

Implementation of Cognitive Stimulation Therapy in Long Term Care

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Abstract

Problem and Purpose

Individuals with dementia are often treated with psychotropic medications despite harmful side effects. Cognitive Stimulation Therapy (CST) has been shown to improve cognitive functioning and quality of life (QOL) in individuals with dementia and reduce adverse behaviors. The aim of this quality improvement (QI) project was to implement a CST program in a long term care facility for residents with dementia to decrease the number of adverse behaviors, reduce the use of psychotropic medications and improve cognition and quality of life.

Methods

This quality improvement project was implemented in a 200 bed long term care facility in Baltimore City. Nine residents were selected to participate in a sevenweek CST program. A DNP student performed the CST sessions twice a week for 45 minutes. Content was based on activities outlined in the CST program manual, with a different theme for each session that incorporated cognitive stimulation, reality orientation, reminiscence therapy, and validation therapy. Outcome measures included the St. Louis University Mental Status (SLUMS) Exam and the Quality of Life in Alzheimer's Disease (QOL-AD) Scale. Assessments were completed pre- and post-implementation. Psychotropic medication use and the frequency of adverse behaviors were monitored through chart audits performed bi-weekly.

Results

Eight residents completed the full seven-week CST program. All participants attended at least half of the sessions. There was an overall average increase in SLUMS scores of 19% with a mean pre-implementation score of 16.75 and mean post implementation score of 20. QOL scores improved an overall average of 12% for six of the eight participants, and an average decrease of

20% for two participants. Deficiencies existed which prohibited the ability to accurately evaluate behavioral charting completed by the staff. There was no change in the use of psychotropic medications for residents enrolled in CST. An important secondary outcome was the observation of increased sustained socialization of residents when not participating in CST.

Conclusion

CST improves cognitive functioning and may be correlated with the improving QOL of some residents. Additional research is needed to further investigate the effect CST has on increasing or sustaining socialization for long term care residents.

Introduction

Individuals with Alzheimer's and related dementias may exhibit behaviors as a consequence of the disease process such as agitation, wandering, hallucinations, and aggression (Richter et al., 2012; Kales et al., 2017). Geriatric guidelines emphasize the importance of non-pharmacological interventions as first line therapy, but treatment with the use of psychotropic medications continues to be widespread, particularly in long term care settings (Kales et al., 2017). Increased mortality rates, higher risk of falls and fracture, metabolic abnormalities, and enhanced cognitive deterioration are some of the major side effects experienced by older adults when taking these medications (Kales et al., 2017). Prescribing practices of psychotropic medications in long term care may range from up to 50 to 80 percent of residents (Cestac et al., 2013). This was evident in a 200-bed long term care facility in Baltimore, where 40 percent of residents were prescribed at least one psychotropic medication. This facility has a gradual dose reduction program to recognize opportunities for medication reduction, but does not utilize any non-pharmacological programs to reduce use. The need for practice change was addressed through the implementation of a Cognitive Stimulation Therapy (CST) program, which involved facilitation twice a week for 45 minutes for a select number of residents that met inclusion criteria and were interested in participating.

Literature Review

The need for CST as a non-pharmacological intervention to improve QOL, maintain or improve cognitive functioning, and reduce adverse behaviors was the focus of this literature review. Five studies were analyzed to review the effectiveness of CST on these domains, to identify key structural components, and to determine the most accurate evaluation methods. The

Johns Hopkins Evidence Level and Quality Guide (2017) was utilized to rate the evidence, which can be viewed in Appendix A.

The first outcome measure evaluated was QOL, for which there were varying results. Both systematic reviews that analyzed cognitive intervention programs, CST being included, reported that improvements in QOL were consistently demonstrated after implementation (Aguirre et al., 2012; Folkerts et al., 2017). The only experimental study included also found that CST improved QOL, additionally indicating that this was independent of the use of acetylcholinesterase inhibitor (AChEI) medication (Aguirre et al. 2012). The final two, a literature review and a descriptive study, did not recognize improvements in QOL, but both noted a decrease in the rates of depression (Stewart et al, 2017; Cammisuli et al., 2016). A limitation of these results is the inability to determine if the structural components of the program lead to change, or if increasing social interactions results in positive outcomes (Folkerts et al., 2017). In addition, multiple interventions are utilized in cognitive therapy, such as reality orientation, reminiscence therapy, and cognitive training, rehabilitation, or stimulation (Folkerts et al., 2017). Future research is required to determine which yields the greatest benefits (Folkerts et al., 2017).

