



## RESEARCH ARTICLE

### DEMENTIA CARE OF INPATIENT UNITS

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#### ABSTRACT

**Introduction:** The purpose of this paper is to review an evidence based tool and intervention strategies to make sure patients with dementia receive effective nursing care in the medical setting. Currently in the medical setting dementia is under diagnosed and geriatric patients are not receiving evidence based interventions.

**Methods:** In this paper an evidence-based educational program based on the Progressively Lowered Stress Threshold model, and an evidence-based toolkit for the medical units staff compared to current practice affect knowledge of nurses about effective assessment and intervention strategies for working with patients with dementia.

**Results:** This article shows that a proactive approaching to assessing for dementia during admission could prevent or help nurses in better dealing with behavioral outbursts commonly seen in dementia patients.

**Discussion:** Training on tools for assessing dementia and implementation of interventions for behavioral outbursts is key.

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## INTRODUCTION

"One in nine persons aged 65 years and older and 32% of persons over 85 years are estimated to have Alzheimer's disease. By 2050 the number of persons with Alzheimer's disease in the United States is predicted to be 13.8 million" (Malmstrom, Voss, Cruz-Oliver, Cummings-Vaughn, Tumosa, Grossberg, and Morley, 2015, P 741). Currently there is no single test being used by all health care professionals to assess for dementia. Most patients are diagnosed late with dementia after behavioral disturbances are exhibited. In the inpatient setting patients with behavioral disturbances are usually ignored, or are given a chemical or physical restraints that lead to increased agitation. Through the use of an evidence-based assessment tool dementia could be recognized earlier and be treated with a proactive approach. Stressors will be detected sooner and can be removed or minimized to avoid triggering the disruptive behavior. Annually dementia patients have a fall incidence rate of 70-80%, with hip fractures being up to 3x more common in people with dementia (Close, 2012). Common triggers that cause disruptive behavior in elderly patients with dementia include fatigue; changes (routine, environment, or caregiver); demands that exceed the patient's capability; multiple stimuli; loss of control or love ones; and physical stressors (pain, medications). By the nurse assessing for these triggers on admission could help reduce or prevent

behavior outburst or injuries (patient, health care workers). Achieving this goal is anticipated to reduce inpatient stay durations, promote safe and accurate patient outcomes, prevent injuries, and prevent falls. Additionally, cost (\$22,500 per capita) for dementia care compared to (\$12,500 per capita) for patients without dementia. Implementing this initiative will save the hospital \$10,000 per individual patient by decreasing the patients LOS alone. Initiation of assessing each individual for stressor and eliminating those stressors right away to reduce hospital length of stay and injury will be implemented in fall of 2016 (Lyketsos, Sheppard, and Rabins, 2000). The purpose of this paper is to present a review on evidence-based assessment tool and intervention strategies to ensure patients with dementia receive effective nursing care in the medical setting. This paper will address the process of educating nurses about providing effective care for geriatric patients with dementia in order to bring better patient outcomes. In registered nurses caring for patients with dementia on medical inpatient units, how does an evidence-based educational program based on the Progressively Lowered Stress Threshold model, and an evidence-based toolkit for the medical units staff compared to current practice affect knowledge of nurses about effective assessment and intervention strategies for working with patients with dementia within three months.

## MATERIALS AND METHODS

Stanford Valley Care is 200 bed, acute, community hospital that needs improvement in treating geriatric patients with

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dementia. Currently, geriatric patients with dementia are staying longer in the hospital due to disruptive behavior causing the need for either a sitter, physical or chemical restraint. This type of behavior has led to nurse burnout, patients complaining of excess noise, and extra resources from the hospital. Stanford Valley Care does not have a protocol on how to deal with patients with dementia. Patients are coming in with aggressive behavior that no one is prepared for, and don't know how to manage, and while dealing with a lack of psychiatric resources. Hospital staff are getting assaulted and it's hard to find placement for a patient with recent assaultive behavior. Staff education on how to identify dementia on admission with early detection of triggers could help reduce injuries to patient and staff, decrease the patient's length of stay, ultimately saving the hospital money.

The dementia assessment tool will be implemented at Stanford Valley Care Hospital on the 3 west Medical Surgical floor first as a pilot program. A meeting will be held with the Medical Surgical nurse manager and Chief Nursing Officer (CNO). Before implementing the dementia assessment a meeting will be held with the nurse managers, CNO, Chief Medical Directors (CMDs), and the CEO to explain the pilot program, the goals and objectives of the dementia assessment, and the plan for project evaluation. Once approved a copy of the dementia assessment will be available for nursing staff on 3 west to assess (see Appendix A for dementia assessment tool). A questionnaire will then be given regarding the dementia assessment. After feedback is given and dementia assessment is seen by all staff on floor, the pilot program will be initiated. During the evaluation period the use of physical and chemical restraints, injuries, and hospital LOS will be monitored as well as the use of the initial dementia assessment. The dementia assessment will be part of the hospital admission questions making it easier to monitor. At the end of the pilot period another questionnaire will be given to staff to assess their experience with the dementia assessment to see if it was effective and how it affected patient behavior.

#### **Timeline and schedule for implementation**

**January 8-18, 2017:** Finalize dementia assessment and presentation of pilot program.

**January 20-24, 2017:** Present dementia assessment to management for approval.

**February 5-8, 2017:** Meet with nurse managers, CNO, Chief Medical Directors (CMDs), and the CEO to discuss pilot program plan and timeline.

