

- **<u>Philosophy</u>** Karen Love, Jackie Pinkowitz
- Education & Leadership Judy Lucas, Cornelia Beck, Brenda Cleary, Ann Bossen
- <u>Assessment-</u>Laura Gitlin, K. Marx, B. Hansen, & Kimberly VanHaitsma (Linda Teri, Kitty Buckwalter & Chris Kovach reviewed draft)
- <u>Intervention</u>- Sharon Nichols, Rita Jablonski, Andrea Gilmore-Bykovskyi, Darina Molkina, Natalie Baker, Ann Bossen (Lois Evans & Kelly Carney reviewed draft)
- **System Integration** Marie Boltz, Carmen Bowman & Pat Parmelee
- **Dissemination Plan** Barb Resnick
- **Specific Behaviors-** Andrea Gilmore-Bykovskyi , Justine Sufcik

## **Other Players**

Advancing Excellence American Health Care Association American Medical Director's Association **Centers For Medicare and Medicaid Services** (CMS) Leading Age National Dementia Care Initiative

## Workgroup Agenda

- Face-to-face meeting in San Diego, Nov., 2012
- Multiple phone conferences
- Meeting with Mary Jane Koran (Commonwealth Foundation)
- Web design and dissemination with gift from Hartford Foundation
- Conducted eight focus groups with nursing home staff (CNAs, LPNs, RNs, Recreational Therapy) in Centre County and Philadelphia, Pa.

# The Toolkit www.nursinghometoolkit.com



Tools to Integrate Non-pharmacologic Treatment of Behavioral Manifestations of Distress in Residents with Dementia

Marie Boltz, Patricia Parmelee, Carmen Bowman, G. Allen Power, Kimberly Van Haitsman, Ann Kolanowski

## **Our Goal**

Identify best practices related to:

- implementation
- evaluation
- sustainability

of systemic approaches that support safe and effective alternatives to antipsychotic use for behavioral symptoms of distress experienced by nursing home residents with dementia

## Methods

## Iterative:

- Literature review
- Website reviews
- Consultation with experts
- Committee discussions

# Recognizing the complexity of the nursing home setting











Anderson RA, McDaniel R. Taking complexity science seriously: New research, new methods. In: Lindberg C, Nash S, Lindberg C, editors. On the Edge: Nursing in the Age of Complexity. Bordentown, NJ: Plexus Press; 2008. pp. 73–95.

#### **Results: Social –ecological Factors**

- Baseline and ongoing appraisal of the social and physical environment
- Educational methodology to support resident, family and staff interpersonal communication and relationship
- Intrapersonal tools to support evidence-based, individualized clinical interventions
- Performance improvement measures, tool, and initiatives to support adherence with regulatory policy

# Step 1: Organizational evaluation

#### Appraisal of the social and physical environment







#### Long-term Care Improvement Guide Self-assessment Tool (Planetree)

#### Long-Term Care Improvement Guide

Self-Assessment Tool

#### LONG-TERM CARE IMPROVEMENT GUIDE SELF-ASSESSMENT TOOL

This self-assessment tool is provided as a resource to assist users in navigating through the Long-Term Care Improvement Guide, particularly those struggling with where to begin. The assessment tool is organised around important aspects of a resident-centered culture, each of which is addressed indepth in its own section of the Guide. Completing the self-assessment may help to identify important opportunities for improvement or to prioritize a list of initiatives your organization may be eager to andertake. The process of completing the tool and using the fudings is an opportunity for modeling organizational values. Including stakeholders from throughout the organization in the assessment process is important, as perceptions may differ across the organization. Sharing the fudings in a transparent manner builds trust and helps to create urgency for change, and incorporating the identified priorities into the goals of the coalition/steering team will be important for maintaining momentum. Change is dynamic, accordingly, if will be important to revisit this tool routinely as part of the process for sustainable improvement.