The impact on cognitive functioning was a second outcome measure evaluated. All of the studies noted improvements in this domain, with some studies citing a long term benefit that lasted over three months after cessation of the program (Folkerts et al., 2017). Similarly to QOL, improvements in cognitive functioning were demonstrated independent of AChEI use, although some studies suggested concomitant pharmacological interventions produced the best results (Aguirre et al., 2012). A weakness noted is the lack of evidence indicating how the effects on cognition generalize to improvements in everyday life activities (Reijnders et al., 2013). CST has

not been found to have a significant impact on activities of daily living, however, this is not consistently analyzed in the literature (Folkerts et al., 2017; Aguirre et al., 2012).

The effect of CST on behavioral symptoms of dementia is not consistently measured in the literature as this was not one of the primary intentions when the program was developed. Despite this, it has been included in more recent literature and found to be impacted more significantly when a weekly exercise component is included (Morley, 2012). The incorporation of physical activity, occupational therapy, or music have been noted as the most successful interventions in reducing frequency of behaviors (Folkerts et al., 2017). Aguirre et al. (2012) found no relation between cognitive stimulation and challenging behaviors.

CST is designed for individuals with varying levels of cognitive impairment and has demonstrated benefits in both the community and nursing home settings (Folkerts et al., 2017; Stewart et al., 2017). A CST manual details program activities and components, supporting the fidelity of results despite geographical location or setting (Spector et al., 2010). Small sample sizes due to the structure of the program have been a main criticism, as no more than six to eight participants are recommended (Cammisuli et al., 2016; Folkerts et al., 2017). This is noted to be necessary to promote the development of relationships and inclusion (Spector et al., 2010).

Methods of evaluation varied across the literature. Cognitive functioning was measured using the mini mental status exam, the Alzheimer's disease Assessment Scale-Cognitive Subscale, and the St. Louis University Mental Status examination (Cammisuli et al., 2016; Folkerts et al., 2017). QOL was measured using the Quality of Life-Alzheimer's Disease assessment tool, with a few studies choosing the Quality of Life in Dementia tool or Life Satisfaction Index (Cammisuli et al., 2016; Folkerts et al., 2017). Behaviors were measured using the Neuropsychiatric Inventory Scale and the Problem Behavior Rating Scale (Cammisuli et al.,

2016; Folkerts et al., 2017). The literature did not identify efficacy for one evaluation tool over another, but inconsistency in measurement makes comparison of the results more challenging.

Theoretical Framework

Lewin's Change Theory was utilized to guide the development and implementation of a CST program in a long-term care facility. This theory describes the successful execution of change as involving three stages; unfreezing, moving, and refreezing (Ziegler, 2005). In addition, this theory highlights the need to perform an analysis of the driving and restraining forces prior to implementation in order to target appropriate underlying issues (Ziegler, 2005). The driving force of psychotropic medication use was recognized as the desire to diminish adverse behaviors. The major restraining forces included a lack of knowledge of alternative interventions and harm of psychotropic medications, as well as a lack of resources to implement other interventions.

In the unfreezing stage, discussing the number of psychotropics used, highlighting previous deficiencies received related to their misuse, and recognizing the lack of non-pharmacological interventions, were used to ignite support for change. The moving stage involved educating staff about CST and behavioral charting, and involving staff in identifying barriers to charting as well as resident attendance. This stage was aimed at redefining the attitudes, beliefs, and values of staff toward the proposed change of implementing a CST program and reducing psychotropic use. Finally, refreezing entailed the successful functioning of the CST program and demonstration of positive resident outcomes. This was accomplished by engaging multiple members of the management team, staff nurses, nursing aides, and sharing the results.

Methods

This quality improvement (QI) project was implemented in a 200 bed long term care facility in Baltimore City. Nine residents with mild to moderate dementia were selected to participate in a seven-week CST program. Inclusion criteria for participation in this CST program included mild to moderate dementia, the ability to engage in meaningful conversation, the ability to hear well enough to participate in small group discussion, vision adequate enough to see most pictures, and being able to tolerate a group setting for 45 minutes. For the purposes of this QI project, participants also needed to be taking a minimum of one psychotropic medication. Mild to moderate dementia was determined by the use of the St. Louis University Mental Status (SLUMS) Exam, evidenced by a score between 10 and 26.

