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Implementing a Cognitive Impairment Care Planning Toolkit to Enhance Dementia Care: A Quality Improvement Project

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IMPLEMENTING A COGNITIVE IMPAIRMENT CARE PLANNING TOOLKIT TO
ENHANCE DEMENTIA CARE: A QUALITY IMPROVEMENT PROJECT

by

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Raquel Garcia-Priestly

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Abstract

Alzheimer's is the most expensive disease in the United States, with costs reaching \$277 billion a year and affecting 5.7 million Americans. By 2050, 14 million Americans will have Alzheimer's disease and related dementias (ADRD). This burdensome disease not only affects the individual, but also those who are responsible for their care, making it extremely complex to manage. The purpose of this project is to systematically integrate the Alzheimer's Association's Cognitive Impairment Care Planning Toolkit in an outpatient mental health clinic to enhance care by effectively addressing the needs of patients with ADRD and of their caregivers. The objectives were to increase the number of patients with ADRD and/or their caregivers screened using the validated, standardized assessment tools found within the toolkit; increase the number of patients and/or caregivers who were identified as having unmet need(s) that received appropriate follow-up referrals; increase the number of written care plans formulated from the comprehensive assessment; and increase revenue by utilizing billing CPT code 99483. Conducting a person-centered comprehensive assessment and care plan was beneficial in enhancing care by addressing the complex needs of this population. It helped identify needs such as neuropsychiatric symptoms, patient and caregiver depression, functional and environmental safety concerns, and caregiver stress. It also improved documentation for care planning and increased revenue collection. This toolkit allowed for holistic management of patient outcomes. Clinicians were able to customize treatment plans to tailor individual patient needs from the multi-component assessments.

Keywords: cognitive impairment, dementia, treatment planning, interventions, assessments

Dementia Care Planning

Alzheimer's is the most expensive disease in the United States, with costs reaching \$277 billion a year and affecting 5.7 million Americans (Alzheimer's Impact Movement [AIM], 2018). With emerging technologies and advancements in medicine, the aging population is living longer, and these costs are expected to rise dramatically. It is estimated that by 2050, 14 million Americans will have Alzheimer's disease (Alzheimer's Association, 2018b). This burdensome disease not only affects individuals, but also those who are responsible for their care, which is often family members or close friends (Alzheimer's Association, 2018b; Adelman, Tmanova, Delgado, Dion, & Lachs, 2014; AIM, 2018). Approximately 16.1 million family members and friends bestowed 18.4 billion hours of uncompensated care to individuals with Alzheimer's disease and related dementias (ADRD) in 2017, which has an economic value of more than \$232 billion dollars (AIM, 2018). Caregivers serve an integral role in the support and care of individuals affected with ADRD and the need to support them is essential so that they can remain frontline providers of care.

To reduce health disparities among this population, efforts to close detrimental gaps in care within the healthcare system need. The newly developed Alzheimer's Association Dementia Care Practice Recommendations address all aspects of care to provide quality, patient-centered care across all practice settings (Fazio, Pace, Maslow, Zimmerman, & Kallmyer, 2018). The recommendations support evidence-based findings that the quality of care rendered to individuals and caregivers of ADRD is contingent upon clinicians' methods of accurately assessing and planning care (Molony, Kolanowski, Van Haitsma, & Rooney, 2018).

Although nothing can change the underlying course of disease in ADRD, interventions can be implemented to benefit patients and their caregivers. Care planning has proven to be the

most important aspect of care in this population, because it is personalized and specific to the needs of the individual (Alzheimer's Association, 2018a). ADRD is extremely complex, and the delivery of care cannot be approached as a one-size-fits-all method. Patients and caregivers need personalized, individual attention; thorough assessment and care planning will help facilitate quality care by recognizing areas needing attention and connecting patients and caregivers to needed services (Alzheimer's Association, 2018a; Alzheimer's Association Expert Taskforce, 2016).

Statement of the Problem

ADRD is a complex and debilitating neurogenerative disease. Currently, over 5 million adults have ADRD, and of those affected, 81% are ages 75 and older (Alzheimer's Association, 2018c). It is the sixth leading cause of death in the United States and its numbers are exponentially growing (Alzheimer's Association, 2018c). Processes aimed at improving the care of patients afflicted with ADRD are lacking, and interventions to assess the needs and enhance the quality of life in these patients are needed. Comprehensive assessments and care planning are vital components in addressing the multifactorial aspects of dementia care. Including caregivers in all aspects of care reinforces the fact that they are integral members of the treatment team and contributors to the health of the patient. Including them helps address any deficits in their knowledge, lack of support they experience, and barriers their loved ones experience in receiving care, and reduces any stress or burden felt by taking care of the patient (Alzheimer's Association Expert Taskforce, 2016; Physician Consortium for Performance Improvement [PCPI], 2011).

To address the problem statement, a clinical question was created: Can integrating an evidence-based care planning toolkit in an outpatient mental health clinic enhance care by effectively addressing the needs of patients with ADRD and their caregivers?

Background and Significance

ADRD refers to a series of cognitive disorders, including Alzheimer's disease and dementia, that are characterized by an insidious and continual deterioration of cognitive functioning in one or more domains of memory—executive functioning, language, judgement, and spatial abilities—which impair activities of daily living and are not related to the normal process of aging (PCPI, 2011; U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Aging, 2017). There are several different types of dementias and pathologies, including Alzheimer's disease, vascular dementia, dementia with Lewy bodies, frontotemporal lobar degradation, Parkinson's disease, Creutzfeldt Jakob disease, mixed dementias, and normal pressure hydrocephalus (Alzheimer's Association, 2018b; Maloney & Lahiri, 2016).

Recent studies conducted at autopsy reported that many people have mixed dementia, characterized by more than one type of dementia, and it is often Alzheimer's disease and vascular dementia combined (Alzheimer's Association, 2018b). Vascular dementia occurs from the brain being deprived of oxygen due to an infarct from cardiovascular disease (Alzheimer's Association, 2018b). Alzheimer's disease accounts for up to 80% of all dementias and is the most common and progressive type (Alzheimer's Association, 2018b). Neuropathologically, Alzheimer's disease is characterized by the aggregation of parenchymal plaques primarily consisting of amyloid β peptide ($A\beta$) protein, and neurofibrillary tangles of protein tau, which leads to the degradation of neurons (Maloney & Lahiri, 2016).

Symptoms of each dementia type vary with each disease and with the individual affected. Some dementias progress rapidly, like Alzheimer's disease and Lewy bodies dementia, and others are insidious, where individuals remain in the mild to moderate stages of symptoms for

longer periods of time (Alzheimer's Association, 2018b; Maloney & Lahiri, 2016). In the mild states of ADRD, neuronal changes have occurred, but individuals are capable of functioning independently, and minimal assistance may be needed to ensure safety (Alzheimer's Association, 2018b).

Most people linger in the moderate stage of ADRD the longest (Alzheimer's Association, 2018b). In this stage, people start experiencing difficulty performing routine tasks, communicating effectively, personality and behavior changes occur, and neuropsychiatric symptoms begin to emerge; neuropsychiatric symptoms have been identified throughout the literature as an important variable affecting caregiver burden and stress (American Academy of Neurology, American Psychiatric Association [AAN APA], 2016; Terum et al., 2017; Workgroup on Alzheimer's Disease and Other Dementias, 2010).

Lastly, it is in the severe stage of ADRD when neuronal degradation to areas of the brain controlling movement have occurred, the physical health of the person becomes poor (Alzheimer's Association, 2018c). It is during this time that individuals affected by ADRD require total care. They become bed-bound, and have difficulty swallowing, which leaves them susceptible to infections, and other conditions; aspiration pneumonia is a result of impaired swallowing and is a leading cause of death in the severe stages of ADRD (Alzheimer's Association, 2018b).

The global prevalence of all dementias is approximately 35 million, and by 2050, it will affect over 100 million people (Maloney & Lahiri, 2016). The cognitive deterioration experienced with ADRD is a significant burden on the individual affected, the economy, the healthcare system, and caregivers. Caring for persons with ADRD can be a challenging task because they require individualized assistance, attention, and eventually, around-the-clock care.

Family caregivers often feel inadequately prepared to effectively manage the multifarious needs of this special population. They are often tossed into the caregiving role without receiving any specialized training, education on disease management, or support from the healthcare system or the community, which can leave them prone to experiencing physical, mental, and psychosocial adverse health effects (Adelman et al., 2014). Furthermore, the lack of support, resources, and education given to caregivers exposes the patient to substandard care and increases their risk of abuse and neglect (Workgroup on Alzheimer's Disease and Other Dementias, 2010). The value of ADRD caregivers is insurmountable to the economy; the care they provide exceeds the value that would be spent on home health or nursing home costs (Adelman et al., 2014). Ensuring that their needs are met is vital in maintaining optimal health in the patient.

Assessment

Microsystem Assessment

This evidence-based project was located within a medical center complex in the southern United States. This is a large, independent, outpatient psychiatric-mental health clinic. The clinic has been in operation for less than 3 years and has experienced rapid growth. Due to the dire need for mental health services in this area, three other clinics have been opened throughout the state in different cities within this short time frame. The clinic has several departments dedicated to integrating cutting-edge technologies by taking a patient-centered approach to improving mental health solutions with medication management, psychotherapy, ketamine infusion therapies, transcranial magnetic stimulation, and telepsychiatry services.

The clinic has 35 employees. There are two psychiatrists, and five prescribers who see patients after initial assessment by a psychiatrist. There are eight psychotherapists trained in a variety of therapeutic modalities and patient populations to effectively treat disorders and

develop healthier coping strategies. Many staff members are fluent in Spanish, which attracts a large Spanish speaking population to this specific clinic. On average, the clinic sees approximately 550 patients a week. It serves a diverse population, and accepts patients of all ages and most insurances, to promote health across the lifespan.

All new patients are scheduled for an initial evaluation and electroencephalogram before the first visit with any clinician (prescriber or therapist). This aligns with the mission of the clinic in providing cutting edge innovative technologies. A thorough psychosocial evaluation is also completed by a licensed professional counselor (LPC) at this time; all patients are also given several self-evaluative assessments to complete, which include:

- Screening, Brief Intervention and Referral to Treatment identifies patients who use drugs or alcohol at risky levels;
- Alcohol Use Disorders Identification Test (Audit) identifies hazardous drinkers or those with an active alcohol disorder;
- Drug Abuse Screening Test assesses drug abuse including prescription drugs;
- Hooked on Nicotine Checklist measures the dependence on nicotine products;
- Bipolar Inventory of Symptoms Scale assesses for mania, depression, anxiety, irritability, and psychosis, which are symptoms observed in bipolar disorder.
- Thinc-it is a computerized assessment tool utilized to detect cognitive dysfunction in people with major depression.

These screening instruments are designed to aid clinicians in appropriate questioning and evaluation methods to make an accurate diagnosis. In addition to the screening instruments which are given to every patient at check-in, each clinician employs additional screeners which are used at their discretion, depending on the presentation of each patient.

Needs Assessment

A microsystem assessment conducted in the fall of 2018 indicated that the clinic lacks a standardized method in assessing and managing the needs of patients with ADRD.

Approximately 8% of patients in this clinic have an established diagnosis of some type of dementia, made up of 66% female, 34% male. The largest age group affected with ADRD are people aged 75 to 85 years old, at 34%; the second largest is people aged 65 years and younger, at 28%. People aged 65 to 74 years old are affected at 26%, and those over 85 years of age are affected at 12%. Medicare, Tricare and United Health are the three most common insurances carried among this population. Half of these patients were referred to this clinic for the management of neuropsychiatric symptoms by their primary care providers.

Although clinicians addressed many of the domains necessary for providing patient-centered quality care, the system was not uniform, and several of the required elements from the practice recommendations were not fully addressed, due to time constraints. The Alzheimer's Association Dementia Care Practice Recommendations state that a comprehensive person-centered assessment should be completed at baseline, and interim reassessments should be conducted regularly, at a minimum of every six months (Molony et al., 2018). A ll comprehensive assessments should include the following domains:

- Cognition
- Function
- Stage of cognitive impairment
- Decision-making
- Neuropsychiatric symptoms, including depression
- Medication review and reconciliation

- Safety and risk reduction
- Caregiver identification and needs assessment
- Advanced care planning.

