Implementation of a Dementia Screening Tool (Poster)

Amanda Fougere
Lehigh Valley Health Network, Amanda_A.Fougere@lvhn.org

Lindsay Garde RN, BSN
Lehigh Valley Health Network, lindsay_m.garde@lvhn.org

Courtney Green BSN, RN
Lehigh Valley Health Network, courtcourtney_b.green@lvhn.org

IMPLEMENTATION OF DEMENTIA SCREENING TOOL

Amanda Fougere RN, BSN
Lindsay Garde RN, BSN
Courtney Green RN, BSN

Background/Significance

- **Dementia is a widespread chronic disease** that is associated with many complications.

-**Early identification and intervention improves care** of patients diagnosed with dementia.

-It has also been found that although some elderly may not have been diagnosed with dementia, **there are many who suffer enough cognitive impairment to affect their daily function**

-There are many dementia screening tools however, **there are no tools for memory impairment commonly used for nurses to perform in hospitals.**

PICO QUESTION

- **For patients aged ≥65 years of age, will the implementation of a dementia screening tool, compared with no screening tool, lead to a more individualized plan of care and better outcomes.**

- *P*: Patients admitted ≥65 years of age.
- *I* : Implementation of dementia screening tool within12 hours of admission.
- *C*: No screening vs. screening tool
- *O*: Individualized plan of care based on dementia screening tool score/outcome.

TRIGGER?

- Knowledge v. Problem
  - Knowledge Focused Trigger:
    - It has been found that dementia is "under-recognized and under-diagnosed" in our communities.
    - There are many dementia screening tools, but no current tools for nurses to perform in hospitals to determine a memory impairment.
    - As the elderly population increases, this will becomes an increasingly aspect of care that needs to be addressed.

EVIDENCE

- Search Engines Used:
  - CINAHL, EBSCOHost, PubMed
- Key Words Used:
  - dementia, cognitive impairment, screening

EVIDENCE

Mini-Mental State Examination (MMSE)	-The MMSE uses five cognitive domains to determine impairment: orientation, registration, recall, language, and attention and calculation -This test has high sensitivity and specificity with determining different levels of dementia - Scores vary with age and education level. -**Costs about $7 per person** -T*akes about 5-12 minutes to administer*.
Mini-Cog	- The Mini-Cog uses recall and clock drawing test to screen for dementia. - No training is needed to perform the test - Takes 2-4 minutes long. - Mini-Cog is also cheaper to use than the MMSE. - *Interpretation can be subjective and lengthy with this test*.
Eight-item Interview to Differentiate Aging and Dementia (AD8):	- The AD8 tests for memory, orientation, judgment and function by asking a total of 8 questions to the patient or family and friends. A score 2 or greater is positive for memory impairment -Takes about 3 minutes to complete - *Has been validated with non-English speakers and low education levels.* -*No training is required.* -*Detects change from previous function.*

The AD8

Remember, "Yes, a change" indicates that you think there has been a change in the last several years cause by cognitive (thinking and memory) problems	YES, A change	NO, No change	N/A, Don't know
Problems with judgment (e.g. falls for scams, bad financial decisions, buys gifts inappropriate for recipients)			
Reduced interest in hobbies/activities			
Repeats questions, stories or statements			
Trouble learning how to use a tool, appliance or gadget (e.g. VCR, computer, microwave, remote control)			
Forgets correct month or year			
Difficulty handling complicated financial affairs (e.g. balancing checkbook, income taxes, paying bills)			
Difficulty remembering appointments			
Consistent problems with thinking and/or memory			
TOTAL AD8 SCORE			

Galvin JE et al, Neurology, 2005

Current Practice at LVHN

- There is currently no baseline data or tools being implemented to screen patients at risk for dementia/cognitive deficits at LVHN.

Design/Process

- We looked at many different memory screenings including the Mini-Mental Status Exam, Mini-Cog and AD8. The AD8 was one that took the least amount of time and was most appropriate for nurses to perform in an acute care setting.

- Our question was then, how well does the AD8 work in an acute care setting?

- We Implemented AD8 on 27 patients with their families

RESULTS

- Patients and family were receptive to screening.
- We scored more positive results when questions were asked to family versus only the patient.
- On average, screening took between 2 and 4 minutes to administer.

Next Steps/Implementation: Care plan and Dissemination

- Perform AD8 with patients
- Apply care plan, we created based on clinical practice guideline from EPIC, on patients who test positive for memory impairment
- Alert primary care physicians of memory deficit through discharge instructions

Care plan

- <u>Cognitive Impairment Care Plan</u>
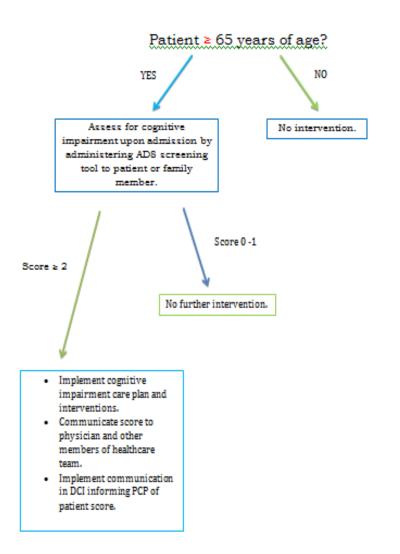- Implement for a score of 2 or greater on AD8 assessment tool.

- <u>Purpose:</u>
- Minimize cognitive and functional impairment as demonstrated by the patient.
- Keep patient free from injury or harm, while maximizing independence within the limits required to keep patient safe.