The DNP student performed the CST sessions twice a week for 45 minutes. Content was based on activities outlined in the CST program manual, with each session incorporating cognitive stimulation, reality orientation, reminiscence therapy, and validation therapy. Education regarding psychotropic medication use and behavioral charting was conducted for the staff during morning huddles. The aim of this component was to improve staff charting practices and capture episodes of adverse behaviors more accurately. Quizzes were completed verbally as a group at the end of each session, and rewards were used to award staff for participation.

Outcome measures included the St. Louis University Mental Status (SLUMS) Exam and the Quality of Life in Alzheimer's Disease (QOL-AD) Scale. Assessments were completed pre-implementation and post-implementation, within one week of the program beginning and ending. Psychotropic medication use and the frequency of adverse behaviors were monitored through chart audits performed bi-weekly and compared to pre-implementation values, as well as an initial review to calculate a mean for the number of behaviors and antipsychotics administered during the month prior to program implementation. Behavioral charting was reviewed bi-weekly

in order to assess staff compliance and competence. Only those residents enrolled in the program received chart reviews, which included paper and electronic health record documentation.

Once data collection was complete, data was analyzed by calculating means and percentages. The pre and post QOL and cognitive functioning scores were compared to determine what percentage of an increase or decrease in scores had occurred, or if the resident's baseline had been maintained. A mean was calculated for the number of psychotropic medications administered for each resident during the month prior to program implementation, and for the two weeks post program implementation. These averages were compared to calculate what percentage of change the program influenced. Barriers to collecting data regarding behavioral charting resulted in a lack of findings for this area.

Results

The purpose of implementing a CST program was to positively impact the QOL, cognitive functioning, frequency of adverse behaviors, and psychotropic medication use of residents with mild to moderate dementia. The findings reflect achievement in both QOL and cognitive functioning scores, but did not note any significant differences in frequency of behaviors or use of psychotropic medications. Of the eight residents who participated in the CST program, there was an overall average increase in SLUMS scores of 19% with a mean pre-implementation score of 16.75 and mean post implementation score of 20. QOL scores improved an overall average of 12% for six of the eight participants, and an average decrease of 20% for two participants. One resident had a reduction in QOL of 28%. Deficiencies existed which prohibited the ability to accurately evaluate behavioral charting completed by the staff which primarily included inconsistencies and gaps in documentation. There was no change in the use of psychotropic medications for residents enrolled in CST.

Several changes were made to the structures and processes initially proposed for this project. The timeline for the educational sessions and the number of CST sessions held were components that changed. Limitations in the facilitator's schedule, restrictions in the resource of time, and challenges in gaining access to electronic records for behavioral charting resulted in altering the original timeline for educational sessions. Chart audits started three weeks later than expected, delaying the start of the educational sessions, and requiring content to be condensed in order to comply with the seven-week implementation period. In addition, the number of units being targeted was reduced from four to two, and only day shift staff was included in the educational sessions rather than the previously proposed day and evening staff.

Challenges encountered which influenced CST implementation included a reduction in attendance, changes to program components, a delay in the implementation of the program, and a lack of a co-facilitator. Due to the scheduling of other activity programs, not all residents were able to attend two sessions per week but attended at least one. The implementation of the program was delayed due to challenges related to coordination with the Activity Coordinator which led to difficulty in organizing program components for implementation. A co-facilitator was assigned to the program but only participated during the first week of implementation and was then required to assist with other activities. This led to challenges with managing all of the residents during sessions and transporting them to and from the program. In addition, it contributed to time constraints and resulted in the inability to include a physical therapy component during each session. Physical therapy is not a program component detailed in the manual, but more recent research has supported this as a means of impacting behavioral issues.

Key barriers that influenced the project included the health of participants and resources. One resident was excluded after two sessions due to death. This did not significantly impact the

long term interaction of the group, but participants expressed concern and it resulted in diversion from program objectives. This is a crucial component of planning because the foundation of the program is based on participant interaction. Therefore, if a group loses a significant number of participants a vital aspect of the intervention will be diminished. A lack of resources in personnel also acted as a potential barrier, as the amount of time available to facilitate the session was reduced and this impacted the number and length of activities during the sessions.