#### INSTRUCTIONS:

- Complete the table below by marking the box that most appropriately captures the current status of the described practice in your organization.
- Tally up your score for each section using the following scale:
  - 2 points for every practice that is fully implemented.
  - 1 point for every practice that is partially implemented.
  - 0 points for every practice that there is no activity or it is not applicable.
- Calculate your organization's performance in each area, and refer to the section of the Guide addressing those areas which your performance indicates as the greatest opportunities for improvement. (low percent score-opportunity for improvement)
- 4. Use the Prioritization Tool to prioritize the implementation of the initiatives.
- 5. Take the time to celebrate your accomplishments! (high percent score=areas of achievement)

	Fully Incolemented Throughout Organization	Partially Implemented (in progress or in place in some areas)	No activity	Not applicable
Building Community: Est	ablishing U	igency, pg.	51	
We routinely use an internal assessment and/or measurement system for developing goals.				
We have a process in place to listen to the stakeholders of our organization. (Examples: focus groups, learning circles)				
We have a process to routinely communicate our organizational challenges, financial, clinical, operational and cultural goals and vision to stakeholders. (Examples: community meetings, town hall meetings, daily stand-ups)				
Total Score out of a Possible of 6		Per	cent of Total:	96

© 2010 by Planetree (www.planetree.org) and Picker Institute (www.pickerinstitute.org). All rights reserved.

#### Long-Term Care Improvement Guide

Self-Assessment Tool

#### INITIATIVE PRIORITIZATION TOOL:

Instructions:

- From the completed assessment, fill in those initiatives that you rated either partially implemented or no activity.
- Tally up the number of -Yes" responses to identify top initiatives. Items with the greatest number of Yes responses = higher priority.
- 3. Refer to the Guide sections that correlate to the top priorities for your organization.
- Empower the Guiding Coalition or Steering Team to use these priorities to set organizational goals and work groups.

Assessment Item	Does this initiative satisfy an expressed resident, family and/or staff need?		Does this initiative support our organizational goals and priorities?		Does this initiative present an opportunity for a high- impact, short- term win?		Do our organizational resources allow for the implementa- tion of this initiative?		# of Yes Resp- osses	
	Yes	No	Yes	No	Yes	No	Yes	No		
	Yes	No	Yes	No	Yes	No	Yes	No		
	Yes	No	Yes	No	Yes	No	Yes	No		
	Yes	No	Yes	No	Yes	No	Yes	No		
	Yes	No	Yes	No	Yes	No	Yes	No		
	Yes	No	Yes	No	Yes	No	Yes	No		
	Yes	No	Yes	No	Yes	No	Yes	No		
	Yes	No	Yes	No	Yes	No	Yes	No		

17 © 2010 by Planetree (www.planetree.org) and Picker Institute (www.pickerinstitute.org). All rights reserved.

Putting the P.I.E.C.E.S. Together website. http://www.piecescanada.com/

#### TESS -NH (Therapeutic Environment Screening Survey)

A 37-item checklist consists of a range of environmental domains (safety / security, orientation, privacy/control), as well as staff interaction, resident involvement in activities, and physical environmental atmosphere.

Garcia LJ et al. Perceptions of family and staff on the role of the environment in long-term care homes for people with dementia. International Psycho geriatrics 2012; 24(5):753-65.

#### **Models of Care Instrument**

#### MODELS OF CARE ASSESSMENT INSTRUMENT

Resident ID:	1	Facility	Code:	Date:	

Assessor:

\_\_\_\_\_ Proxy Informant:

For each of the following questions, please check <u>one</u> answer that is most similar to the care practices and features of your unit/facility. Only use the "other" line when no other answer is appropriate. After checking a box, you may write additional comments if further explanation is necessary.

Dining tables accommodate six or more residents.     Dining tables accommodate six or more residents.     Driner are several sizes of dining tables.     Other:
Residents are served the meal of the day, but may request alternative.     Residents can select from a wide range of choices, there may be a menu, buffet, etc.     Residents select and control choice of food items at meals, as in family style dining.     Other: Comments:
Residents are encouraged or assigned to eat with residents: U with similar diets or need for assistance. U whon they choose Who live near them Other: Comments:
At meals, staff assume the role of: an adult child or close relative. a maitre d' or waiter/waitress. health monitor. Other: Comments:

19.	Mrs. Smith values her independence and privacy in dressing. When she comes out of her room, her clothes are usually mismatched. Sometimes buttons are done wrong or a garment is on
1	backwards. It this situation, staff usually will:
Н	Do nothing unless she is indecently exposed
R	Anticipate the time when she will get up and be there to assist her
М	Take her to her room and help fix the problem. Involve occupational therapy or add dressing supervision to her care plan.
0	Other:
20.	Mr. Thomas is a new resident on the unit. He has not entered into any group activities in the tw weeks that he has been there. Staff are most likely to:
R	Use pep and enthusiasm to encourage him to come.
11	Drop in his room to establish 1:1 rangest and then try to get him to come
п.	a prop in instroom to estavitsh 1.1 tapport and then by to get min to come.
М	<ul> <li>Day in instruction to establish 1.1 happen and then by to get him to come.</li> <li>Call his family and share concerns. Involve a social worker or mental health professional screen for adjustment difficulty or depression.</li> </ul>
м о	<ul> <li>Call his family and share concerns. Involve a social worker or mental health professional screen for adjustment difficulty or depression.</li> <li>Other:</li> </ul>
м о 21.	Call his family and share concerns. Involve a social worker or mental health professional: screen for adjustment difficulty or depression.     Other:     Mrs. Jones has always been a very independent and private person. She is angry that staff come     into her room to check on her during the day and night. Unit staff are most likely to:
м 0 21. М	<ul> <li>Call his family and share concerns. Involve a social worker or mental health professional screen for adjustment difficulty or depression.</li> <li>Other:</li> </ul> Mrs. Jones has always been a very independent and private person. She is angry that staff come into her room to check on her during the day and night. Unit staff are most likely to: <ul> <li>Explain that it is unit policy and for her safety, then look for a small compromise to pacify her.</li> </ul>
н 0 21. М н	<ul> <li>Call his family and share concerns. Involve a social worker or mental health professional screen for adjustment difficulty or depression.</li> <li>Other:</li> <li>Mrs. Jones has always been a very independent and private person. She is angry that staff come into her room to check on her during the day and night. Unit staff are most likely to:</li> <li>Explain that it is unit policy and for her safety, then look for a small compromise to pacify her.</li> <li>Stop obvious checks but stop in to visit a few times during the day and listen at her door at night.</li> </ul>
м 0 21. М н R	<ul> <li>Drop in instruction to establish 1.1 apport and then up to get him to Colle.</li> <li>Call his family and share concerns. Involve a social worker or mental health professional: screen for adjustment difficulty or depression.</li> <li>Other:</li> </ul> Mrs. Jones has always been a very independent and private person. She is angry that staff come into her room to check on her during the day and night. Unit staff are most likely to: <ul> <li>Explain that it is unit policy and for her safety, then look for a small compromise to pacify her.</li> <li>Stop obvious checks but stop in to visit a few times during the day and listen at her door at night. <ul> <li>Stop obvious checks but stop in to see if she needs anything or bring her a snack that she likes and listen at her door at night.</li> </ul></li></ul>

Calkins MP, Weisman GD. Models for environmental assessment. In: Schwarz B, Brent R, eds. Aging, Autonomy and Architecture. Baltimore, MD: Johns Hopkins University Press, 1999, 130–142.

#### Person-centered care assessment tool (P-CAT)

		Disagree completely	Disagree	Neither agree or	Agree	Agre comple
		1	2	disagree 3	4	5
1.	We often discuss how to give person-centred care.					
2.	We have formal team meetings to discuss residents' care					
3.	The life history of the residents is formally used in the care plans we use.					
4.	The quality of the interaction between staff and residents is more important than getting the tasks done.					
5.	We are free to alter work routines based on residents' preferences.					
6.	Residents are offered the opportunity to be involved in individualised everyday activities.					
7.	I simply do not have the time to provide person-					
8.	The environment feels					
9.	We have to get the work done before we can worry about a homelike environment					
10.	This organisation prevents me from providing person- centred care					
11.	Assessment of residents' needs is undertaken on a daily basis.					
12.	It is hard for residents in this facility to find their way around.					
13.	Residents are able to access outside space as they wish.					

Edvardsson, D. et al 2009). Construction and psychometric evaluation of the Swedish language person-centred climate questionnaire—staff version. Journal of Nursing Management, 17, 790–795.

#### Person-directed Care Measure

#### 50 items

- personhood
- autonomy/ choice
- knowing the person
- comfort
- nurturing relationships
- physical environment
- organizational environment

White, D. L., Newton-Curtis, L., & Lyons, K S. (2008). Development and initial testing of a measure of person-directed care. *The Gerontologist*, *48*, 114–123.