A chart audit was performed on 60 patients with an established diagnosis of at least one type of dementia or mild cognitive impairment who were seen in the clinic between June 1, 2018 and November 1, 2018. Of those patients, none had documentation that all 10 of the required assessment domains from the Alzheimer's Association were assessed during their appointment. It is evident that the practice recommendations from the Alzheimer's Association are underutilized, and that this clinic would benefit from a quality improvement evidence-based project aimed at effectively implementing them. The Alzheimer's Association Expert Task Force (2017) has published a care planning toolkit which aligns with the practice recommendations of the Alzheimer's Association Dementia Care Practice Recommendations designed to provide guidance on the diagnosis and management of ADRD patients.

During appointments, prescribers at the clinic divided their time between providing brief psychoeducation to caregivers and patients and the management of neuropsychiatric symptoms. The psychoeducation and list of community referrals given during appointments was beneficial but limited. Although caregivers reported frustration or concern in managing neuropsychiatric symptoms at home, no specific interventions were documented in the electronic medical record (EMR) addressing if caregivers were assessed for burden/stress, depression, referred to supportive services, or if a needs assessment was conducted. The only interventions documented were patient referrals for psychotherapy if depression or anxiety was noted or suspected. Utilizing a toolkit could enhance the current measures already established in this clinic by helping patients live the best life they have remaining by addressing their needs. It could

facilitate a uniform, systematic approach for all clinicians to provide active, meaningful care, and could help address the unmet challenging needs of this population (Alzheimer's Association Expert Taskforce, 2016; Molony et al., 2018).

Organization's Readiness for Change

All major stakeholders of the outpatient psychiatric mental health clinic expressed an interest in participating and engaging in an evidence-based quality improvement project for the care of patients with ADRD. Since the clinic is currently in the process of seeking accreditation with the Joint Commission, the major stakeholders were vested in developing standardized procedures and protocols that parallel with current clinical guidelines.

All prescribers were knowledgeable of previous practice recommendations and quality measures set by various organizations, but not all were aware of the Alzheimer's Association Dementia Care Practice Recommendations. Those who lacked knowledge were made aware of the new practice recommendations and were briefed on the changes. Although all interviewed prescribers felt they addressed every domain of care outlined in the Alzheimer's Association Dementia Care Practice Recommendations, it was not evident in the documentation. Integrating a toolkit could help ensure that all domains have been assessed, as it requires a written care plan (Alzheimer's Association Expert Task Force, 2017).

Major clinic stakeholders and providers were unaware that Medicare now reimburses for ADRD assessment, care planning, and coordinating services, with a new current procedural terminology (CPT) code 99483 (Alzheimer's Association Expert Task Force, 2016). CPT code 99483 offers a significantly higher reimbursement rate than other CPT codes, which are often used for addressing many of the same components of care. Clinicians are eligible for a Medicare reimbursement of \$242.85 every 6 months for comprehensively assessing patients with ADRD

using this toolkit (Alzheimer's Association Expert Task Force, 2017), so it is anticipated that introducing CPT code 99483 will bring more revenue into the clinic. Upon reviewing the requirements for reimbursement and educating all clinicians on the differences, all parties committed to supporting the integration of this toolkit to help facilitate the delivery of care. The practice manager and lead nurse also participated in facilitating this new process, and verbalized the importance of communicating effectively with all parties to ensure its success.

Although the organization's stakeholders expressed a willingness for improvement, there were barriers associated with implementing a project at this site, such as the underutilization of the EMR's capabilities.

Project Identification

Purpose

The purpose of this project was to implement the Alzheimer's Association's Cognitive Impairment Care Planning Toolkit (Alzheimer's Association Expert Task Force, 2017) to create a systematic algorithm within the clinic to aid clinicians in conducting a person-centered comprehensive assessment and care plan for patients with ADRD.

Objectives

The objectives of this evidence-based quality improvement project were to:

1. Increase the number of patients with ADRD and their caregivers screened using the validated, standardized assessment tools found within the toolkit by 75% in 8 weeks.
2. Increase the number of patients and/or caregivers who were identified as having unmet need(s) that received appropriate follow-up or referrals by 75% in 8 weeks.
3. Increase the number of written care plans formulated from the comprehensive assessment by 75% in 8 weeks.

4. Increase revenue by utilizing billing CPT code 99483 for every patient who was assessed with the toolkit within the 8 weeks.

By meeting the above objectives, clinicians are aligned with the most current practice recommendations for the management of ADRD and will provide high-quality, patient centered care (Fazio et al., 2018).

Summary and Strength of the Evidence

No empirical studies were found which used the Alzheimer's Association's Cognitive Impairment Care Planning Toolkit (2017). However, other models, current practice guidelines, performance measure sets, and systematic reviews related to cognitive impairment and ADRD were reviewed. Most models of care are limited to a specific setting, domain, or discipline. For example, the Age-friendly Primary Health Care Centres Toolkit from the World Health Organization (2008) assesses for many age-related health concerns, and should only be used in the primary medical-care setting. The Kickstart-Assess-Evaluate-Refer Model was designed for early detection and assessment of cognitive impairment, diagnosing, and referring out to community resources, but does not address any other domains (Gerontological Society of America Workgroup, 2017; Maslow & Fortinsky, 2018). The Family Caregiver Alliance (2006) also has a domain specific toolkit for caregivers called Caregivers Count Too!, which promotes health through supporting, encouraging, and educating caregivers by conducting an in-depth caregiver needs assessment (Family Caregiver Alliance, 2006).

PCPI (2011) published a set of quality measures designed to improve health outcomes of people with ADRD and their caregivers. These quality measures can be used in any outpatient setting and communicate the importance of conducting a comprehensive assessment regularly. The Assistant Secretary for Planning and Evaluation (ASPE) at the U.S. Department of Health

and Human Services conducted a detailed analysis of models of dementia care by reviewing 37 existing clinical guidelines. From this, they established several imperative care components that should be addressed regularly by multidisciplinary clinicians as a standard of care (Wiener, Gould, Shuman, Kaur, & Ignaczak, 2016).

Although no collective studies were acquired using a specific toolkit or performance measures, there is significant evidence throughout the literature expressing the importance of assessing each domain contained in the Alzheimer's Association's Cognitive Impairment Care Planning Toolkit individually. Utilizing validated and reliable instruments has proven to be effective in assessing, measuring, and detecting changes in each domain, and should be incorporated into treatment planning services for patients with ADRD (Cunningham, Cunningham, & Roberston, 2018; Molony et al., 2018). Findings within the literature review are summarized below by each domain.

Cognition

Cognitive impairment (CI) among the elderly in the United States remains under-detected (Gerontological Society of America Workgroup, 2017), so regular cognitive evaluations should be conducted. Patients with established CI or ADRD should be assessed at least every 6 months to track changes and disease progression (AAN APA, 2016; Fazio et al., 2018; Gerontological Society of America Workgroup, 2017; PCPI, 2011). Because certain types of dementias evoke a more rapid progression in symptomology, performing regular cognitive evaluations with reliable and valid instruments will aid clinicians in detecting new symptoms earlier, generating individualized treatment plans tailored to current needs, and offering supportive and educational services to maintain quality of life and maintain independence (AAN APA, 2016; Gerontological

Society of America Workgroup, 2017; Workgroup on Alzheimer's Disease and Other Dementias, 2010).

The Saint Louis University Mental Status (SLUMS) examination is one of many valid and reliable instruments that assesses for the presence of cognitive deficits and its changes over time (Feliciano et al., 2013). It can be administered in less than 10 minutes by any qualified healthcare professional who has been trained, and it screens several cognitive domains such as attention, calculation, immediate and delayed recall, animal naming, abstract thinking, and visuospatial skills (Feliciano et al., 2013; Howland, Tatsouka, Smyth, & Sajatovic, 2016). Feliciano et al. (2013) conducted a cross-sectional design of 170 nonveteran community-dwelling adults between the ages of 60 and 91 years, where the SLUMS examination was compared to the Mini-Mental Status Examination (MMSE) to predict its validity in memory and executive functioning. Results suggested that the SLUMS examination is an effective tool and is stronger than the MMSE in assessing for memory and executive function (Feliciano et al., 2013). Memory and executive functioning in older adults are extremely important to assess regularly because these areas often decline first.

Function

Dementia is a progressive disease associated with a loss of independence in functional status, so supportive care with activities of daily living will eventually be required (Prizer & Zimmerman, 2017). This loss of independence correlates with a poorer health status and quality of life (Prizer & Zimmerman, 2017). Therefore, assessing function regularly is vital, and assessing function in patients with AD or suspected mild cognitive impairment (MCI) can be achieved by utilizing valid and reliable instruments. Screening for basic activities of daily living includes the patient's ability to independently feed, dress, and bathe themselves, while

instrumental activities of daily living concentrates on more advanced self-care activities like shopping, cooking meals, proper medication administration, and managing financial matters (PCPI, 2011). Establishing the capacity for self-care and independent living is beneficial for advanced care planning because it allows clinicians to initiate conversations on hard-to-discuss topics with patients and families early on in the disease process, such as when to stop driving and when institutionalization may be necessary (Molony et al., 2018; PCPI, 2011). It is also beneficial for planning interventions that help promote independence, respect, dignity, and choice for the person losing their functional abilities (Prizer & Zimmerman, 2017).

The Alzheimer's Association, Kickstart-Assess-Evaluate-Refer Model, and PCPI recognizes the Katz index of Independence in activities of daily living and the Lawton-Brody instrumental activities of daily living as valid and reliable screening instruments for assessing functional status in the geriatric population (Alzheimer's Association Expert Task Force, 2017; Gerontological Society of America Workgroup, 2017; PCPI, 2011). Both Katz and Lawton-Brody scales are best used for detecting problems in performing activities of daily living independently among the elderly across a variety of care settings. They provide data in identifying individualized needs for specific services that may be needed in the home and are sensitive to big changes in health status (Alzheimer's Association Expert Task Force, 2017).

Staging of Cognitive Impairment and Decision-Making Capacity

The staging of dementia is not frequently addressed, yet it is an important component of evaluation; it helps differentiate normal aging from MCI, and MCI from Alzheimer's disease (Moelter et al., 2015). A 3-level rating scale is used to rate decision-making capacity and is derived from clinical judgement. Mild dementia is indicated by some difficulty in completing tasks such as balancing a checkbook, preparing multi-step meals, or adhering to a complex

medication regimen, but the person is still able to remain independent in many areas of their life (Alzheimer's Association, 2018c; PCPI, 2011). In the moderate stage of dementia, patients will experience difficulty with more simple tasks, such as minor household and yard duties, preparing a simple meal, or requiring assistance in some or all aspects of care (Alzheimer's Association, 2018c; PCPI, 2011). They may start wandering, become confused, and develop neuropsychiatric symptoms (Alzheimer's Association, 2018c). In severe stages of dementia, patients will require total assistance in all activities of daily living and instrumental activities of daily living (Alzheimer's Association, 2018b; PCPI, 2011).

The Dementia Severity Rating Scale (DSRS) is a valid and reliable tool that effectively gauges level of impairment and detects slight changes of function over time (Moelter et al., 2015). The scale takes less than five minutes to complete and is easy to administer. Results from Moelter et al. (2015) indicate that utilizing the DSRS along with cognitive testing enhanced diagnostic accuracy, and a score change of ≥ 10 from previous scores is excellent in differentiating the progression from MCI to Alzheimer's disease.

Neuropsychiatric Symptoms

Neuropsychiatric symptoms result from neurodegeneration of the diseased brain in ADRD, and occurs in up to 97% of people with ADRD (Scales, Zimmerman & Miller, 2018). Symptoms include agitation, apathy, motor disturbances, anxiety, irritability, depression, disinhibition, delusions, hallucinations, nighttime behaviors, euphoria, and appetite changes (Scales et al., 2018). It accelerates cognitive decline and functional impairment, increases comorbidities and hospitalizations, decreases mean survival time, and increases risk of danger to self and others (AAN APA, 2016). Neuropsychiatric symptoms have been identified throughout the literature as the most poignant sequelae of ADRD (Scales et al., 2018), and as one of the

leading factors attributing to caregiver burden (Adelman et al., 2014; Terum et al., 2017). Due to the potentially dangerous consequences neuropsychiatric symptoms poses, patients should be assessed regularly to manage all negative symptoms, and modifiable interventions to the social and physical environment should be implemented (AAN APA, 2016; Scales et al., 2018; Workgroup on Alzheimer's Disease and Other Dementias, 2010).