**March 2, 2017:** Give a copy of dementia assessment to medical surgical nurses on 3 west and questionnaires.

**April 2-15, 2017:** Conduct project evaluation and data analysis.

**April 19, 2017:** Present data findings and evaluation of project to upper management and CMDs.

**April 26-28, 2017:** Meet with medical surgical nurses on 3 west regarding dementia assessment.

**May 1, 2017:** Implementation of the final dementia assessment into the hospital admission questions.

#### **Description of program leader and resources needed**

Development and implementation of the dementia assessment requires multidisciplinary collaboration, including the following:

- **Sponsor:** Jennifer Rillston, Nurse Manager

- **Lead:** Amber A, Pilot Project Manager
- **Volunteer**
- **Team:** Medical Surgical nurses, CNO, CMDs.

The Progressively Lowered Stress Threshold (PLST) model focuses on six main stressors (fatigue, changes in routine, demands, multiple and competing stimuli, affective response to perceptions of loss, and physical stressors), and how assessing for these stressors ahead of time could prevent a behavior change. Rose McCloskey (2004) showed that with early implementation of the PLST model, nurses were able to assess patients for stressors and help reduce those stressors which led to a decrease in problematic behaviors (e.g., behavioral outbursts). Reducing behavioral outbursts reduces the stress of both the patient and the nurse, which leads to the belief in the importance of dementia knowledge. Nurses need to be more aware of behavioral disturbances caused by patients with dementia in order to deliver care appropriately to this type of patient. The PLST model better helps the nurse understand the needs of the patient, and in return the nurse will deliver the highest quality of care (McCloskey, 2004).

## **RESULTS**

The post pilot program is expected to reduce expenses by approximately \$18,172 by reducing costs from falls, injuries, and a sitter. The typical cost for a hospital stay for a patient without dementia is \$12,500 (5 LOS). Cost of hospital stay for dementia patient is approximately \$22,500 (9 LOS). With success and continual use of the dementia assessment the dementia patients LOS could possibly decrease to 5 days instead of 9 days, totaling an additional savings of \$10,000. Return of investment (ROI) from full implementation of the dementia assessment would have a revenue of \$18,172 exceeding the cost of \$9,700 to implement the dementia assessment. Since the revenue from implementation of the dementia assessment exceeds the cost, the pilot program is already profitable at initiation (see Appendix B for budget plan).

## **DISCUSSION**

Results show a proactive approach of early assessment of psychiatric disorders such as dementia could prevent or help nurses in better dealing with behavioral changes as seen with dementia patients. With early detection, the nursing staff could better deal with the patient by decreasing stressors that may provoke this behavior in the least restrictive way. The results of this paper align with those of McCloskey (2004) and how the PLST is effective at finding the cause of behavioral outbursts in patients with dementia and how to manage those behaviors. Through managing the behavior of patients with dementia right away will reduce stress in patients and nurses, increasing better patient outcomes. Through training on how to use tools for assessing dementia and implementation of effective interventions for problematic behaviors, the nurse could ensure the patient receives the psychiatric help they may need. This would include dementia questionnaires on admission that would assess for cognition and behavior. Once the patient matches the qualifications of dementia, the nurse will put the information in the care plan and includes evidence-based interventions to prevent and intervene with problematic behaviors. Meanwhile the nurse will assess for stressors and help prevent/reduce those stressors to minimize behavioral

changes. This process will be in the hospital procedures and policies book, available for reference at anytime. Through following this procedure, the nurse and patient should have less stress and better outcomes.

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**Appendix A: Dementia assessment**

Part 1 Questions	Correct	Incorrect
Tell the patient three words to remember and recall after assessment.		
Can you tell me something that happened in the news recently? (war, weather, etc)		
What is the date?		
Part 2 Questions	Yes	No
Does the patient have more trouble remembering things that have happened recently?		
Does he/she have trouble recalling conversations a few days later?		
Is the patient able to management medication independently?		
Part 3	Stressors/triggers	Interventions
What makes you mad ?		
Part 4 Continuation throughout hospital stay. Assess mood each shift	Stressors, triggers	Interventions/effective?
Alternatives to restraints: <ul style="list-style-type: none"> <li>• Electron devices (bed check, seat alarms)</li> <li>• Change in medication regimen if applicable</li> <li>• Placement of patient’s room (near nurse’s station)</li> <li>• Familiarize surroundings</li> <li>• Positioning</li> <li>• Exercise regimen (PT/OT)</li> <li>• Routine toileting</li> <li>• Reduction hazards/fall prevention</li> <li>• Distraction activities</li> </ul>		

**Appendix B: Budget**

Costs		Savings	
Supplies: (paper, printing)	\$2,000	Falls	\$35,000 (20% of cases)= \$7,000
1 Volunteer (Opportunity cost)	\$0.00	Hip Surgery	\$30,124 (20% of case)= \$6,024
RN	\$70/hr x 5 hrs/day x6 days = \$2,100	Sitter (CNA)	\$15 hr x24 hrs=\$360 x 9 days = \$3,240 (20% of case)= \$648
Training Costs	4 hrs training for each employee (20 employees) x \$70 hr/day x4= \$280=\$5,600	Length of Stay (LOS)	\$22,500 (Average LOS 9 days) (20% of case)= \$4,500
Total	\$9,700	Total	\$18,172

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