# Step 2: Education: staff, residents, family

Project Management that supports uptake



## Step 2 Use of an evidence-based educational program

STAR—<u>Staff</u> Training in <u>Assisted-living</u> <u>Residences</u>

#### P.I.E.C.E.S.:

Human resource development and project management tools to support changes in practice





#### **Educational Methodology**

Practices that support integration

- Mandatory inservices, scheduled as part of routine work time
- Incentives to participate (such as a meal) facilitate reach
- Ongoing educational opportunities at the bedside

#### Resident /family education

- Orientation to include philosophy, policy, and alternatives
- Revisit as needed at care planning

Resnick et al. Implementation of the 6-week educational component in the Res-Care intervention: process and outcomes. Journal of Continuing Education in Nursing 2009; 40(8):353-60. Rodwell et al. Supervisors are central to work characteristics affecting nurse outcomes J Nurs Scholarsh 2009; 41:310–319.

# Step 3: Policy development

✓ Clinical protocol

✓ Interdisciplinary care planning processes



## Clinical protocol (monitored by champion{s})

#### Preferences for Everyday Living Inventory

- Assessment of:

   Social profile, coping measures, preferences, triggers.
  - Clinical presentation of cognition, mood, function

Van Haitsma, K. (2000). The assessment and integration of preferences into care practices for persons with dementia residing in the nursing home. In Rubinstein R., Moss M., and Kleban M. (Eds). The Many Dimensions of Aging. New York: Springer.

## **Clinical protocol**

- A plan for:
  - family involvement as desired
  - a structured routine (24-hour) that reflects resident preference and capability
  - therapeutic communication
- Management of medical and psychiatric disorders
  If antipsychotics are used, conservative approach
  An individualized plan of care to avoid behavioral symptoms and manage acute behavioral episodes

1.Insel, K.C. & Badger, T.A. (2002). Deciphering the 4 D's: cognitive decline, delirium, depression and dementia – a review. Journal of Advanced Nursing 38 (4)360–368.

2. Westbury, J., Jackson, S. & Peterson, G. (2009). Psycholeptic use in Tasmanian aged care homes. *International Journal of Clinical Pharmacy and Therapeutics*. 35(2):189-93.

3.Westbury, J., Jackson, S. Gee P, & Peterson G. An effective approach to decrease antipsychotic and benzodiazepine use in nursing homes: the RedUSe project. *International Psychogeriatrics* 2010; 22 (1): 26–36

Interdisciplinary care planning processes

that include:

 the resident and family with a copy of care plan provided to family

nursing assistants in care planning

# Step IV. Sustain the improvement

#### Quality assurance/ improvement activity



Evidence-based measures

- Pharmacist audit of psychoactive use (outcome measure) with feedback to staff
- Steering committee to develop process measures
- Include assessment of congruence to resident preference

Evidence-based approach to continuous performance improvement

• Include all levels of staff in QA/QI activity. Share results.

• Use of "QAPI at a Glance" • <u>http://cms.gov/Medicare/Provider-Enrollment-andCertification/QAPI/Downloads/QAPIAtaGI ance.pdf</u>.

Westbury, J., Jackson, S. Gee P, Peterson G. An effective approach to decrease antipsychotic and benzodiazepine use in nursing homes: the RedUSe project. *International Psychogeriatrics* 2010; 22 (1): 26–36.

http://www.abramsoncenter.org/pri/projects/PELI.htm

## Toolkits to achieve quality goals Advancing Excellence in America's Nursing Homes

#### **Process Goals:**

o Improving staff stability;

- o Increasing use of consistent assignment
- o Increasing person-centered care planning and decision making;

o Safely reducing hospitalizations;



#### **Clinical Goals**

- o Using medications appropriately;
- o Increasing resident mobility;
- o Preventing and managing infections safely;
- o Reducing the prevalence of pressure ulcers; and
- o Decreasing symptoms of pain.

## In conclusion.....

The social ecological view supports a systematic approach to promoting the well-being of persons with dementia,

including alternatives to anti-psychotic medication.

We are still on the journey....