The Neuropsychiatric Inventory Questionnaire (NPI-Q) is a quick, valid and reliable caregiver-rated screening tool that can be routinely administered in any clinical setting (Musa et al., 2017). It is used to measure the presence or absence of 12 neuropsychiatric symptoms in ADRD and allows the caregiver to gauge the severity of distress of each symptom (Musa et al., 2017). In order to establish the NPI-Q psychometric properties and the prevalence of neuropsychiatric symptoms in patients with Alzheimer's disease, Musa et al. (2017) studied 53 patients with diagnosed Alzheimer's disease. Results indicated a correlation between the progression of Alzheimer's disease and an increased prevalence of neuropsychiatric symptoms. Symptoms with the highest prevalence were delusions (44.2%), agitation/aggression (36.7%), and aberrant motor behavior (28.9%). The neuropsychiatric symptom assessment is relevant for the differential diagnosis in ADRD as well as for assessing behavioral responses to pharmacological and non-pharmacological interventions (Musa et al., 2017).

Depression

Depression is the most common neuropsychiatric symptom in dementia, affecting over 50% of patients (PCPI, 2011). Even mild cases of depression can significantly impact those with ADRD and are linked with higher rates of disability, mortality, and poorer quality of life (PCPI, 2011). Furthermore, as the severity of depression increases, the severity of psychopathological and neurological impairments increases (PCPI, 2011). Identifying depression in this population

is essential and can be differentiated between other neuropsychiatric symptoms by validated assessment instruments.

The Patient Health Questionnaire-9 (PHQ-9) is a reliable instrument utilized for screening depressive disorders based on symptomology from the Diagnostic and Statistical Manual of Mental Disorders (DSM, 5th Ed.) (Moriarty, Gilbody, McMillan, & Manea, 2015; PCPI, 2011) and is widely used in a variety of clinical settings. A score of 10 on PHQ-9 differentiates between mild depression and moderate depression; in a meta-analysis by Moriarty et al. (2015), at cutoff point 10, PHQ-9 showed a higher sensitivity and similar specificity in primary care when compared to community and secondary care settings. When coupled with clinician evaluation, PHQ-9 is effective in differentiating between major depressive disorders and other mood disorders (Moriarty et al., 2015). The literature lacked evidence on its validity and reliability in the CI geriatric population.

Medication Review and Reconciliation

Conducting a careful review of medications and reconciliation on a regular basis is endorsed within the literature. Medications often contribute to impaired cognitive dysfunction and clinicians should be aware of all medications, especially high-alert and inappropriate medications, to minimize risk of adverse drug events which could result in worsening cognition or safety issues (Molony et al., 2018). Assessing for medication adherence in the reconciliation process is paramount. This tells clinicians if pharmacologic interventions were effective in minimizing or worsening symptoms, and tolerability. In many cases, the inability to manage medications appropriately is the only sign of functional impairment, and this differentiates MCI from a dementia diagnosis (Hudani & Rojas-Fernandez, 2016). The geriatric population with cognitive impairment presents with a set of unique circumstances in achieving or maintaining

optimal medication adherence. Circumstances that affect medication adherence include complex medication regimens, polypharmacy, health care system barriers, declining health status, increased co-morbidities, and socio-economic barriers (Hudani & Rojas-Fernandez, 2016). The ability to effectively adhere to medications entails working memory, verbal memory, processing speed, and reasoning skills that people with ADRD lack (Hudani & Rojas-Fernandez, 2016). Because of this, caregivers generally take on the responsibility for managing medications among this patient population. The most commonly used method for obtaining a medication list and assessing for adherence is self-reports (32%), pharmacy data (27%), pill count (14%), health provider report (14%), electronic monitoring (10%), and clinical health outcomes (3%) (Hudani & Rojas-Fernandez, 2016). The literature lacks evidence on the best method of obtaining an accurate medication list so that individualized care can be achieved.

Safety

Living alone without supervision poses many challenges for those with ADRD. As the level of CI progresses, functional abilities decline and safety issues arise (Molony et al., 2018). Evaluating and planning for environmental safety-hazards reduction is one of the most valuable types of support clinicians can contribute to this population and should be conducted periodically with both patient and caregiver (Calkins, 2018; Molony et al., 2018). By implementing interventions that support a therapeutic and supportive environment, patients can maintain their dignity and comfort, which positively impacts their quality of life, independence, and length of time before institutionalization (Calkins, 2018; Molony et al., 2018).

There is no single valid and reliable screening instrument that assesses for safety in CI adults. However, the Cognitive Impairment Care Planning Toolkit (Alzheimer's Association, 2018a) contains a safety assessment guide to aid clinical questioning over seven key areas

concerning environment: driving status, medication management, home hazards, access to firearms, fall risk, wandering or getting lost, and living status. These topics are also consistent with the recommendations from the PCPI (2011) and the systematic review of existing models of dementia care conducted by Wiener et al. (2016). PCPI (2011) and Wiener et al. (2016) both address safety concerns of abuse and neglect suffered by the patient, whereas the Alzheimer's Association's toolkit lacks direct questioning around that specific topic.

Caregiver Identification and Needs Assessment

Caregivers of persons with ADRD are susceptible to increased risks of depression, anxiety, burden, and stress, and are associated with increased risk of mortality themselves (Adelman et al., 2014; Odenheimer et al., 2013; Terum et al., 2017). Up to 40% have symptoms of depression or anxiety (Livingston et al., 2014). In a systematic review of 19 previously published literature reviews of caregiver well-being, Cunningham et al. (2018) found that burden and depression were characterized as the top terms used in describing caregiver wellbeing throughout the literature. Cunningham et al.'s review also concluded that current research lacks a standardized method and robust screening approach to incorporate both positive and negative aspects of providing care to determine burden. The PHQ-9 assessment has proven to be a highly valid assessment tool in screening for depression. My Stress Thermometer (see Appendix F) is also a quick and easy method for rating stress levels. It can be done in a matter of seconds by marking current stress level on the body of a thermometer. Ratings include "not stressed at all," "a little stressed," "moderately stressed," "very stressed," and "extremely stressed" (Alzheimer's Association Expert Task Force, 2017).

Conducting a multicomponent needs assessment for caregivers will help to better understand their individualized needs and assist with improved care planning efforts (Whitlatch & Orsulic-Jeras, 2018). The Cognitive Impairment Care Planning Toolkit contains a caregiver

profile assessment to appraise caregiver knowledge around various topics such as understanding ADRD, where to obtain sources for additional information, where to receive supportive services, and willingness to provide care (Alzheimer's Association Expert Task Force, 2017). This profile assessment is consistent with findings in the literature supporting the need for greater caregiver support, education, and information across all stages of dementia to improve quality of life and mental health outcomes in both patient and caregiver (PCPI, 2011; Schoenmakers, Buntinx, & DeLepeleire, 2010; Whitlatch & Orsulic-Jeras, 2018). Furthermore, evidence also indicates that the health status of individuals affected with ADRD is significantly dependent on the care they receive at home (Terum et al., 2017). Therefore, providing education, information, ~~and~~ appropriate referrals, ~~and~~ screening for depression and stress, are all critically important for reducing adverse effects associated with caregiving, and should not be overlooked during the comprehensive assessment (PCPI, 2011; Terum et al., 2017; Whitlatch & Orsulic-Jeras, 2018).

Advanced Care Planning

Advanced care planning facilitates planning for future care in patients with chronic illness so that when they are unable to make financial and medical decisions on their own, their wishes can be carried out (Robinson et al., 2010). Since ADRD follows a gradually declining course, the literature supports early efforts by clinicians to initiate conversations around advanced directives before capacity is lost. Advanced care planning counseling is recommended to be completed within two years of diagnosis, with advanced directives documented in the medical record. Having the patient participate in advanced care planning maximizes autonomy and honors individual preferences for future care (Molony et al., 2018). However, this is rarely done (AAN APA, 2016; Robinson et al., 2010).

Advanced care planning should incorporate essential components, such as decision-making power, symptom management planning, comfort care, and end-of-life care (Alzheimer's Association Expert Task Force, 2017; Molony et al., 2018; Robinson et al., 2010). Assessing for knowledge and attitudes towards end-of-life care in both patients and family can guide clinicians in effective intervention strategies (Molony et al., 2018). Historically, dementia patients are less likely than those with cancer to complete advanced directives ~~Alzheimer's disease~~ (Robinson et al., 2010), so this population may require additional services/referrals, such as ongoing counseling and education around advanced care planning with a social worker (Molony et al., 2018).

Overall, the literature reflects that improving health care delivery systems among the ADRD population is a challenging task. Due to the complexity of the disease itself, and the many psychosocial factors which influence patients and their caregivers, approaching this collaboratively with a multidisciplinary team would be useful in reducing disparities in dementia care. There is evidence to support the benefits of implementing a multidimensional assessment protocol, such as the Alzheimer's Association's Cognitive Impairment Care Planning Toolkit, in a mental health clinic. All evidence indicates the importance of regular assessment and frequent reassessment in the key domains of cognition, function, neuropsychiatric symptoms, medication review, caregiver needs, and advanced care planning. Evidence also supports the utilization of validated screening instruments in assessment methods. Tracking disease progression and planning interventions can enhance quality of life and equip caregivers with the essential resources necessary to provide the best care possible during this challenging time.

Methods

The project had five major implementation steps:

1. Developing an efficient process to screen, assess, and appropriately bill identified patients.
2. Obtaining approval from the organization's leadership.
3. Training necessary staff on the new process.
4. Implementing the new process.
5. Evaluating the implementation and outcomes.

Each step will be discussed below in detail.

Project Intervention

Step 1: Developing an efficient process to screen, assess, and appropriately bill identified patients. Prior to project implementation, a template within the EMR program titled, Comprehensive Cognitive Impairment Assessment (CCIA), was created to document assessment results into the patients' EMR. Utilizing this template ensured uniformity in documentation, tracked disease progression and associated symptoms over time, and guided clinicians in establishing a personalized care plan for ADRD patients and their caregivers.

The universal order sheet utilized by all staff within the office was updated and a selection box for the CCIA was added to the order. In addition, a new appointment type was created into the electronic scheduling system, which allowed the selection of the new CCIA appointment type to be made. All CCIA appointments were scheduled under "psychotherapy services" for 1.15 hours in duration and automatically coded with billing code CPT 99483.

Step 2: Obtaining approval from the organization's leadership. Due to the magnitude and implications of this project, it was decided that it would run as a pilot project for the 8-week

duration. One bilingual prescriber participated in identifying and referring patients to be assessed with the CCIA toolkit, and one bilingual therapist was trained on how to conduct the assessments. This allowed time to examine its feasibility within the clinic and for adjustments before implementing it throughout the organization. Key stakeholders also decided that, to best serve the clinic's patient demographics, only validated screening instruments available in both English and Spanish should be utilized. Several screening instruments recommended by the Alzheimer's Association's Cognitive Impairment Care Planning Toolkit were replaced with other valid instruments, and all checklists were translated into Spanish to ensure all clients and their caregivers received the same checklist (see Appendices B-N).

After making modifications based on key stakeholders' recommendations, organizational approval to implement the project was obtained by all owners of the outpatient clinic. A letter of support was written by one of the owners and is listed as Appendix A. The proposed plan was submitted to the University of the Incarnate Word Institutional Review Board, and was determined to be a quality improvement project and, therefore, exempt from Institutional Review Board approval.

Step 3: Training necessary staff on the new process. Several copies of the CCIA toolkit were printed and used for training purposes. The selected prescriber and therapist received an individual training session over each standardized scale within the toolkit, scoring instructions, and an overview of the new CCIA template for documenting results. Each was given a copy of the CCIA toolkit to reference for future use (see Table 1). Lastly, all staff received education on the different roles and responsibilities of each member prior to implementation.

Step 4: Implementing the new process. Beginning on day one of implementation, all patients having a diagnosis of ADRD, MCI, or a strong suspicion of CI who was seen by the selected prescriber had orders written to receive the CCIA toolkit. An electronic list of all identified patients was compiled in a secure Microsoft TEAMS account, which enabled student, prescriber, and therapist to communicate. All identified patients and their caregivers were scheduled with a CCIA appointment prior to leaving the office. Since this was a new process within the organization, requiring an adjustment period, all patients scheduled for a CCIA appointment were flagged with electronic reminder notes that popped up at check-in. This prompted the therapist conducting the assessment to ensure the correct appointment type was scheduled to allow for adequate time to conduct the assessment (1.15 hours) and ensure correct billing.