An important secondary outcome noted was the observation of increased sustained socialization of residents when not participating in CST. Residents that did not previously socialize encouraged each other to attend activities, sought each other out at activities to sit as a group, and visited each other in their rooms. This created a stronger bond among the group which was evident during sessions in more robust conversation and humor.

Discussion

The results of this QI project are similar to the evidence available for CST implementation across the United States as well as internationally. A primary advantage of this program is the high fidelity due to program structure being guided by a manual and activities supported by evidence. This provides consistency in the types of interventions incorporated and how interactions are managed. In this project, cognitive functioning was found to be positively impacted for all participants, and QOL was improved for three quarters of the enrolled residents. CST has resulted in consistent improvements of cognitive functioning in the literature, regardless of setting or number of subjects (Aguirre et al., 2012; Folkerts et al., 2017). In studies that did not find significant improvements in QOL with the operation of CST, a decrease in rates of depression were identified (Stewart et al, 2017; Cammisuli et al., 2016). The majority of

psychotropics prescribed for the selected participants in this project were antidepressants, therefore, assessing depression as an outcome may have been a more practical measure.

There are several factors that may have influenced the differences between observed and anticipated outcomes. First, due to competing activities, behavioral and health issues, and scheduled medical appointments, all eight residents did not attend the full 14 sessions of the CST program. Current findings are based on participants completing two, 45-minute sessions bi-weekly for seven weeks. Although outcomes for cognitive functioning were noted to be similar to the literature, QOL scores varied, and attendance may have influenced these results. The absence of a co-facilitator directly impacted the pace at which activities could be conducted and led to a lack of time for the inclusion of a physical exercise component. Cognitive stimulation programs that incorporated exercise were found to be more effective at reducing adverse behaviors, and this reduced the likelihood of noting changes in this outcome (Folkerts et al., 2017). Inconsistencies and incompleteness of behavioral charting by staff resulted in this aspect of the project not being measured. Chart reviews revealed that documentation was not occurring when residents were unable to attend CST sessions due to behavioral issues. Despite education, this remained unresolved and is an important barrier to note for future implementation.

Challenges in program functioning were related to differing auditory capacities and cognitive levels of residents. Difficulties arose when residents were unable to hear each other, because they could not fully participate in discussions and repeatedly requested clarification. Varying levels of cognition demonstrated similar challenges. At the end of each session, one particular participant would announce that they would not be attending again because they didn't reside in the facility. This was a false belief held secondary to cognitive impairment. Members

would become irritated, inquiring why this individual was invited if they weren't a resident. Pairing cognition levels may decrease these challenges.

Limitations of this project are related to the generalizability of the findings, bias, and outcome measures. This project only consisted of eight participants, making the generalizability of results extremely limited. Assessments relating to cognition and QOL were completed by the facilitator, who also worked as a registered nurse within the facility. This may have influenced residents' responses and willingness to participate. Efforts to minimize limitations included attendance at an international CST conference to receive formal training and improve congruency with evidence based CST program implementation. In addition, the same evaluation tools used in the most recent literature were utilized to measure outcomes, and timing of assessments were aligned with research practices. Finally, one of the measured outcomes, the use of psychotropic medications, may have not been observed for an appropriate length of time. Gradual dose reduction is recommended within three to six months after initiation of a psychotropic medication. Data collection ceased two weeks after the cessation of the seven-week program, indicating a possible failure to observe medication use for long enough.

Despite these limitations, this project demonstrated many strengths. This program is inexpensive and activities can be implemented with resources already available within a facility. Little planning is needed as each session is detailed explicitly within the CST manual, which provides high fidelity in reproducing results and positively influencing residents. The manual includes teaching DVDs that review important implementation techniques to be sure the program is implemented correctly. The QOL-AD and SLUMS assessment tools are free and available for use online, with a SLUMS training video also available for free via the St. Louis University

website. Most importantly, the participants' enthusiasm about the program was the key to its sustainability. Items purchased for the program were provided to the facility after completion.