Building a Toolkit for Improving Behavioral Health in Nursing Homes Cornelia Beck, Ann Bossen, Brenda Cleary, Judith A. Lucas, Imani Baker, Ann Kolanowski , and Kimberly Van Haitsma.

> GSA Annual Scientific Conference, New Orleans, LA., Nov. 20-24, 2013

## **Education Committee**

- Cornelia Beck, PhD, RN, FAAN, University of Arkansas for Medical Sciences
- Ann Bossen, PhD, RN, University of Iowa
- Brenda Cleary, PhD, RN, FAAN, Healthcare Consultant
- Judith A. Lucas, EdD, RN, GCNS-BC, Seton Hall University
- Ann Kolanowski, PhD, RN, FAAN, Penn State School of Nursing
- Kimberly Van Haitsma, PhD, Polisher Research Institute
- Imani Baker, Rutgers University

## Goal of education committee;

 To conduct a search to identify nursing education sources on existing nonpharmacological approaches to behavioral management in dementia care

## Educational and Leadership Development Programs

- Educational Programs for Implementing Non-Pharmacological Approaches
- Leadership Opportunities for Professional Staff
- Educational Resources Available on the Portal of Geriatric Online Education (POGOe) Website
- Geriatric Certification Opportunities

GSA Annual Scientific Conference, New Orleans, LA., Nov. 20-24, 2013

## Features identified

- Name of program
- Sponsoring agency
- Abstract/ brief description
- Intended learning audience
- Peer reviewed

- Evidence-based
- Learning resource type & format
- CEUs available
- Duration
- Link
- Cost involved
# Product formats included;

 5 webinars, 8 power point presentations, 1 CD-ROM, 6 videos, 1 audio conference, 3 continuing education presentations and modules, instructional materials, 3 pocket cards, 2 case studies, journal articles and 1 book.

# Focus group input

 Direct care staff indicated that video and other types of demonstration were the most useful sorts of educational materials for helping them respond to behavioral symptoms.

Portal of Geriatric Online Education (POGOe)

 An existing database of educational materials supported by the Reynolds Foundation

20 resources identified

# Leadership development programs

 15 programs were identified with material specific for administrators and supervisory staff.

# The Coalition of Geriatric Nursing Organizations

- 10 geriatric certification opportunities for management and professional staff were found
- These certification opportunities are designed for licensed practical nurses and registered nurses in long-term care and assisted living.

# Challenges

- Finding products that were specifically for direct care staff. Limited to those products where the sponsoring organization did not charge a fee.
- Database itemized when there was a fee for use of the product.
- Costs for some products were higher for non-members of the organization, and may reduce access for facility use.

# Thank you

# Assessing Neuropsychiatric Symptoms in Persons with Dementia: A Review of Measures

Laura N. Gitlin, PhD Professor, Director Center for Innovative Care in Aging The Johns Hopkins University

lgitlin1@jhu.edu

www.nursing.jhu.edu/agingcenter



#### **Co-authors and Collaborators**

- Katherine A. Marx, PhD, MPH
  - Center for Innovative Care in Aging, Johns Hopkins University
- Kimberly S. Van Haitsma, PhD
  - Director, Polisher Research Institute, Abramson Center for Jewish Life
- Bryan Hansen, MSN, RN
  - Doctoral candidate, Research Assistant, Center for Innovative Care in Aging., Johns Hopkins University, School of Nursing
- Ann M. Kolanowski, PhD, RN
  - Elouise Ross Eberly Professor, Director, Hartford Center of Geriatric Nursing Excellence School of Nursing, Penn State

 Assistance preparing GSA slides, Ian Stanley, Health Educator for Center for Innovative Care in Aging, Johns Hopkins University

### **Research Support and Disclosures**

- Dr. Gitlin supported in part for work on this project from the:
  - NIA Grant #R01AG041781
  - Alzheimer's Association Grant # NPSASA-10-174625
- Commonwealth funds awarded to Drs. Van Haitsma and Kolanowski

No relevant financial or conflict of interest disclosures

#### **Objectives**

Why assess behavioral symptoms in persons with dementia?