After the client and caregiver checked in on appointment day, the therapist escorted them to a private room and handed the caregiver the toolkit folder which contained 4 tabs labeled “patient”, “caregiver (rate the patient)”, “caregiver (rate self)”, and “clinician” (See Table 1). Instructions for each screener to be completed by the caregiver were read to them. The therapist ensured literacy and understanding of the instructions by the caregiver before taking the portion of the toolkit labeled “clinician” out of the folder (see Table 1).

The therapist conducted the “clinician” portion of the toolkit with the patient, as the caregiver completed their sections simultaneously. After the therapist completed the clinician’s portion, any areas left blank or needing clarification from the caregiver’s sections were addressed. After the client and caregiver left, results were entered in the patient's EMR and sent to the prescriber to view, and a treatment plan was initiated. See the algorithm in Figure 1 to view the process.

Table 1

Summary of Toolkit Contents

Person responsible for completing	Domain	Measure	Available in Spanish
Patient/caregiver	Med list & reconciliation	Medication list	Yes
Caregiver	Staging	DSRS	No
Rating patient	Function	KATZ	Yes
	Function	Lawton-Brody	Yes
	neuropsychiatric symptoms	NPI-Q	Yes
Caregiver	Caregiver needs assessment	My Stress Thermometer	No
Rating self	Caregiver needs assessment	PHQ-9	Yes
	Caregiver needs assessment	Caregiver profile	Yes
Clinician	Cognition	SLUMS	Yes
	Depression	PHQ-9	Yes
	Safety	Safety assessment checklist	Yes
	Advanced care planning	End-of-life checklist	Yes
	Decision making capacity	Capacity Assessment	No

Step 5: Evaluating the implementation and outcomes. Throughout the course of the project, several hours a week were dedicated to evaluating its progress by chart review. An evaluation plan was designed prior to implementation to help measure each outcome stated below.

Outcome 1. Increase the number of patients with ADRD and of their caregivers who were screened using the validated, standardized assessment tools found within the toolkit by 75% in 8 weeks.

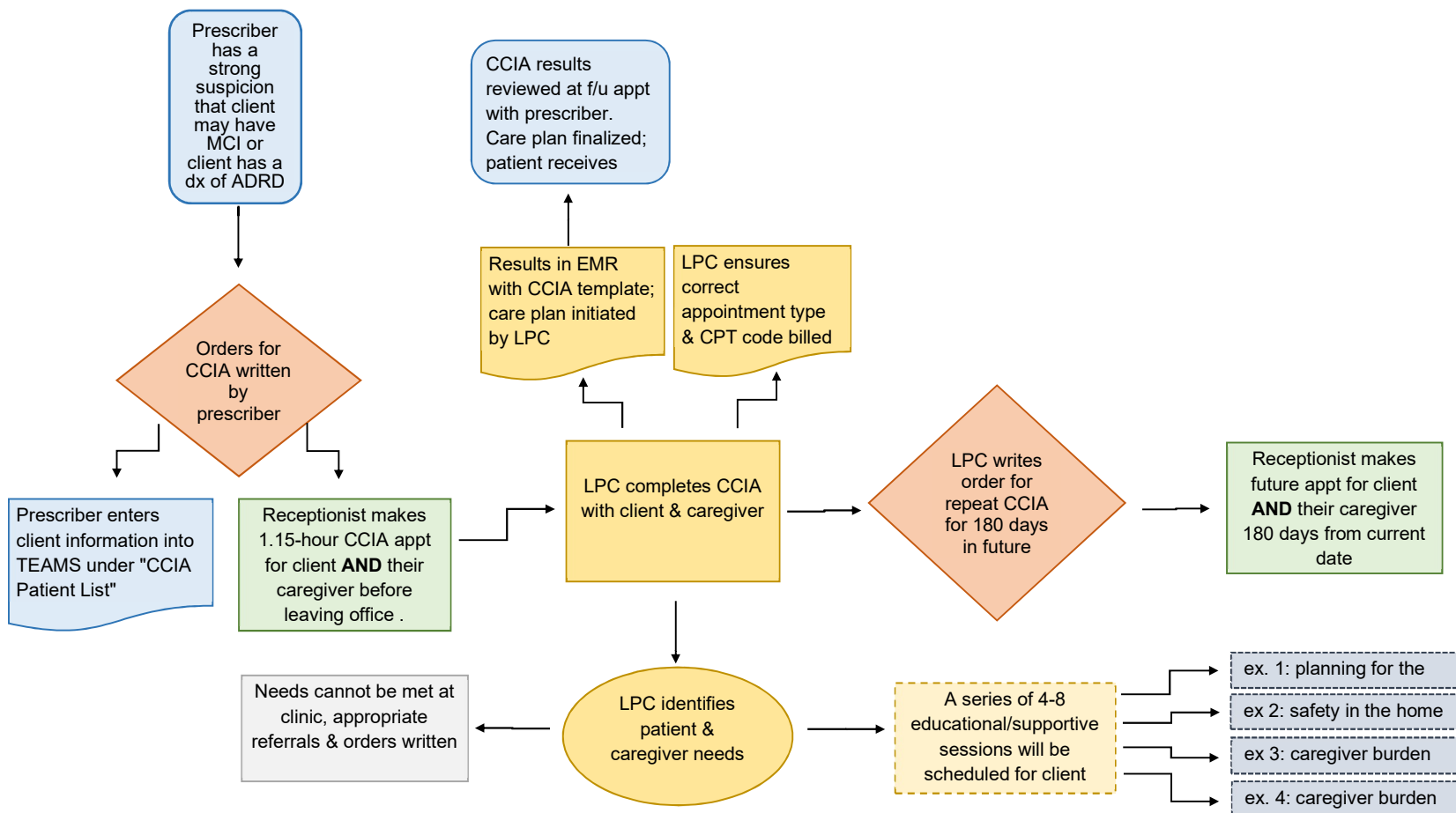


Figure 1. Comprehensive cognitive impairment assessment algorithm.

An excel sheet was created in Microsoft TEAMS to identify all patients meeting criteria and was compared with written orders for the CCIA. The charts of each identified patient were reviewed to ensure that an appointment was made to receive the CCIA. Charts of identified patients were checked weekly to see if appointments were kept. If they were, CCIA toolkit contents were verified for completion. At project completion, the percentage of patients who met criteria and were assessed with the toolkit were calculated.

Outcome 2. Increase the number of patients and/or caregivers who were identified as having unmet need(s) that received appropriate follow-up or referrals by 75% in 8 weeks.

After the completion of outcome one, the contents of each folder were analyzed by each domain individually. The scores of each screening instrument and answers to checklists were evaluated to determine if any areas needed further intervention, such as education, counseling, or referrals. After project completion, the percentage of people whose CCIA toolkits indicated an unmet need was identified and addressed with documented proof of follow up or referral, and was compared to those who had unmet needs identified but did not have follow-up sessions or declined further intervention.

Outcome 3. Increase the number of written care plans formulated from the comprehensive assessment by 75% in 8 weeks.

The completion of outcome one was needed prior to evaluating outcome three. The EMR of patients who were identified as having received the CCIA were reviewed and verified for template utilization in documenting results. The percentage of all patients who had a care plan started were calculated and compared to those who did not.

Outcome 4. Increase revenue by utilizing billing CPT code 99483 for every patient who was assessed with the toolkit within the 8 weeks.

The EMR of patients who were verified as having completed the CCIA would be checked to see if the correct appointment type was made on the date of CCIA completion. Since the appointment type was created to be coded automatically with CPT 99483, that ensured correct billing. If any patients had the incorrect appointment type entered, but received the CCIA, then CPT code(s) utilized for that specific appointment date would be logged. The percentage of appointments billed with CPT 99483 were calculated at project completion.

Organizational Barriers and Facilitators

Organizational barriers which influenced the outcomes of this project were the high levels of prescriber and therapist practice autonomy, and high employee turnover. During a two-month period, the clinic lost eight employees across several departments. Although new staff were hired, positions, roles, and responsibilities were unclear during this transitional period; many staff felt overwhelmed with the additional responsibilities assigned to them, including the implementation of this project. This caused significant delays in implementation, especially related to scheduling.

Due to significant personnel changes and lack of management oversight over the previous years, there was minimal interprofessional teamwork within the clinic. Neither departments nor clinicians communicated with one another regularly. Each practiced in silos, resulting in incongruity between professions and high levels of group autonomy in daily functions, which were both profound barriers in institutionalizing change (Tataw, 2012). Although clinicians verbalized interest in learning how to administer the CCIA, none attended the scheduled training sessions. Since this project involved multidisciplinary participation, the cultural inertia of the clinic hindered its progress, resulting in substantial delays.

According to Tataw (2012), a strong group identity weakens organizational interprofessional collaborative practice. In order to reconstruct clinical practice into synergistic processes and systems, interdisciplinary education and socialization is essential, and has been proven to improve performance and employee retention (Tataw, 2012). After significant delays in implementation, an additional clinical mentor within the organization was recruited as a facilitator. She was successful in enlisting a therapist to be trained so the project could commence. Throughout the length of the project, she continued to challenge the organizational inertia by motivating and educating clinicians on the many practice implications this project offered and strengthening interdisciplinary collaboration between departments.

Originally, the EMR served as a barrier. However, prior to implementation the EMR software was updated, which allowed for a CCIA template to be built into the system. The update was advantageous because it helped close one of the gaps in care that the organization struggled with overall, which was the underutilization of EMR capabilities.

Ethical Considerations

With uncertainty around the amount of time associated with conducting a comprehensive assessment with demented patients, and the many organizational barriers faced, a consensus was reached among major stakeholders that this would be a pilot project and that it would be limited to one prescriber to identify patients who met criteria, and one therapist to conduct assessments. Stakeholders verbalized interest in comparing longer term measures (6+ months) to evaluate the effectiveness of the toolkit before implementing it as a standard of practice within all clinics. Although not all patients were evaluated with the CCIA, or benefited from purposed interventions, they still received the current standard of care this organization employed, which met minimal standards. All clients requiring medical management or services other than

neuropsychiatric symptom management were continued to be referred to their primary care providers.

All data were kept secure and anonymous with the use of an encrypted external hard drive that met HIPAA standards. The Microsoft TEAMS account created to communicate project information between all participating clinicians was within a secured site and only medical record numbers and initials were used. Completed CCIA toolkits were kept in a locked filing cabinet in the therapist's office until its contents could be uploaded into the EMR and then destroyed.

Results

During the 8-week implementation phase, 15 patients met criteria to be screened. Eleven (73%) were screened with the CCIA toolkit. The ages of patients ranged from 68 to 90 years old, with a mean age of 78.8 years ($SD=6.92$). Of these patients, 8 (73%) were female, and 3 (27%) were male. The education levels of this sample included 3 (27%) who did not graduate high school, 5 (46%) who graduated from high school but had no further education, and 3 (27%) who pursued higher education. The diagnoses of this sample included 2 (18%) who had a suspicion of dementia and were given ICD-9 of R41.9—unspecified symptoms and signs involving cognitive functions and awareness; 6 (55%) were given ICD-9 of F02.81—dementia in other diseases with behavioral disturbances; 1 (9%) were given ICD-9 of F01.50—vascular dementia without behavioral disturbances; and 2 (18%) were diagnosed with ICD-9 F02.80—dementia in other diseases without behavioral disturbances. Five (46%) lived with their caregiver(s), 4 (36%) lived independently, and 2 (18%) lived in an assisted living facility. See Table 2.

All 10 caregivers of these patients were female (100%). One patient who lived in an assisted living facility had no specific caregiver and was excluded from the sample. Of the

caregivers, 7 (70%) were children of the patient, 2 (20%) were spouses, and 1 (10%) was another relative. All caregivers had contact with the patient five or more days of the week. See Table 3.

Outcome 1

Increase the number of patients with ADRD and of their caregivers who were screened using the validated, standardized assessment tools found within the toolkit by 75% in 8 weeks.

