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Mental Health Screening in Nursing Homes

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Mental Health in Nursing Homes

Depression and dementia are two of the most common mental health conditions in nursing homes. These disorders can easily be overlooked given the complexity of care required for many nursing home residents.

- "**Depression** is the main contributor to the growing burden of mental illness in nursing-home residents; it is associated with increased mortality, and use of healthcare services."[7] And 37%-45% of cases of depression in nursing homes goes unrecognized by staff.[10]
- "A very large number and proportion of nursing home residents have **dementia**, although many of them do not have a diagnosis of dementia in their medical records. Compared with nondemented nursing home residents, residents with dementia are, on average, older, more functionally impaired, and more likely to have depressive, psychotic, and behavioral symptoms."[11]

Pines Rehabilitation and Health cares for a long-term population with significantly more depressive symptoms, with more increasing need for help with daily activities, and that takes more antipsychotic medication than the national or Vermont averages.[8]

Proper screening and treatment of depression and dementia can improve quality of life and health of these residents and can decrease their healthcare costs. Given the challenges and complexity of caring for nursing home residents, these screenings need to be succinct and accurate.

Public health cost and unique cost considerations in host community

Nursing home residents with depression have "greater functional impairment, use 7% additional staff time, and are 1.5 times more likely to die within 12 months of admission. Older adults with depression also incur more outpatient visits, medication costs, and laboratory charges."[12]

Vermont ranks 12th in highest costs for long-term care in the country.[1] Specifically at the Pines Rehabilitation and Health, the total number of licensed nurse staff hours per resident per day is only just over 1 hour vs the Vermont and national average of 1 hour and 40 minutes.[8]

Dementia also increases health care costs. One study demonstrated that dementia alone had a hazard ratio of 1.32 regarding risk of rehospitalization for CHF, pneumonia or MI. Comorbid dementia and depression had an odds ratio of 1.58 for rehospitalization.[4]

This poses a unique risk to the community hospital near the Pines, the Northeastern Vermont Regional Hospital (NVRH), which has a yearly average of 63 patients admitted with mental illness vs the state average of 43 patients. NVRH also has a yearly average of 53 patients admitted for depression vs the state average of 42.[5]

Early detection and intervention are both key to reducing the costs. Interventions, like the Dementia Demonstration Project, can help reduce urgent and emergency visits by 25-30% and unscheduled hospital admissions by 50%.[3]

Screening is the first step in the process of identifying and treating nursing home residents in order to improve health and decrease costs.

Community perspective on issue and support for project

Cynthia Farnsworth – *Eldercare and Adult Outpatient Clinician at Northeast Kingdom Human Services, St. Johnsbury, VT*

"Primary care offices in the area are doing well with screening for depression, and Behavioral Health Specialists are being added to the offices. However, nursing homes are not doing as well."

"17-37% of nursing home residents have clinical depression, but I think its higher than that. We don't see what we don't look for. Think about leaving home after living there with your spouse for decades, you can't see or hear well, living with people who don't want to be there. Add frailty and the fact that most people who know have died. How would we deal with that?"

"If we don't screen, we miss it. If we don't look for it, we don't find it. Many providers are not adequately trained and don't know what to do with the information [regarding depression] once they have it."

Community perspective on issue and support for project

Diana LaFountain, RN, DSN – *Nursing Director at Pines Rehabilitation and Health, Lyndonville, VT*

“About 70% of our residents likely have dementia,” and though there is a dedicated dementia unit, not all patients with the diagnosis can be placed there. This makes it important to identify patients with cognitive impairments because "if they are out on the other wings, they start to wander, disrupting other residents. They're anxious and they don't know what they're looking for.” The staff can help calm and redirect residents, and “believe me, these girls can take a hit, literally.”

The biggest challenge for nursing homes regarding these patients is continuity of care. “It’s difficult when three different people are looking at you naked three times a day or more.” And not only is this hard on patients, information can easily be lost between these transitions. Standardizing screenings makes helps improve communication.