Conclusions

CST improves cognitive functioning and may be correlated with the improving QOL of some residents. No changes in the use of psychotropic medications were observed for the CST group. Recommendations for this QI project would be to improve behavioral charting practices prior to CST implementation so the effect on behavior can be evaluated. Additional research is needed to further investigate the effect CST has on increasing or sustaining socialization for long term care residents. This was an interesting finding of the QI project.

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Appendix A

Evidence Review Table

Author, year	Study objective/intervention or exposures compared	Design	Sample (N)	Outcomes studied (how measured)	Results	Level and Quality Rating
Aguirre, Hoare, Streater, Spector, Woods, Hoe, & Orrell, 2012	To evaluate the effectiveness of a Cognitive Stimulation Therapy (CST) program on quality of life and cognition in older adults with dementia, and investigate characteristics that may predict an increased response to therapy.	Pre-post experimental study	Convenience sample N=272 older adults from community day centers and care homes. Randomly assigned to two intervention groups.	<p>1) Cognition measured using the Alzheimer's Disease Assessment Scale-Cognitive Subscale (ADAS-Cog) and the mini mental state exam (MMSE)</p> <p>2) Quality of life measured using the Quality of Life-Alzheimer's Disease (QoL-AD) and the DEMQOL</p> <p>3) Behavioral disturbances assessed using the total score (frequency x severity) of the neuropsychiatric inventory.</p> <p>4) Activities of daily living assessed using the Alzheimer's Disease Co-operative study – Activities of Daily Living Inventory (ADCS-ADL)</p>	<p>1) CST demonstrated improved cognitive abilities and QOL using the DEMQOL but not on the QoL-AD. CST resulted in a lower frequency of disruptive behaviors. A minimal improvement in ADL function was demonstrated. Benefits of CST were independent of the use of AChEIs.</p> <p>Unexpected finding that participants 80 years of age and older were noted to be impacted more by CST intervention.</p>	4 B
Aguirre, Woods, Spector, & Orrell, 2013	To evaluate the effectiveness of CST for individuals with dementia.	Systematic Review	N=15 randomized control trials	<p>1) Studies used ADAS-Cog and MMSE to analyze participant cognition pre and post intervention.</p> <p>2) QOL and wellbeing were assessed using the Life Satisfaction Index and QoL-AD.</p>	Review identified consistent cognitive benefits, improvements in self rated QOL, well-being, communication ability, and social interaction with implementation of CST. Activities of daily living, behavior, and mood were not affected by CST.	1 B

				<p>3) Participant communication and social interaction was determined by staff feedback.</p> <p>4) Instrumental ADL scale used to measure changes in ADL function.</p> <p>5) The Problem Behavior Rating Scale was completed by staff to capture the frequency of behaviors.</p> <p>6) The Cornell Scale for Depression in Dementia, the MOSES evaluation tool, and Rating of Anxiety in Dementia (RAID) tool were used to assess mood.</p>		
<p>Cammisuli, D., Danti, S., Bosinelli, F., & Cipriani, G. (2016).</p>	<p>To examine non-pharmacological interventions for individuals with Alzheimer’s Dementia that support cognitive and physical functioning, and reduce neuropsychiatric symptoms.</p>	<p>Literature review</p>	<p>N=17; 9 pre-post control studies, 5 RCTs, 2 pre-post uncontrolled studies, and 1 within subjects design.</p>	<p>1) Cognition measured using the Alzheimer’s Disease Assessment Scale-Cognitive Subscale (ADAS-Cog) and the mini mental state exam (MMSE).</p> <p>2) Behavioral disturbances assessed using the total score (frequency x severity) of the neuropsychiatric inventory.</p>	<p>Implementation of CST program resulted in improvement of cognition and behavior in participants with mild to moderate dementia. Supported other research findings regarding the concomitant use of AChEIs.</p>	<p>5 B</p>
<p>Folkerts, A., Roheger, M., Franklin, J., Middelstat, J., & Kalbe, E. (2017).</p>	<p>To determine the effects of cognitive interventions for residents with dementia in long term care facilities</p>	<p>Systematic Review and Meta-Analysis</p>	<p>N=15 randomized control trials</p>	<p>1) Cognition measured using the Alzheimer’s Disease Assessment Scale-Cognitive Subscale (ADAS-Cog) and the mini mental state exam (MMSE).</p> <p>2) QOL and well-being were measured using the Life Satisfaction Index and QoL-AD.</p>	<p>Cognitive interventions in the long-term care setting are safe. Positive effect on cognition, behavioral symptoms, QOL, and well-being were noted. Programs that included physical activities, occupational therapy, and music were more influential on reducing behaviors and increasing QOL.</p>	<p>1 B</p>