Table 2

Demographic Characteristics of Patients

Characteristic	No. (%) of Patients (<i>n</i> = 11)
Gender	
Male	3 (27%)
Female	8 (73%)
Age	
60-69	1 (9%)
70-79	4 (37%)
80-89	5 (45%)
90-100	1 (9%)
Education	
Less than HS graduate	3 (27%)
HS graduate	5 (46%)
College	3 (27%)
Living status	
Lives alone	4 (36%)
Lives with CG	5 (46%)
Lives in ALF	2 (18%)
Diagnosis	
R41.9	2 (18%)
F01.50	1 (9%)
F02.80	2 (18%)
F02.81	6 (55%)

Note. HS= high school; CG= caregiver; ALF= assisted living facility

Fifteen patients were scheduled with CCIA appointments by the selected prescriber; eleven (73%) were screened with the CCIA toolkit, and four (27%) did not show up, or rescheduled their appointment for a later time which was not within the implementation phase of the pilot project (see Figure 2). One of the two patients who lived at an ALF did not bring a

caregiver to his appointment, so the toolkit was not completed in its entirety. This brought the caregiver sample population to 10.

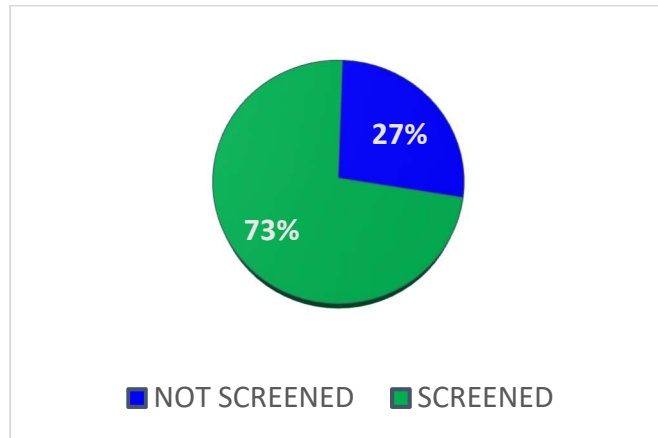


Figure 2. Screened patients.

Table 3

Summary Characteristics of Caregivers

Characteristic	No. (%) of CG (<i>n</i> = 10)
Gender	
Male	0 (0%)
Female	10 (100%)
Relationship to patient	
Child	7 (70%)
Spouse	2 (20%)
Sibling	0 (0%)
Other relative	1 (10%)
Amount of contact per week	
>than 1 day per week	0 (0%)
1-2 days per week	0 (0%)
3-4 days per week	0 (0%)
5 or more days per week	10 (100%)

Outcome 2

Increase the number of patients and/or caregivers who were identified as having unmet need(s) that received appropriate follow-up or referrals by 75% in 8 weeks.

All screened patients and caregivers had several unmet needs that required addressing (see Table 4). The top needs were patients exhibiting neuropsychiatric symptoms (nine patients; 81%), patients exhibiting depression (eight patients; 73%), patients displaying deterioration of health functional status (seven patients; 64%), safety concerns in the home (seven patients; 64%), and caregivers reporting stress at a moderate level or higher (seven caregivers; 64%). Six of the seven caregivers who reported at least a moderate level of stress on the My Stress Thermometer (see Appendix F), or a PHQ-9 score of 10 or higher indicating moderate depression, were referred for therapy. Three chose to do therapy at the same clinic; one caregiver was already seeing a therapist on a regular basis, and the remaining caregivers declined therapy.

All nine patients who were displaying neuropsychiatric symptoms had their medications adjusted by the prescriber at their next appointment, as well as the eight patients who reported depression. Three patients and their caregivers were referred to an Alzheimer's activity center close to their homes that provided different types of services and supports to families. All patients and caregivers were given a list of community and national resources, and the therapist highlighted and explained the resources which s/he thought would most benefit the patient and caregiver. All patients were given a referral to their primary care provider to initiate case management services.

Outcome 3

Increase the number of written care plans formulated from the comprehensive assessment by 75% in 8 weeks.

All 11 patients screened with the CCIA toolkit had care plans initiated with the newly created template, and all were given a copy of their individualized care plan to reinforce goals set, and current treatment plan.

Outcome 4

Increase revenue by utilizing billing CPT code 99483 for every patient who was assessed with the toolkit within 8 weeks.

Although CPT code 99483 was coded into the appointment type for billing, not all patients qualified for reimbursement with this code. Five (45%) patients who were insured with primary Medicare or Tricare were billed with 99483 for services; however, six (55%) patients were not primarily insured by Medicare or Tricare, so the billing department chose to utilize CPT codes 96132 + 96133 for services to those patients.

Table 4

Identified Needs and Referrals Initiated

Need	No. (%) of Patients (<i>n</i> = 11)	No. (%) of CG (<i>n</i> = 10)	% of Appropriate Referrals Initiated
Neuropsychiatric symptoms	9 (81%)		100%
Depression	8 (73%)		100%
Deterioration of health function	7 (64%)		100%
Safety concerns	7 (64%)		100%
CG stress		7 (70%)	100%
End-of-life planning		6 (60%)	0%
Support/Resources		6 (60%)	100%
Disease knowledge		5 (50%)	0%
Depression		2 (20%)	100%

Note. CG = caregiver.

Discussion

During the first few weeks of implementation, not all patients who met criteria were identified in a timely manner, which led to missed opportunities for screening. Not until another agency facilitator was added to aid in the project were patients identified and given appointments to be screened. Due to the high practice autonomy, lack of multidisciplinary collaboration, and time limits on this project, the implementation phase was reduced to 8 weeks and was limited to one prescriber and one therapist. Patients who were initially missed were called and given an appointment date to be screened. Although 4 (26%) patients missed or rescheduled their appointments, this turnout is synonymous with all patient populations in the clinic. Several patients felt uneasy being tested for cognitive impairment because they did not want a confirmation of dementia and were scared that their independence might be taken away. While the literature indicates that clinicians should disclose any diagnosis of dementia or cognitive impairment (AAN APA, 2016), this was difficult to accomplish with certain patients and deemed detrimental to their care.

The NPI-Q¹ was originally set for the clinician to conduct with the caregiver. However, this led to arguments between the patient and caregiver during the assessment. It was then placed under the caregiver's tab, so the caregiver could rate the patient silently. After revising the placement of the NPI-Q¹ screening instrument, there were no more arguments during the appointments, and assessments were completed without incident. The prescriber also utilized the NPI-Q¹ during the patient's medication management appointment to assess for severity of symptoms. Since neuropsychiatric symptoms are known to be the most distressing ramification of ADRD, and is the leading factor in contributing to caregiver burden, patients should be

screened regularly to manage negative symptoms to help reduce poor health outcomes in both patients and caregivers (Adelman et al., 2014; Scales et al., 2018; Terum et al., 2017).

The results of this pilot project were consistent with the literature, in that ADRD is extremely complex to manage due to the many needs of both patients and caregivers. Both patients and caregivers need personalized, individual attention to their needs, and should be connected to services to promote health and independence for as long as possible (Alzheimer's Association Expert Taskforce, 2016).

Limitations

This project had several limitations, beginning with time constraints. Due to the allotted time within the agency, the implementation phase was only 8 weeks. This limited the number of participants who were screened, and restricted measurement of its impact on enhancing patient care. The time constraints further limited ability to review how much revenue the proposed billing code actually brought in since reimbursement often takes several months after submitting claims. Therefore, only projected reimbursement rates could be measured for this pilot project.

Another limitation was the amount of autonomy all clinicians possessed in patient management. The leadership structure within the agency only recommended that prescribers and therapists follow new protocols, but did not require their participation, so buy-in was difficult. However, as the project progressed, several prescribers and therapists expressed interest in becoming familiar with the CCIA, which added to future sustainability.

Recommendations

The most recognized and detrimental gap in care within current healthcare systems among this population is the lack of care planning services (Alzheimer's Association Expert Taskforce, 2016). Failure to recognize the needs of these patients and to initiate referrals or

services for community resources, such as support groups, adult day programs, and education on ADRD, will only continue to add to the global burden of this disease. Building an educational program for patients, caregivers and family members within the clinic would be beneficial in closing this gap in care. As of now, the clinic is only providing psychotherapy services for patients and caregivers who reported moderate to high levels of stress, anxiety, or depression. However, the clinic employs people in a variety of disciplines who are capable of teaching in many areas that were identified as an unmet need. Incorporating a program designed to inform, educate, support, and navigate the healthcare system would bring in extra revenue, and help reduce health care cost associated with the burden of ADRD.

The literature further indicates that, due to the complexity of care, case management services for these individuals is imperative to help navigate the healthcare system. Since this clinic did not have any case managers, all patients were given a referral to their primary care providers to initiate case management services. It is recommended that this clinic strengthen their referral process to avoid a delay in services caused by going through primary care providers. Employing a case manager, and partnering with community resources and local agencies, would greatly benefit patients and their caregivers by allowing them to connect to resources faster.

Implications for Practice

With the misconception that nothing can be done for these individuals, the lack of available reimbursement incentives for services, and the fear that time constraints pose in conducting a thorough assessment, proactive and preventative steps that could enhance care are not commonly taken (Alzheimer's Association Expert Taskforce, 2016; Fazio et al., 2018). This pilot project proved that a face-to-face comprehensive assessment can successfully be completed within a 1.15-hour time frame, and there are several CPT codes available to bill for

this service. Within 8 weeks, this pilot project which was limited to just one prescriber and one therapist to identify, screen, and care plan, billed \$2,617.64 for reimbursement services on 10 patients. Implementing the Alzheimer's Association's Cognitive Impairment Care Planning Toolkit organization-wide could potentially make the clinic \$331,430.40 to \$466,272 a year. This was calculated by taking the number of active patients in the clinic (12,000) and multiplying by 8%, the estimated percentage ADRD population (960). CPT codes 96132 in combination with 96138 reimburses \$172.62, and CPT code 99483 reimburses \$242.83. Reimbursable amounts were multiplied by 960 and multiplied by 2, since the guidelines recommend this assessment to be done twice a year.

The DNP-prepared Advanced Practice Registered Nurses (APRN) was essential in executing organizational change within this outpatient clinic. DNP-prepared APRNs are practice leaders and experts at implementing research in the clinical setting (Sonson, 2013), thus have been trained to exhibit excellent clinical judgement, communication skills, conflict management strategies, leadership, professionalism, and business practices that help make systems more cost effective and efficient (Sonson, 2013). All of these qualities are imperative in operationalizing systems change, as well as altering the clinical culture to a more synergistic collaborative environment.

The role of the APRN is to manage patient outcomes in a holistic way, and this toolkit helps address the holistic picture of the patients' needs by assessing the ten core domains the guidelines recommend, twice a year: cognition, function, staging of cognitive impairment, decision-making, neuropsychiatric symptoms, depression, caregiver needs, medication review and reconciliation, safety, and advanced care planning.