#### Summary of available tools

#### Research and Clinical Implications



## Why Assess Behavioral Symptoms?

- Behavioral symptoms occur throughout disease progression
- Nearly universal almost all persons with dementia will have one or more behavioral symptoms, regardless of dementia etiology
- Associated with poor patient outcomes:
  - Reduced quality of life
  - More rapid disease progression
  - Increased health care utilization and costs
  - Increased safety concerns

#### Associated with poor caregiver outcomes:

- Increased depression, burden and upset
- Increased need for vigilance and time spent caregiving
- Poor quality of life
- Increased risk for placing person in nursing home care
- Increased safety risk

#### Under recognized and undertreated



### Common Behavioral Symptoms of Most Concern to Caregivers (N=239)

Behavioral Symptoms	# (%) of Caregivers Reporting Behavior Past Month
Repetitive questioning	218 (80.1%)
Refusing care	147 (54.0%)
Argumentativeness	183 (67.3%)
Toileting issues	173 (63.6%)
Upset/agitated/restless	157 (57.7%)
Wakes up at night	145 (53.3%)
Verbal Aggression	145 (53.3%)
Wandering	52 (19.1%)
Inappropriate behaviors	20 (7.4%)

Gitlin, et al., (2007). Design and methods of Project ACT. *Clinical Interventions in Aging*, 2(4), 695-703. PMCID: PMC2670989; Gitliin et al., (2010). JAGS, 58 (6) 1465-1474.



## **Assessing Behaviors**

- AMA Physician Consortium for Performance
  Improvement (PCPI) 2011 Dementia Performance
  Measurement Set suggests minimum yearly screen
  - Measure #4: Neuropsychiatric Symptom Assessment
    Percentage of patients, regardless of age, with a diagnosis of dementia and for whom an assessment of neuropsychiatric symptoms is performed and results reviewed at least once in a 12 month period.
- No widely agreed upon standard for screening for behavioral symptoms or one recommended tool
  - Behaviors typically brought to physician's attention by concerned caregiver after occurrences or by staff in a facility

Odenheimer, et al., in press, Neurology; Marx et al., poster, AAIC, July 17th, 2013

#### Search Strategy

- A computerized search of:
  - Peer reviewed published studies of measures (1980 to present)
  - English
- Search terms: neuropsychological tests, neuropsychological measurements, dementia, Alzheimer's disease, behavior, delusions, hallucinations, agitation, aggression, depression, anxiety, eating, euphoria, apathy, disinhibition, irritability, motor disturbance, sleep, and vocalizations.
- Articles were further searched for additional measures.

#### **Evaluation of Scales for:**

- Number of Items
- Domains of Behavior
- How Administered
- Response Categories (domain and specific response)
- Target Population
- Reliability and Validity



## General Behavior Scales (n=15)

- 1. Alzheimer's disease assessment scale non-cog
- 2. Multi-dimensional observation scale for elderly subjects
- 3. Nurses' observation scale for geriatric patients
- 4. The neurobehavioral rating scale
- 5. The nursing home behavior problem scale
- 6. BEHAVE-AD
- 7. Neuropsychiatric inventory (NPI-Q; NPI-C)
- 8. Revised memory and behavior problem checklist
- 9. Computer assisted behavioral observation scale
- 10. Clinical dementia rating scale
- 11. Behavioral syndromes scale for dementia
- 12. Dementia signs and symptoms scale
- 13. CERAD Behavior rating scale for dementia
- 14. Key behavior change inventory
- 15. Dementia Behavior disturbances scale

### Specific Behavior Scales (n=29)

#### Agitation

- 1. Cohen-Mansfield agitation inventory
- 2. Agitated behavior in dementia scale
- 3. Pittsburgh agitation scale
- 4. Brief agitation rating scale
- 5. Overt agitation severity scale
- 6. Disruptive behavior rating scales

#### Apathy

- 1. Dementia apathy interview and rating scale
- 2. Apathy evaluation scale
- 3. Lille apathy rating scale
- 4. Irritability-apathy scale
- 5. Frontal system behavior scale
- 6. Apathy inventory

#### Aggression

- 1. Aggression behavior scale
- 2. Overt aggression scale
- 3. RAGE
- 4. Ryden aggression scale

#### Depression

- 1. Cornell scale for depression in dementia
- 2. Patient health questionnaire 9
- 3. The dementia mood assessment scale