				3)Mood measured using the Geriatric Depression Scale and face scale		
Stewart, D., Berg-Weger, M., Tebb, S., Sakamoto, M., Roselle, K., Downing, L., Lundy, J., & Hayden, D. (2017).	To assess the impact of CST on QOL, cognition, and depression.	Descriptive study	N= 40 participants with dementia in six CST groups	<p>1) Cognition measured used the St. Louis University Mental Status Exam (SLUMS)</p> <p>2) Cornell Scale for Depression in Dementia used to measure mood.</p> <p>3) QOL assessed using the Life Satisfaction Index and QoL-AD.</p>	<p>Cognition and depression demonstrated significant improvement. No difference noted in QOL scores.</p> <p>SLUMS tool noted as having a high correlation with the MMSE tool and higher sensitivity to detecting dementia than alternate cognitive screening tools.</p> <p>Cornell Scale for Depression noted as having acceptable internal consistency and sensitivity.</p> <p>QoL-AD noted as having adequate internal consistency, validity, and reliability.</p>	6 A

Appendix B

VAMC SLUMS EXAMINATION

Questions about this assessment tool? E-mail aging@slu.edu

Name _____ Age _____
Is the patient alert? _____ Level of education _____

_ /1	1	1. What day of the week is it?	
_ /1	1	2. What is the year?	
_ /1	1	3. What state are we in?	
		4. Please remember these five objects. I will ask you what they are later.	
		Apple Pen Tie House Car	
		5. You have \$100 and you go to the store and buy a dozen apples for \$3 and a tricycle for \$20.	
	1	How much did you spend?	
_ /3	2	How much do you have left?	
		6. Please name as many animals as you can in one minute.	
_ /3	0	0-4 animals	1 5-9 animals
		2 10-14 animals	3 15+ animals
_ /5		7. What were the five objects I asked you to remember? 1 point for each one correct.	
		8. I am going to give you a series of numbers and I would like you to give them to me backwards. For example, if I say 42, you would say 24.	
_ /2	0	87	1 648
		1 8537	
		9. This is a clock face. Please put in the hour markers and the time at ten minutes to eleven o'clock.	
	2	Hour markers okay	
_ /4	2	Time correct	
	1	10. Please place an X in the triangle.	
_ /2	1	Which of the above figures is largest?	
		11. I am going to tell you a story. Please listen carefully because afterwards, I'm going to ask you some questions about it.	
		Jill was a very successful stockbroker. She made a lot of money on the stock market. She then met Jack, a devastatingly handsome man. She married him and had three children. They lived in Chicago. She then stopped work and stayed at home to bring up her children. When they were teenagers, she went back to work. She and Jack lived happily ever after.	
	2	What was the female's name?	2 What work did she do?
_ /8	2	When did she go back to work?	2 What state did she live in?

TOTAL SCORE _____

SCORING			
HIGH SCHOOL EDUCATION	NORMAL	MILD NEUROCOGNITIVE DISORDER	LESS THAN HIGH SCHOOL EDUCATION
27-30	25-30	20-24	1-19
21-26	1-19		
1-20			