References

- Adelman, R., Tmanova, L., Delgado, D., Dion, S., & Lachs, M. (2014). Caregiver burden: A clinical review. *JAMA*, 311, 1052-1059. <https://doi.org/10.1001/jama.2014.304>
- Alzheimer's Association. (2018a). *Cognitive assessment and care planning services: Alzheimer's Association expert task force recommendations and tools for implementation*. Retrieved from <https://www.alz.org/careplanning/downloads/cms-consensus.pdf>
- Alzheimer's Association. (2018b). *2018 Alzheimer's disease facts and figures*. Retrieved from <https://www.alz.org/media/Documents/facts-and-figures-2018-r.pdf>
- Alzheimer's Association. (2018c). What is dementia. Retrieved from <https://www.alz.org/alzheimers-dementia/what-is-dementia>
- Alzheimer's Association Expert Task Force. (2017). *Cognitive impairment care planning toolkit*. Retrieved from <https://www.alz.org/careplanning/downloads/care-planning-toolkit.pdf>
- Alzheimer's Association Expert Taskforce. (2016). *Alzheimer's association's expert task force consensus statement on the CMS proposed billing code for assessment and care planning for individuals with cognitive impairment*. Retrieved from http://act.alz.org/site/DocServer/Taskforce_Consensus_Statement_FINAL.pdf?docID=51841
- Alzheimer's Impact Movement. (2018). About the Alzheimer's impact movement. Retrieved from <https://alzimpact.org/about>
- American Academy of Neurology, American Psychiatric Association. (2016). *Dementia management quality measurement set update*. Retrieved from https://www.aan.com/siteassets/home-page/policy-and-guidelines/quality/quality-measures/15dmmeasureset_pg.pdf

- Calkins, M. (2018). From research to application: Supportive and therapeutic environments for people living with dementia. *The Gerontologist*, 58, S114-S128.
<https://doi.org/10.1093/geront/gnx146>
- Cunningham, N., Cunningham, T., & Roberston, J. (2018). Understanding and measuring the wellbeing of carers of people with dementia. *The Gerontologist*, 00, 1-13.
<https://doi.org/10.1093/geront/gny018>
- Family Caregiver Alliance. (2006). *Caregivers count too! A toolkit to help practitioners assess the needs of family caregivers*. Retrieved from https://www.caregiver.org/sites/caregiver.org/files/pdfs/Assessment_Toolkit_20060802.pdf
- Fazio, S., Pace, D., Maslow, K., Zimmerman, S., & Kallmyer, B. (2018). Alzheimer's Association dementia care practice recommendations. *The Gerontologist*, 58, S1-S9.
<https://doi.org/doi:10.1093/geront/gnx182>
- Feliciano, L., Horning, S., Klebe, K., Anderson, S., Cornwell, E., & Davis, H. (2013). Utility of the SLUMS as a cognitive screening tool among a nonveteran sample of older adults. *The American Journal of Geriatric Psychiatry*, 21, 623-630. <https://doi.org/10.1016/j.jagp.2013.01.024>
- Gerontological Society of America Workgroup. (2017). *Approaches and tools for primary care providers*. Retrieved from <https://www.geron.org/images/gsa/kaer/gsa-kaer-toolkit.pdf>
- Howland, M., Tatsouka, C., Smyth, K., & Sajatovic, M. (2016). Detecting change over time: A comparison of the SLUMS exam and the MMSE in older adults at risk for cognitive decline. *CNS Neuroscience & Therapeutics*, 22, 413-419. <https://doi.org/10.1111/cns.12515>

- Hudani, Z., & Rojas-Fernandez, C. (2016). A scoping review on medication adherence in older patients with cognitive impairment or dementia. *Research in Social and Administrative Pharmacy*, 12, 815-829. <https://doi.org/10.1016/j.sapharm.2015.11.011>
- Livingston, G., Barber, J., Rapaport, P., Knapp, M., Griffin, M., King, D., ... Cooper, C. (2014). Long-term clinical and cost-effectiveness of psychological intervention for family carers of people with dementia: a single-blind, randomised, controlled trial. *The Lancet Psychiatry*, 1(December), 539-548. [https://doi.org/10.1016/S2215-0366\(14\)00073-X](https://doi.org/10.1016/S2215-0366(14)00073-X)
- Maloney, B., & Lahiri, D. (2016). Epigenetics of dementia: understanding the disease as a transformation rather than a state. *The Lancet Neurology*, 15, 760-774. Retrieved from <https://www-clinicalkey-com.uiwtx.idm.oclc.org/#!/content/playContent/1-s2.0-S147444221600065X?returnurl=null&referrer=null>
- Maslow, K., & Fortinsky, R. (2018). Nonphysician care providers can help to increase detection of cognitive impairment and encourage diagnostic evaluation for dementia in community and residential care settings. *The Gerontologist*, 58, S20-S31. <https://doi.org/doi:10.1093/geront/gnx171>
- Moelter, S., Glenn, M., Xie, S., Chittams, J., Clark, C., Watson, I., & Arnold, S. (2015). The dementia severity rating scale predicts clinical dementia rating sum of boxes scores. *Alzheimer Disease and Associated Disorders*, 29, 158-160. <https://doi.org/10.1097/WAD.0000000000000031>
- Molony, S., Kolanowski, A., Van Haitsma, K., & Rooney, K. (2018). Patient-centered assessment and care planning. *The Gerontologist*, 58, S32-S47. <https://doi.org/10.1093/geront/gnx173>

- Moriarty, A., Gilbody, S., McMillan, D., & Manea, L. (2015). Screening and case finding for major depressive disorder using the Patient Health Questionnaire (PHQ-9): a meta-analysis. *General Hospital Psychiatry*, 37, 567–576. <https://doi.org/10.1016/j.genhosppsych.2015.06.012>
- Musa, G., Henriquez, F., Muñoz-Neira, C., Delgado, C., Lillo, P., & Slachevsky, A. (2017). Utility of the neuropsychiatric inventory questionnaire (NPI-Q) in the assessment of a sample of patients with Alzheimer's disease in Chile. *Dement Neuropsychol*, 11, 129-136. <https://doi.org/10.1590/1980-57642016dn11-020005>
- Odenheimer, G., Borson, S., Sanders, A., Swain-Eng, R., Kyomen, H., Tierney, S., ... Johnson, J. (2013). Quality improvement in neurology: Dementia management quality measures. *Journal of the American Geriatrics Society*, 62, 558-561. <https://doi.org/10.1111/jgs.12630>
- Physician Consortium for Performance Improvement. (2011). *Dementia performance measurement set*. Retrieved from <http://neurofoundation.net/globals/axon/assets/9493.pdf>
- Prizer, L., & Zimmerman, S. (2017). Progressive support for activities of daily living for persons living with dementia. *The Gerontologist*, 58, S74-S87. <https://doi.org/10.1093/geront/gnx103>
- Robinson, L., Bamford, C., Beyer, F., Clark, A., Emmer, C., Exley, C., ... Rousseau, N. (2010). Patient preferences for future care- how can advance care planning become embedded into dementia care: A study protocol. *BMC Geriatrics*, 10(2), 1-6. Retrieved from <https://bmgeriatr.biomedcentral.com/articles/10.1186/1471-2318-10-2>

- Scales, K., Zimmerman, S., & Miller, S. (2018). Evidence-based nonpharmacological practices to address behavioral and psychological symptoms of dementia. *The Gerontologist*, 58, S88-S102. <https://doi.org/10.1093/geront/gnx167>
- Schoenmakers, B., Buntinx, F., & DeLepeleire, J. (2010). Supporting the dementia family caregiver: The effect of home care interventions on general well-being. *Aging and Mental Health*, 14, 44-56. <https://doi.org/10.1080/13607860902845533>
- Sonson, S. (2013). DNP-prepared APRNs: Leading the Magnet® charge. *Nursing Management*, 49-52. doi:10.1097/01.NUMA.0000431425.39076.81
- Tataw, D. (2012). Toward human resource management inter-professional health practice: Linking organizational culture, group identity and individual autonomy. *International Journal of Health Planning & Management*, 27, 130–149. <https://doi.org/10.1002/hpm.2098>
- Terum, T., Anderson, J., Rongve, A., Aarsland, D., SvendsboeI, E., & Testad, I. (2017). The relationship of specific items on the Neuropsychiatric Inventory to caregiver burden in dementia: A systematic review. *The International Journal of Geriatric Psychiatry*, 32, 703-717. <https://doi.org/10.1002/gps.4704>
- U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Aging. (2017). *Basics of Alzheimer's disease and dementia*. Retrieved from <https://www.nia.nih.gov/health/what-dementia>
- Whitlatch, C., & Orsulic-Jeras, S. (2018). Meeting the informational, educational, and psychosocial support needs of persons living with dementia and their family caregivers. *The Gerontologist*, 58, S58-S73. <https://doi.org/10.1093/geront/gnx162>

- Wiener, J., Gould, E., Shuman, S., Kaur, R., & Ignaczak, M. (2016). *Examining models of dementia care*. (ASPE Final Report No. 0212704.017.000.001). Washington, D.C.: RTI International
- Workgroup on Alzheimer's Disease and Other Dementias. (2010). *Practice guideline for the treatment of patients with Alzheimer's disease and other dementias*. Retrieved from https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/alzheimers.pdf
- World Health Organization. (2008). *Age-friendly primary health care centres toolkit*. Retrieved from https://www.who.int/ageing/publications/AF_PHC_Centretoolkit.pdf

Appendix A
Letter of Support

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]


December 1, 2018

Raquel Garcia-Priestly
PMHNP DNP Student
University of the Incarnate Word
4301 Broadway St.
San Antonio, TX 78209

Dear Raquel Garcia-Priestly:

I have reviewed your project proposal for establishing a systematic process to improve the care and support of patients with Alzheimer's disease and related dementias, and grant permission for [REDACTED] to be used as the site of your DNP project. I support your efforts in reducing health disparities in our community by implementing evidence-based care interventions to improve clinical practice. I look forward to working with you on this project and seeing the results.

Sincerely,


[REDACTED]
[REDACTED]

Appendix B

Medication List

List all medications

Medications	Dose	Frequency	Review Date

Name of caregiver who assists with or oversees medication management:

Appendix C

Dementia Severity Rating Scale (DSRS)

PARTICIPANT'S NAME: _____

DATE: _____ PERSON COMPLETING

FORM: _____ Please circle the most appropriate answer.

Do you live with the participant? No YesHow much contact do you have with the participant? Less than 1 day per week 1 day/week 2 days/week 3-4 days/week 5 or more days per weekRelationship to participant

Self Spouse Sibling Child Other Family Friend Other _____

In each section, please circle the number that **most closely applies** to the participant. This is a general form, so no one description may be exactly right -- please circle the answer that seems to apply most of the time.

Please circle only one number per section, and be sure to answer all questions.

MEMORY

- 0 Normal memory.
- 1 Occasionally forgets things that they were told recently. Does not cause many problems.
- 2 Mild consistent forgetfulness. Remembers recent events but often forgets parts.
- 3 Moderate memory loss. Worse for recent events. May not remember something you just told them. Causes problems with everyday activities.
- 4 Substantial memory loss. Quickly forgets recent or newly-learned things. Can only remember things that they have known for a long time.
- 5 Does not remember basic facts like the day of the week, when last meal was eaten or what the next meal will be.
- 6 Does not remember even the most basic things.

SPEECH AND LANGUAGE

- 0 Normal ability to talk and to understand others.
- 1 Sometimes cannot find a word, but able to carry on conversations.
- 2 Often forgets words. May use the wrong word in its place. Some trouble expressing thoughts and giving answers.
- 3 Usually answers questions using sentences but rarely starts a conversation.
- 4 Answers questions, but responses are often hard to understand or don't make sense. Usually able to follow simple instructions.
- 5 Speech often does not make sense. Can not answer questions or follow instructions.
- 6 Does not respond most of the time.

RECOGNITION OF FAMILY MEMBERS

- 0 Normal - recognizes people and generally knows who they are.
- 1 Usually recognizes grandchildren, cousins or relatives who are **not** seen frequently but may not recall how they are related.
- 2 Usually does not recognize family members who are not seen frequently. Is often confused about how family members such as grandchildren, nieces, or nephews are related to them.
- 3 Sometimes does not recognize close family members or others who they see frequently. May not recognize their children, brothers, or sisters who are not seen on a regular basis.
- 4 Frequently does not recognize spouse or caregiver.
- 5 No recognition or awareness of the presence of others.

ORIENTATION TO TIME

- 0 Normal awareness of time of day and day of week.
- 1 Some confusion about what time it is or what day of the week, but not severe enough to interfere with everyday activities.
- 2 Frequently confused about time of day.
- 3 Almost always confused about the time of day.
- 4 Seems completely unaware of time.

ORIENTATION TO PLACE

- 0 Normal awareness of where they are even in new places.
- 1 Sometimes disoriented in new places.
- 2 Frequently disoriented in new places.
- 3 Usually disoriented, even in familiar places. May forget that they are already at home.
- 4 Almost always confused about place.

ABILITY TO MAKE DECISIONS

- 0 Normal - as able to make decisions as before.
- 1 Only some difficulty making decisions that arise in day-to-day life.
- 2 Moderate difficulty. Gets confused when things get complicated or plans change.
- 3 Rarely makes any important decisions. Gets confused easily.
- 4 Not able to understand what is happening most of the time.

SOCIAL AND COMMUNITY ACTIVITY

- 0 Normal - acts the same with people as before
- 1 Only mild problems that are not really important, but clearly acts differently from previous years.
- 2 Can still take part in community activities without help. May appear normal to people who don't know them.
- 3 Often has trouble dealing with people outside the home without help from caregiver. Usually can participate in quiet home activities with friends. The problem is clear to anyone who sees them.
- 4 No longer takes part in any real way in activities at home involving other people. Can only deal with the primary caregiver.
- 5 Little or no response even to primary caregiver.