#### Depression & Anxiety

- 1. Hospital anxiety and depression scale
- 2. Depression anxiety stress scale

#### Anxiety

- 1. Rating anxiety in dementia
- 2. Geriatric anxiety inventory
- 3. Beck anxiety inventory
- 4. The worry scale
- Sleep
  - 1. Pittsburg sleep quality index
  - 2. The sleep disorders inventory
  - 3. Epworth sleepiness scale
- Wandering
  - 1. Algase wandering scale

## No measures specific to:

- Euphoria
- Hallucinations
- Irritability apart from aggression or anxiety
- Motor and verbal disturbances

### Observational tools (n=10)

- Multi-dimensional Observation Scale for Elderly Subjects (MOSES)
- Nurses' Observation Scale for Geriatric Patients (NOSGER)
- The Nursing Home Behavior Problem Scale (NHBPS)
- Computer Assisted Behavioral Observation Systems (CABOS)
- Pittsburgh Agitation Scale (PAS)
- Overt Agitation Severity Scale (OASS)
- Disruptive Behavior Rating Scales (DBRS)
- Overt Aggression Scale (OAS)
- Rating Scale for Aggressive Behavior in the Elderly (RAGE)
- Algase Wandering Scale (AWS)

#### **Characteristics of Assessment Tools**

#### ▶ 38 (86%) tools specific to settings

- Nursing home
  - The Nursing Home Behavior Problem Scale (NHBPS)
  - Brief Agitation Rating Scale (BARS)
- Assisted living
  - Algase Wandering Scale (AWS)
- Home care
  - Dementia Behavior Disturbance Scale (DBD)
  - Agitated Behavior in Dementia Scale (ABID)
- Hospital
  - Hospital Anxiety and Depression Scale (HADS)
  - Aggressive Behavior Scale (ABS)
- ▶ # of items across all 44 tools = range of 3 to 64
- ▶ 9 (20%) tools dependent upon specialized assessor (e.g., nurses/trained clinician)
- Examples of response categories
  - Frequency of occurrence using different time frames:
    - Dementia Signs and Symptoms Scale (DSS): 43 items, 8 subscales Over the past month: 0=absent, 3=daily
  - A few examined severity to person with dementia
  - A few examined level of upset to caregivers

## Implications

- Assessing behavioral symptoms using reliable and valid measures should be part of routine and comprehensive care of persons with dementia.
- Good news Measures exist with strong psychometric properties
- Choice of measure should depend upon:
  - Clinical setting or research context
  - Specific behaviors of concern
  - Method of ascertainment (clinician versus nonclinician; self-report versus observation).

#### Recommendation:

- Use general measure that captures a broad spectrum of behavioral symptoms as screen
- For a behavioral occurrence, followup with specific measure to obtain more nuanced understanding.
- Existing measures represent an initial step for behavioral symptom detection
- Only a few evaluate severity to patient and level of upset to caregiver

### Implications Con't

- Existing measures represent an initial step for behavioral symptom detection but:
  - Only a few evaluate severity to patient and level of upset to caregiver
  - Do not capture phenotype of behaviors
  - Do not capture context in which behaviors occur
- These 44 assessments start the process only
- Most common measure used in research/clinical context is NPI (NPI-C; NPI-Q)

## **Measurement Development Needs**

- Systematically characterize risk factors for behaviors
- Systematic measurement protocol for characterizing behavioral occurrences and contextual features
- Determine congruence between items and caregiver knowledge/understanding and own characterization of behavioral symptoms
- Determine whether self-report by proxies accurately captures behavioral occurrences
- Advance measurement protocols:
  - Quick screens for risk
  - Quick screens for behavioral symptoms
  - In-depth followup of context of occurrences
  - Link assessment tools to potential nonpharmacologic strategies
  - Cross train health professionals and caregivers in identifying/assessing for behavioral symptoms

## Non-Pharmacological Interventions to Reduce Agitation in Persons with Dementia: Considerations for Feasibility and Future Research

Rita Jablonski, PhD, CRNP, FAAN<sup>1</sup>, Andrea L Gilmore-Bykovskyi, MS,RN<sup>2</sup>, Natalie Baker, DNP, CRNP,<sup>1</sup> Ann Bossen, PhD, RN,<sup>3</sup> Darina V. Molkina, MS, RN<sup>4</sup>