Intervention and Methodology

Potential residents to be screened were identified by their primary care provider (PCP), Joyce Dobbertin, MD, DC. Residents verbally agreed to the screening with the understanding that the information would be reported to their PCP and the results would be generally reported here.

Each resident was administered a WHO-5 depression screening and a Mini-Mental Status Exam. At a cut-off of ≤ 12/25, the WHO-5 has a sensitivity of 0.92, a specificity of 0.79, and is quick to administer with only 5 questions.[2] The MMSE with a cut-off of ≤ 24/30 has a sensitivity of 0.97 and a specificity 0.59.[9]

After the initial screening, the screener wrote up assessments, and each patient was visited by the screener and the PCP to review the findings and discuss interventions. Medical records of all involved residents were updated by the PCP with diagnoses and treatment interventions.

Qualitative Results of Screenings and Chart Reviews

Patient	MMSE	Dx dementia	WHO-5	Dx depression	Rx depression	Intervention
Patient 1	**24/30**	✓	17	*missing*	✓	
Patient 2	**7/30**	✓	23	*missing*	✓	
Patient 3	**8/30**	✓	**10**	*missing*		✓
Patient 4	23/27	*missing*	**7**	✓	✓	
Patient 5	25/30		14			
Patient 6	**20/30**	✓	14	*missing*	✓	✓
Patient 7	**16/30**	*missing*	**3**	✓		✓
Patient 8	**24/30**	*missing*	17	✓		
Patient 9	28/30		**7**	✓		✓
Patient 10	**17/30**	*missing*	**10**	*missing*		
Patient 11	25/28		23	*missing*	✓	
Patient 12	24/28		14	✓		
Number significant	**7**	**4 missing**	**5**	**6 missing**	**5**	**4**

"Dx dementia/depression" indicates if the diagnosis was already in the patient chart or if it was missing based on screenings and/or current prescriptions
"Rx depression" indicates if patient was on an antidepressant medication prior to screening
"Intervention" indicates if screenings and discussions with residents resulted in changes to or additional orders

Qualitative Results

Residents commented on how much they enjoyed interacting with the screener. For the sentence writing question of the MMSE, one resident wrote, “Today has become interesting! Something different is always good for our minds!”

Residents also seemed pleased to have their results shared with them in front of their PCP and to have the opportunity to discuss potential changes to their health care.

Even if no chart orders were written, the identification of residents with dementia will improve care given, including possibly moving residents to the dementia ward of the nursing home.

Reviewing the screening results with patients gave the PCP a change to address mental health with residents and increased face-to-face time, which residents ask for on a regular basis. These interactions strengthen doctor-patient relationships and improve physician understanding of the patient’s overall well-being.

Evaluation of Success

EFFECTIVENESS

Increased communication between residents and PCP regarding mental health.

Updated charts of 75% of participants.

Resulted in significant mental health interventions for 33% of participants.

To evaluate effectiveness over time, it would be useful to follow patients over time to see if their depression lessened and/or their quality of life improved.

LIMITATIONS

Lack of longitudinal view of residents' mental health

- Subsequent visits resulted in rescreening for 2 participants because of changes observed clinically.

Small number of residents screened.

MMSE was not appropriate for residents with physical disabilities.

- Changes were made to total score of MMSE based on resident ability, but validity of screening likely suffered

Recommendations for Future Projects

Routine Screenings

The prevalence of depression and dementia warrants screening for all nursing home residents. Given the ease and accuracy of these screening, they could be integrated into the intake process and could be part of a yearly health maintenance plan. This would also allow for changes to be tracked over time and would serve as a way to double check the accuracy of health records.

Assessing Areas of Cognitive Difficulty

The MMSE and other cognitive screening tests differentiate the areas of cognitive deficits. Future student project could focus on performing more in-depth analysis of residents strengths and weaknesses resulting in better advanced care planning and patient well-being.

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