HOME ACTIVITIES AND RESPONSIBILITIES

- 0 Normal. No decline in ability to do things around the house.
- 1 Some problems with home activities. May have more trouble with money management (paying bills) and fixing things. Can still go to a store, cook or clean. Still watches TV or reads a newspaper with interest and understanding.
- 2 Makes mistakes with easy tasks like going to a store, cooking or cleaning. Losing interest in the newspaper, TV or radio. Often can't follow a long conversation on a single topic.
- 3 Not able to shop, cook or clean without a lot of help. Does not understand the newspaper or the TV. Cannot follow a conversation.
- 4 No longer does any home-based activities.

PERSONAL CARE - CLEANLINESS

- 0 Normal. Takes care of self as well as they used to.
- 1 Sometimes forgets to wash, shave, comb hair, or may dress in wrong type of clothes. Not as neat as they used to be.
- 2 Requires help with dressing, washing and personal grooming.
- 3 Totally dependent on help for personal care.

EATING

- 0 Normal, does not need help in eating food that is served to them.
- 1 May need help cutting food or have trouble with some foods, but basically able to eat by themselves.
- 2 Generally able to feed themselves but may require some help. May lose interest during the meal.
- 3 Needs to be fed. May have trouble swallowing.

CONTROL OF URINATION AND BOWELS

- 0 Normal - does not have problems controlling urination or bowels except for physical problems.
- 1 Rarely fails to control urination (generally less than one accident per month).
- 2 Occasional failure to control urination (about once a week or less).
- 3 Frequently fails to control urination (more than once a week).
- 4 Generally fails to control urination and frequently can not control bowels.

ABILITY TO GET FROM PLACE TO PLACE

- 0 Normal, able to get around on their own. (May have physical problems that require a cane or walker).
- 1 Sometimes gets confused when driving or taking public transportation, especially in new places. Able to walk places alone.
- 2 Cannot drive or take public transportation alone, even in familiar places. Can walk alone outside for short distances. Might get lost if walking too far from home.
- 3 Cannot be left outside alone. Can get around the house without getting lost or confused.
- 4 Gets confused and needs help finding their way around the house.
- 5 Almost always in a bed or chair. May be able to walk a few steps with help, but lacks sense of direction.
- 6 Always in bed. Unable to sit or stand.

INTERPRETATION

Add up the points for all sections.

Score

0-18 --- Mild

19-36 -- Moderate

37-54 -- Severe

Author:

Dr. Christopher M Clark, Alzheimer's Disease Core Center
Department of Neurology, University of Pennsylvania, Philadelphia, Pennsylvania, USA

Appendix D

KATZ Index of Independence in Activities of Daily Living

Katz Index of Independence in Activities of Daily Living		
Activities Points (1 or 0)	Independence (1 Point)	Dependence (0 Points)
	NO supervision, direction or personal assistance.	WITH supervision, direction, personal assistance or total care.
BATHING Points: _____	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.	(0 POINTS) Need help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing
DRESSING Points: _____	(1 POINT) Get clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing self or needs to be completely dressed.
TOILETING Points: _____	(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.
TRANSFERRING Points: _____	(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transfer aids are acceptable	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.
CONTINENCE Points: _____	(1 POINT) Exercises complete self control over urination and defecation.	(0 POINTS) Is partially or totally incontinent of bowel or bladder
FEEDING Points: _____	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.
TOTAL POINTS: _____ SCORING: 6 = High (<i>patient independent</i>) 0 = Low (<i>patient very dependent</i>)		

Appendix E

Lawton-Brody Instrumental Activities of Daily Living Scale

LAWTON - BRODY			
INSTRUMENTAL ACTIVITIES OF DAILY LIVING SCALE (I.A.D.L.)			
Scoring: For each category, circle the item description that most closely resembles the client's highest functional level (either 0 or 1).			
A. Ability to Use Telephone		E. Laundry	
1. Operates telephone on own initiative-looks up and dials numbers, etc.	1	1. Does personal laundry completely	1
2. Dials a few well-known numbers	1	2. Launders small items-rinses stockings, etc.	1
3. Answers telephone but does not dial	1	3. All laundry must be done by others	0
4. Does not use tele hone at all	0		
B. Shopping		F. Mode of Transportation	
1. Takes care of all shopping needs independently	1	1. Travels independently on public transportation or drives own car	1
2. Shops independently for small purchases	0	2. Arranges own travel via taxi, but does not otherwise use public transportation	1
3. Needs to be accompanied on any shopping trip	0	3. Travels on public transportation when accompanied by another	1
4. Completely unable to shop	0	4. Travel limited to taxi or automobile with assistance of another	0
		5. Does not travel at all	0
C. Food Preparation		G. Responsibility for Own Medications	
1. Plans, prepares and serves adequate meals independently	1	1. Is responsible for taking medication in correct dosages at correct time	1
2. Prepares adequate meals if supplied with ingredients	0	2. Takes responsibility if medication is prepared in advance in separate dosage	0
3. Heats, serves and prepares meals, or prepares meals, or prepares meals but does not maintain adequate diet	0	3. Is not capable of dispensing own medication	0
4. Needs to have meals prepared and served	0		
D. Housekeeping		H. Ability to Handle Finances	
1. Maintains house alone or with occasional assistance (e.g. "heavy work domestic help")	1	1. Manages financial matters independently (budgets, writes checks, pays rent, bills, goes to bank), collects and keeps track of income	1
2. Performs light daily tasks such as dish washing, bed making	1	2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.	1
3. Performs light daily tasks but cannot maintain acceptable level of cleanliness	1	3. Incapable of handling money	0
4. Needs help with all home maintenance tasks	1		
5. Does not participate in any housekeeping tasks	0		
Score		Score	
Total Score _____			
A summary score ranges from 0 (low function, dependent) to 8 (high function, independent) for women and 0 through 5 for men to avoid potential gender bias.			

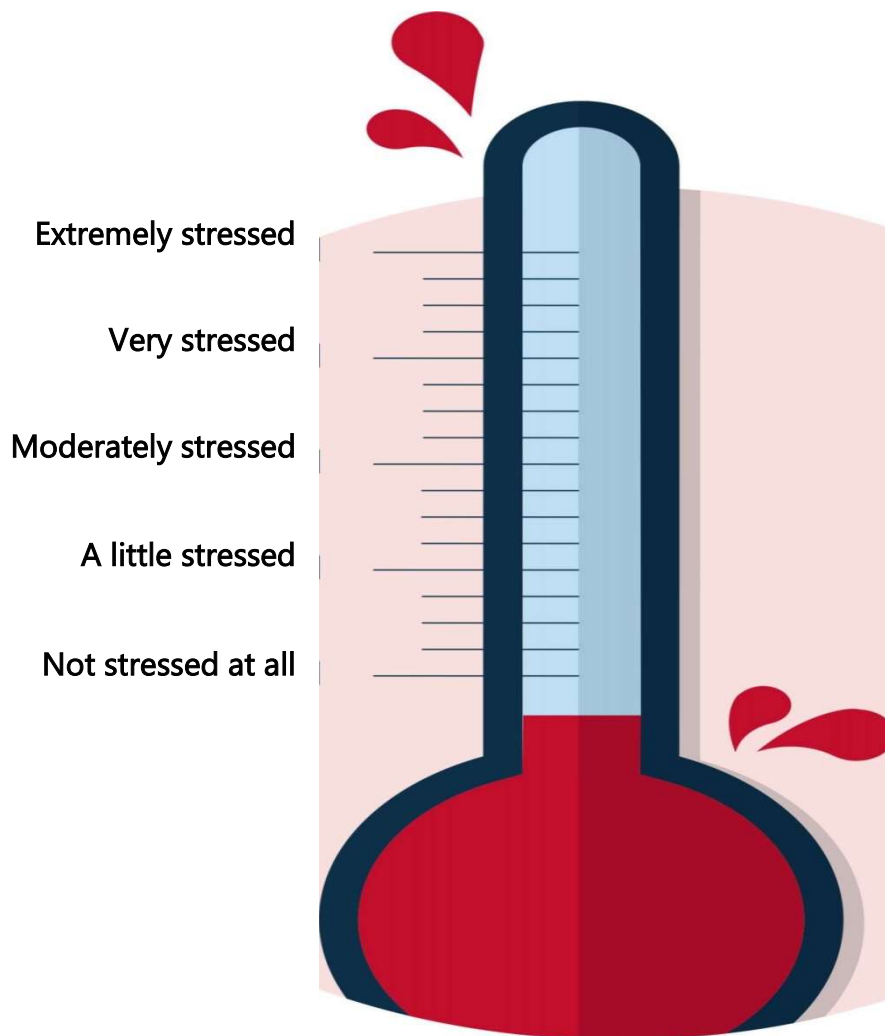
Appendix F

My Stress Thermometer

My Stress Thermometer

STRESS: Feeling tense, nervous, anxious, restless, or unable to sleep because your mind is troubled all the time. *

Please mark your current stress level on the thermometer:



ID: _____ Date: _____

Appendix G

Patient Health Questionnaire (PHQ-9)

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: _____ DATE: _____

Over the last 2 weeks, how often have you been
bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

add columns + +


(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card). TOTAL:

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all	_____
	Somewhat difficult	_____
	Very difficult	_____
	Extremely difficult	_____

Appendix H

Caregiver Profile

CAREGIVER PROFILE			42
Questions to ask the individuals who will provide care and assistance to the patient with dementia			
Questions	Yes	No	Resources
Do you understand Alzheimer's disease and other dementias?			<p>Alzheimer's Association® alz.org 800.272.3900 Provides disease education, support groups, and personalized care consultation in person, online and through a free 24/7 Helpline.</p> <p>Alzheimer's Disease Education and Referral (ADEAR) nia.nih.gov/alzheimers 800.438.4380 Offers disease information online or by phone for individuals with Alzheimer's or other dementias and their families.</p>
Do you know where you can obtain additional information about the disease?			<p>Administration on Community Living aclhhs.gov Supports individuals living with Alzheimer's or other dementias and their caregivers by increasing access to community resources.</p>
Are you able and willing to provide care and/or assistance?			<p>Alzheimer's Association alz.org 800.272.3900 Care consultants are available to talk all day, every day via the 24/7 Helpline, and support groups take place in communities nationwide.</p> <p>ALZConnected® alzconnected.org Online community that connects individuals facing the disease and provides online support.</p> <p>Community Resource Finder alz.org/CRF Find local programs, resources and support services.</p>
Do you know where you can receive support as a caregiver?			<p>Aging Life Care Association aginglifecare.org Locate a geriatric care manager.</p> <p>Family Caregiver Alliance caregiver.org Offers support for family and friends providing long-term, in-home care.</p> <p>Eldercare Locator eldercare.gov Connects older adults and their caregivers with local services and provides resource referrals and contact information for state and local agencies on aging.</p>

alz.org/careplanning | 800.272.3900
 
 alzheimer's association®

Appendix I

VAMC SLUMS Examination

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 ____/3 ____/3 ____/5 ____/2 ____/4 ____/2 ____/8	<p>1. What day of the week is it?</p> <p>2. What is the year?</p> <p>3. What state are we in?</p> <p>4. Please remember these five objects. I will ask you what they are later.</p> <p style="text-align: center;">Apple Pen Tie House Car</p> <p>5. You have \$100 and you go to the store and buy a dozen apples for \$3 and a tricycle for \$20.</p> <p>1 How much did you spend?</p> <p>2 How much do you have left?</p> <p>6. Please name as many animals as you can in one minute.</p> <p style="text-align: center;">0 0-4 animals 1 5-9 animals 2 10-14 animals 3 15+ animals</p> <p>7. What were the five objects I asked you to remember? 1 point for each one correct.</p> <p>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.</p> <p style="text-align: center;">0 87 1 649 1 8537</p> <p>9. This is a clock face. Please put in the hour markers and the time at ten minutes to eleven o'clock.</p> <p>2 Hour markers okay</p> <p>2 Time correct</p> <p>10. Please place an X in the triangle.</p> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; width: 40px; height: 40px; margin-right: 10px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 10px; position: relative;"> <div style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; border-left: 1px solid black; border-right: 1px solid black;"></div> </div> <div style="border: 1px solid black; width: 20px; height: 40px; margin-left: 10px;"></div> </div> <p>1 Which of the above figures is largest?</p> <p>11. I am going to tell you a story. Please listen carefully because afterwards, I'm going to ask you some questions about it.</p> <p style="padding-left: 20px;">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.</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <p>2 What was the female's name?</p> <p>2 What work did she do?</p> </div> <div style="display: flex; justify-content: space-between;"> <p>2 When did she go back to work?</p> <p>2 What state did she live in?</p> </div>
--	--

____ TOTAL SCORE

SCORING		
High School Education		Less than High School Education
27-30	NORMAL	25-30
21-26	MILD NEUROCOGNITIVE DISORDER	20-24
1-20	DEMENTIA	1-19

CLINICIAN'S SIGNATURE _____

DATE _____

TIME _____

SH Tariq, N Tumosa, JT Chibnall, HM Perry III, and JE Morley. The Saint Louis University Mental Status (SLUMS) Examination for detecting mild cognitive impairment and dementia is more sensitive than the Mini-Mental Status Examination (MMSE) - A pilot study. *Am J Geriatr Psych* 14:900-10, 2006.