University of Alabama at Birmingham School of Nursing<sup>1</sup> UW-Madison School of Nursing<sup>2</sup> University of Iowa<sup>3</sup> University of Pennsylvania<sup>4</sup>

#### ALABAMA AT BIRMINGHAM

Knowledge that will change your world

#### **Workgroup Objectives**

- 1. Evaluate the efficacy and feasibility various nonpharmacologic interventions for nursing home residents with dementia in reducing behavioral symptoms, primarily agitation
- 2. Identify relevant barriers to disseminating information regarding non-pharmacologic approaches to long-term care facilities via the Behavioral Health Toolkit





# **Identified Areas of Need**

- Practical guidance for providers that integrates both efficacy and feasibility of various non-pharmacologic interventions
- Information about what types of non-pharmacologic interventions or basic care approaches are likely to be effective for which symptoms
- Reasonable expectations regarding the **effect** of different interventions and the **duration** of those effects



# Challenges of Disseminating NPI to Nursing Home Care Providers

- Limitations of existing evidence-base for non-pharmacologic interventions
  - Methodological
  - Small to moderate effects for short durations
- Constraints of the nursing home environment
  - ✓ Assessment of feasibility
    - Training
    - Time
    - Cost
    - Personnel



# Effective Non-pharmacologic Interventions

- Systematic reviews and review of recent trials of clinicaldecision support interventions
- Non-pharmacologic interventions that were most consistently found to be effective were sensory stimulation interventions
  - Music therapy, hand massage/gentle touch, aromatherapy
  - Medical/Nursing Interventions
    - ✓ Pain treatment
    - ✓ Clinical-decision support interventions



#### **Feasibility Assessment**

 Feasibility was defined as the overall resources required to successfully implement the intervention including: staff training, staff time, the need for specialized environments or equipment, changes in regulations, and resident/family time requirements.





## Interventions with strongest evidencebase and high feasibility

- Music Therapy
- Massage/Touch Therapy
- Pain Management







### Interventions with strongest evidence-base and moderate feasibility

- Clinical Decision-Support Interventions
  - Serial Trial Intervention (STI)
  - Treatment Routes for Exploring Agitation (TREA)
- Aromatherapy





## **Approaches and Responses to Specific Behavioral Symptoms**

nursinghometoolkit.com

nursinghometoolkit | Managing Specific Behaviors

#### Apathy/Withdrawn

A person who is withdrawn or apathetic is someone who is socially withdrawn and is experiencing a loss of interest and motivation. Behaviors that reflect being withdrawn or apathetic might include sitting alone in one's room, avoiding contact with others and making limited eye contact with others.

#### Agitation

Agitation is a broad term that refers to a variety of verbal, vocal or physical behaviors that appear distressing to the person with dementia or are considered inappropriate or unusual or are disruptive to others.

Common behaviors observed in a person experiencing agitation are restlessness, complaining, repetitive statements or repetitive movements and constant requests for attention.

#### Inappropriate or Disruptive vocalizations

Ċ

Disruptive vocalizations are any verbal noises (screaming, yelling, nonsense talking, cursing) which are generally considered unusual, inappropriate or are upsetting to others.

-----

#### Aggressive behaviors

Aggressive behaviors are actions that are threatening or harmful and can be physical in nature (hitting, kicking, biting, grabbing people or things, throwing things) or verbal (screaming, cursing, making threats).

Please select ( the behaviors for details

#### Wandering

Wandering or pacing is sometimes referred to as "aimless" walking. This can also refer to restlessness or excessive moving around during the day or evening.





Knowledge that will change your world

#### **Identification of Barriers to Dissemination**

- Getting the information "out there"
  - Passive versus active diffusion
- Identifying and effectively communicating potential risks associated with interventions.
- Limited understanding of knowledge base of direct care providers regarding behavioral symptoms.
  - Direct care staff (CNAs) often perceive behaviors as "normal"


## Discussion

- Urgent need for emphasis on potential translatability of interventions into practice.
- Study designs that allow for assessment of singular impact of intervention components (i.e. social contact/music) and individualization are needed.
- Development/evaluation of implementation and dissemination methods for clinical decision-support interventions, which may make wide-scale translation of these interventions more feasible.