CLINICIAN'S SIGNATURE _____ DATE _____ TIME _____

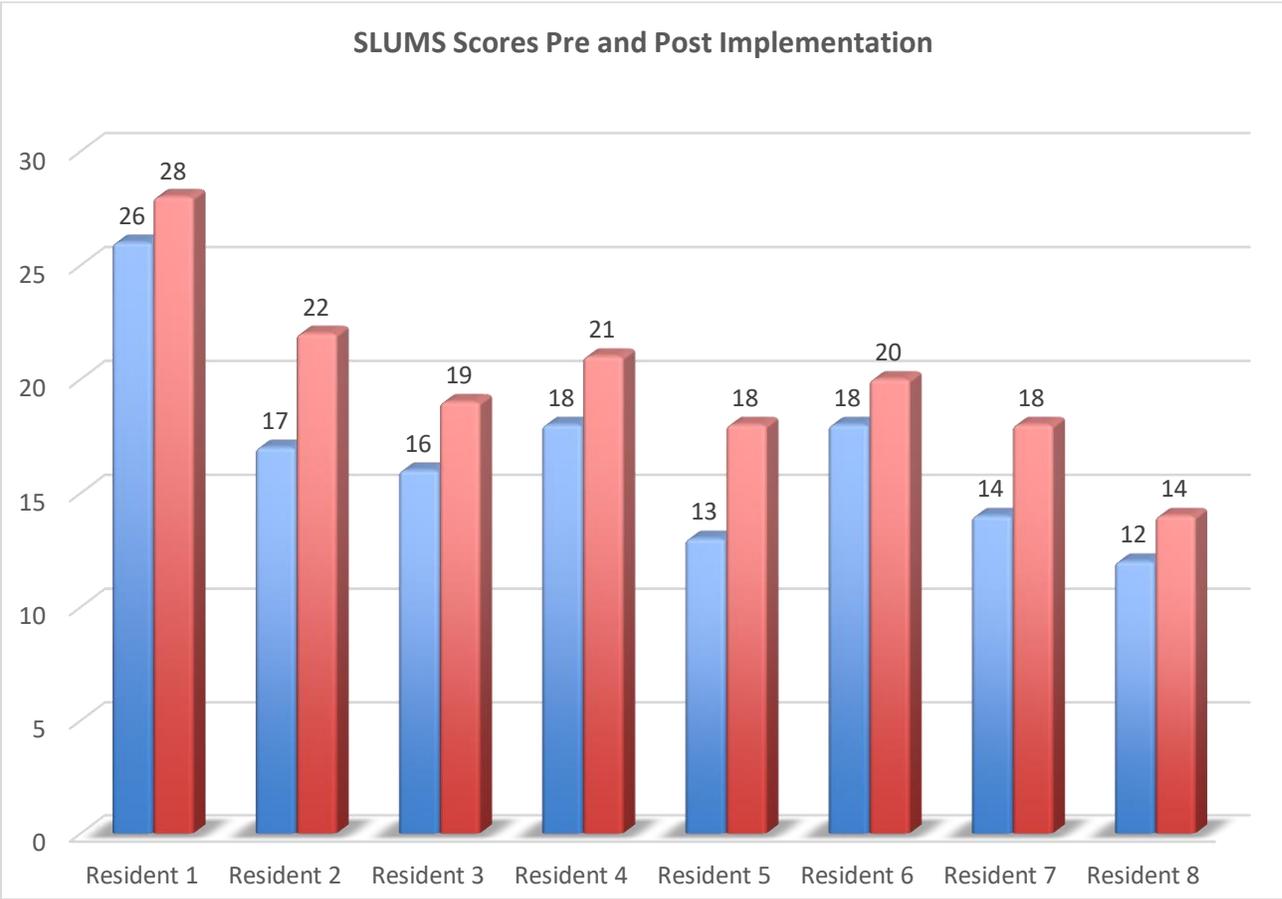
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Appendix C

Quality of Life Questionnaire for Alzheimer's Disease (QOL-AD) (Interview Version for the person with dementia)				
Interviewer to administer according to standard instructions. Circle responses.				
1. Physical health.	Poor	Fair	Good	Excellent
2. Energy level.	Poor	Fair	Good	Excellent
3. Mood.	Poor	Fair	Good	Excellent
4. Living situation.	Poor	Fair	Good	Excellent
5. Memory.	Poor	Fair	Good	Excellent
6. Family relations.	Poor	Fair	Good	Excellent
7. Marriage/closest personal relationship.	Poor	Fair	Good	Excellent
8. Friendships.	Poor	Fair	Good	Excellent
9. General self-esteem.	Poor	Fair	Good	Excellent
10. Ability to do tasks around the house.	Poor	Fair	Good	Excellent
11. Ability to do things for fun.	Poor	Fair	Good	Excellent
12. Finances.	Poor	Fair	Good	Excellent
13. Life as a whole.	Poor	Fair	Good	Excellent

Comments: _____

Appendix D



Appendix E