- <u>Interventions:</u>
- - Prevent/manage modifiable contributing factors (e.g., pain, anxiety, hypoxia, fluid/electrolyte imbalances, sleep disturbances, medications, sensory impairments, immobility, environmental disruptions).
- - Evaluate and inquire about patient involvement in ADLs.
- - Encourage family presence and involvement in patient care.
- - Provide orientation cues (e.g., identify self at each encounter, address person by name at each meeting, frequent orientation to person/place/purpose of admission.)
- - Attempt to establish a routine, as well as continuity of staff members, and communicate this to other members of the healthcare team.
- - Organize environment so as to maximize safety for patient [e.g., call bell and needs in reach, room free of clutter, adequate lighting, orientation cues (clock, window, dry erase board).]
- - Encourage family to bring in items from home so as to provide familiar environment to reduce anxiety and confusion.
- - Use simple, concise instructions when directing patient to avoid frustration and confusion.
- - Implement safety precautions (e.g., fall precautions, elopement precautions, infection prevention).
- - Support family/significant others (e.g., ensure good communication, explain patient's behavior, keep them informed, encourage verbalization of feelings, acknowledge fears, assess caregiver strain and coping/resources, refer for counseling, assist in finding resources).

Strategic Dissemination of Results

Cognitive Impairment Dissemination Tree

Patient ≥ 65 years of age?

YES → Assess for cognitive impairment upon admission by administering ADS screening tool to patient or family member.

NO → No intervention.

Score ≥ 2

Score 0 -1 → No further intervention.

- Implement cognitive impairment care plan and interventions.
- Communicate score to physician and other members of healthcare team.
- Implement communication in DCI informing PCP of patient score.

Indicators, Process and Outcomes

- **Indicators**: How long does it take for the AD8 to be performed on patient in an acute care setting?

- **Process**: Perform the AD8 on patients greater than or equal to 65 years of age one time during admission and time how long it will take to do the test.

- **Outcomes**: After asking 27 patients and their family the AD8 questions, the AD8 took an average 2-4 minutes to perform.

Practice Change/Implications for LVHN

- Educate nurses on AD8 and promote use of care plan

- Make changes in discharge instructions to allow space to put positive results of the AD8 to inform primary care physicians

Lessons Learned

- Process of how to do an evidence base practice project
- The importance of screening for memory impairment in the elderly and ensuring they receive the best care

References

Soo Borson, et. Al.The Mini-Cog: A Cognitive "Vital Signs" Measure for Dementia Screening in Multi-Lingual Elderly. International Journal of Geriatric Psychiatry. 2000.

Borson, Soo, et. Al. The Mini-Cog as a Screen for Dementia: Validation in a Population-Based Sample. American Geriatrics Society. 2003

McCarten, John Riley, et al. Finding Dementia in Primary Care: The Results of a Clinical Demonstration Project. The American Geriatrics Society. 2012.

Scanlan, James. The Mini-Cog: Receiver Operating Characteristics with Expert and Naïve Raters. International Journal of Geriatric Psychiatry. 2001.

James E. Galvin. The AD8: The Washington University Dementia Screening Test. Best Practices in Nursing Care to Older Adults with Dementia. 2013.

James E. Galvin. Validity and Reliability of the AD8 informant interview in dementia. Neurology. 2006.

Lisa Koski. French-English Cross-Linguistic Comparison and Diagnostic Impact of the AD-8 Dementia Screening Questionnaire in a Geriatric Assessment Clinic. Dementia and Geriatric Cognitive Disorders. 2010.

Uta Schramm et al.Psychometric properties of Clock Drawing Test and MMSE or Short Performance Test (SKT) in dementia screening in a memory clinic population.International Journal of Geriatric Psychiatry 2002

Jennifer R. Harvan et al. An evaluation of dementia screening in the primary care setting. Journal of the American Academy of Nurse Practitioners 2006.

Marcia Scazufa et al. Limitations of the Mini-Mental State Examination for screening dementia in a community with low socioeconomic status.

European Archives of Psychiatry and Clinical Neurosciences 2006

Lori L Jervis, Ph.D et al. Performance on the Mini-Mental State Examination and Mattis Dementia Rating Scale among older American Indians. The Journal of Neuropsychiatry and Clinical Neurosciences 2007

Solomon R. Paul, Pendlebury W. William. *Recognition of Alzheimer's Disease: the 7 Minute Screen*. (Fam Med 1990; 30 (4) 256-71.)

Tools for Early Identification, Assessment and treatment for people with Alzheimer's Disease and Dementia -A publication of the Chronic Care Networks for Alzheimer's Disease initiative

Skjerve, Nordhus et al. *Seven Minute screen performance in a normal elderly sample*. International Journal of Geriatric Psychiatry, December 7, 2006

Buschke, Kuslanky et al. *Screening for dementia with the Memory Impairment Screen*. Neurology January 15, 1999.

- CPM CarePoints™ Inpatient, Clinical Practice Guideline: CONFUSION, CHRONIC. *https://intranet.lvh.com/interpostexpress/servlet/,DanaInfo=mail2.lvh.com,SSL+PTReadAttachmentServlet?sUid=1402519042378&AttachKey=0000000007a1f58f40a63ae40873a690000003c20400003fff0000000200000075000000000000000000000000000000&sFileName=Chronic_Confusion_Fall2013.pdf&sAttachType=0*

- Lewis, S., Dirksen, S., Heitkemper, M., Bucher, L., & Camera, I. (2011). *Clinical companion to Medical-surgical nursing: assessment and management of clinical problems* (8th ed.). St. Louis, Mo.: Elsevier/Mosby.

Make It Happen

- Questions/Comments?

Cedar Crest

17th Street

Muhlenberg

Health Centers