Appendix J

Neuropsychiatric Inventory Questionnaire (NPI-Q¹)



phone: (206) 543-8637; fax: (206) 616-5927
e-mail: naccmail@u.washington.edu
website: www.alz.washington.edu

NACC Uniform Data Set (UDS) – Initial Visit Packet Form B5: Behavioral Assessment – Neuropsychiatric Inventory Questionnaire (NPI-Q¹)

Center: _____ ADC Subject ID: _____ Form Date: ____/____/____ ADC Visit #: _____

NOTE: This form is to be completed by the clinician or other trained health professional per informant interview, as described by the training video. (This is not to be completed by the subject as a paper-and-pencil self-report.) For information regarding NPI-Q Interviewer Certification, see UDS Coding Guidebook for Initial Visit Packet, Form B5. Check only one box for each category of response. Examiner's initials: _____

Please ask the following questions based upon changes. Indicate "yes" only if the symptom has been present in the past month; otherwise, indicate "no".
For each item marked "yes", rate the SEVERITY of the symptom (how it affects the patient):
1 = Mild (noticeable, but not a significant change)
2 = Moderate (significant, but not a dramatic change)
3 = Severe (very marked or prominent; a dramatic change)

1. NPI informant: <input type="checkbox"/> 1 Spouse <input type="checkbox"/> 2 Child <input type="checkbox"/> 3 Other (<i>specify</i>): _____	Yes	No	Severity
2. DELUSIONS: Does the patient believe that others are stealing from him or her, or planning to harm him or her in some way?	2a. <input type="checkbox"/> 1 <input type="checkbox"/> 0		2b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
3. HALLUCINATIONS: Does the patient act as if he or she hears voices? Does he or she talk to people who are not there?	3a. <input type="checkbox"/> 1 <input type="checkbox"/> 0		3b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
4. AGITATION OR AGGRESSION: Is the patient stubborn and resistive to help from others?	4a. <input type="checkbox"/> 1 <input type="checkbox"/> 0		4b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
5. DEPRESSION OR DYSPHORIA: Does the patient act as if he or she is sad or in low spirits? Does he or she cry?	5a. <input type="checkbox"/> 1 <input type="checkbox"/> 0		5b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
6. ANXIETY: Does the patient become upset when separated from you? Does he or she have any other signs of nervousness, such as shortness of breath, sighing, being unable to relax, or feeling excessively tense?	6a. <input type="checkbox"/> 1 <input type="checkbox"/> 0		6b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3

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Center: _____ ADC Subject ID: _____ Form Date: ____/____/____ ADC Visit #: _____

NOTE: This form is to be completed by the clinician or other trained health professional per informant interview, as described by the training video. (This is not to be completed by the subject as a paper-and-pencil self-report.) For information regarding NPI-Q interviewer Certification, see UDS Coding Guidebook for Initial Visit Packet, Form B5. Check only one box for each category of response.

Please ask the following questions based upon changes. Indicate "yes" only if the symptom has been present in the past month; otherwise, indicate "no".
For each item marked "yes", rate the SEVERITY of the symptom (how it affects the patient):
1 = Mild (noticeable, but not a significant change)
2 = Moderate (significant, but not a dramatic change)
3 = Severe (very marked or prominent; a dramatic change)

	Yes	No	Severity
7. ELATION OR EUPHORIA: Does the patient appear to feel too good or act excessively happy?	7a. <input type="checkbox"/> 1	<input type="checkbox"/> 0	7b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
8. APATHY OR INDIFFERENCE: Does the patient seem less interested in his or her usual activities and in the activities and plans of others?	8a. <input type="checkbox"/> 1	<input type="checkbox"/> 0	8b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
9. DISINHIBITION: Does the patient seem to act impulsively? For example, does the patient talk to strangers as if he or she knows them, or does the patient say things that may hurt people's feelings?	9a. <input type="checkbox"/> 1	<input type="checkbox"/> 0	9b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
10. IRRITABILITY OR LABILITY: Is the patient impatient or cranky? Does he or she have difficulty coping with delays or waiting for planned activities?	10a. <input type="checkbox"/> 1	<input type="checkbox"/> 0	10b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
11. MOTOR DISTURBANCE: Does the patient engage in repetitive activities, such as pacing around the house, handling buttons, wrapping string, or doing other things repeatedly?	11a. <input type="checkbox"/> 1	<input type="checkbox"/> 0	11b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
12. NIGHTTIME BEHAVIORS: Does the patient awaken you during the night, rise too early in the morning, or take excessive naps during the day?	12a. <input type="checkbox"/> 1	<input type="checkbox"/> 0	12b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
13. APPETITE AND EATING: Has the patient lost or gained weight, or had a change in the food he or she likes?	13a. <input type="checkbox"/> 1	<input type="checkbox"/> 0	13b. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3

Appendix K
Safety Assessment Checklist

SAFETY ASSESSMENT

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Safety Assessment Checklist

If the patient or caregiver answers yes to questions 1 and 3-7 or no to question 2, refer to the Safety Assessment Guide for further evaluation. When working with patients living with dementia, it is recommended that you also consult with a family member, friend or caregiver, as the patient’s judgment, memory and decreased cognitive skills may impact insight into the illness and the ability to provide accurate reporting.

Questions	Yes	No
1. Is the patient still driving?		
2. Is the patient taking medications as prescribed?		
3. Are there concerns about safety in the home?		
4. Has the patient gotten lost in familiar places or wandered?		
5. Are firearms present in the home?		
6. Has the patient experienced unsteadiness or sustained falls?		
7. Does the patient live alone?		

Appendix L

End-of-Life Checklist

END-OF-LIFE CHECKLIST

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Questions	Yes	No	Resources
Have wishes or desires for end-of-life care been discussed?			<p>Aging with Dignity Five Wishes agingwithdignity.org Provides resources for end-of-life planning.</p> <p>The Conversation Project theconversationproject.org Offers a guide for how to talk about the end of life.</p>
Is a power of attorney in place for financial needs?			<p>Alzheimer's Association* alz.org/care/alzheimers-dementia-common-costs.asp Provides information on costs to expect and tips for financial planning.</p>
Is a power of attorney in place for health care decisions?			<p>National Association for Elder Law Attorneys naela.org Offers a directory of elder law attorneys.</p>
Is palliative or hospice care appropriate for the patient?			<p>National Hospice and Palliative Care Organization nhpco.org/find-hospice Provides information about hospice and palliative care and local hospice and palliative care organizations.</p>

Appendix M

Decision Making Capacity

Decision making capacity assessment

At the time of the visit, it is my opinion that the patient is:

Able to make his/her own medical decisions	<input type="checkbox"/>	
Not able make his/her own medical decisions	<input type="checkbox"/>	
Uncertain – May require additional testing	<input type="checkbox"/>	

Appendix N

Resources- National and Local

PATIENT AND CAREGIVER RESOURCES

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Caregiving

Administration on Community Living

alzheimers.gov

Supports individuals living with Alzheimer's disease or other dementias and their caregivers by increasing access to community resources.

Aging Life Care Association

aginglifecare.org

Locate a geriatric care manager.

ALZConnected®

alzconnected.org

Online community that connects individuals facing the disease and provides online support.

Alzheimer's Association®

alz.org

800.272.3900

Provides disease education, support groups, and personalized care consultation in person, online and through a free 24/7 Helpline.

Alzheimer's Disease Education and Referral (ADEAR)

nia.nih.gov/alzheimers

800.438.4380

Offers disease information online or by phone for individuals with Alzheimer's or other dementias and their families.

Community Resource Finder

alz.org/CRF

Find local programs, resources and support services.

Family Caregiver Alliance

caregiver.org

Offers support for family and friends providing long-term, in-home care.

Eldercare Locator

eldercare.gov

Connects older adults and their caregivers with local services and provides resource referrals and contact information for state and local agencies on aging.

Safety

Aging Life Care Association

aginglifecare.org/ALCA/About_Aging_Life_Care/Find_an_Aging_Life_Care_Expert/ALCA/About_Aging_Life_Care/Search/Find_an_Expert.aspx?hkey=78a6cb03-e912-4993-9b68-df1573e9d8af

Alzheimer's Association Dementia and Driving Resource Center

alz.org/driving

Alzheimer's Association Safety Center

alz.org/safety

American Occupational Therapy Association

myaota.aota.org/driver_search

Car Safety Guides

thehartford.com/resources/mature-market-excellence/publications-on-aging

If You Live Alone

alz.org/i-have-alz/if-you-live-alone.asp

Medication Management: A Family Caregiver's Guide

nextstepincare.org/uploads/File/Guides/Medication/Medication_Management_Guide/Medication_Management.pdf

Medication Safety

alz.org/care/dementia-medication-drug-safety.asp

Medi-Cog

pharmacy.umaryland.edu/practice/medmanagement/assisted_living/Tools-to-Assess-Self-Administration-of-Medication/

Simple Solutions: Practical Ideas and Products to Enhance Independent Living

thehartford.com/resources/mature-market-excellence/publications-on-aging

Staying Safe brochure

alz.org/national/documents/brochure_stayingsafe.pdf

Steady Materials for Health Care Providers

cdc.gov/steady/materials.html

Wandering and Getting Lost

alz.org/care/alzheimers-dementia-wandering.asp

End-of-Life

Aging with Dignity Five Wishes

agingwithdignity.org

Resources for end-of-life planning.

Alzheimer's Association

alz.org/care/alzheimers-dementia-common-costs.asp

Provides information on costs to expect and tips for financial planning.

The Conversation Project

theconversationproject.org

Offers a guide for how to talk about the end of life.

National Association for Elder Law Attorneys

naela.org

Offers a directory of elder law attorneys.

National Hospice and Palliative Care Organization

nhpco.org/find-hospice

Provides information about hospice and palliative care and local hospice and palliative care organizations.

Community Resources

<p>Alamo Area Agency on Aging (AACOG / AAA) *hablan espanol*</p> <p>Website: www.alamoaging.org Phone: 210-477-3275 / 1-866-231-4922</p> <p>8700 Tesoro Drive Suite 700 San Antonio, TX 78217-6228</p> <p>If you live in Atascosa, Bandera, Comal, Frio, Gillespie, Guadalupe, Karnes, Kendall, Kerr, McMullen, Medina, and</p> <p>www.aacog.com/65/Alamo-Area-Agency-on-Aging</p> <p>Offers Benefits Counseling - Provides assistance to seniors 60 years of age and older and Medicare beneficiaries of any age concerning their public benefits and entitlements.</p>	<p>Care Coordination - Assesses the needs of people 60 years of age and older and then coordinates local resources to support an individual's highest level of functioning.</p> <p>Caregiver Support - Assesses needs of caregivers and then coordinates available support services.</p> <p>Information, Referral, and Assistance - Provides information and assistance to callers to identify and link with the appropriate service agencies.</p> <p>Nutrition - Serves nourishing meals on site and/or delivered to home-bound seniors.</p> <p>Ombudsman - Advocates for residents of long-term care communities (nursing homes and assisted living communities).</p> <p>Senior Centers - Local neighborhood facilities providing organization and provision of support services and recreational and group activities for the older person.</p> <p>Transportation - Offers door-to-door trips to nutrition sites, local medical services, and social service agency appointments.</p>
<p>Alzheimer's Association/San Antonio & South Texas Chapter *hablan espanol y página web traducida en español</p> <p>Website: www.alz.org/sanantonio</p> <p>Phone: 210-822-6449 24- Hour Helpline: 1-800-272-3900</p> <p>7400 Louis Pasteur, Suite 200 San Antonio, TX 78229</p> <p>Serving Atascosa, Bandera, Bexar, Comal, Frio, Gillespie, Guadalupe, Karnes, Kendall, Kerr, McMullen, Medina, Wilson counties</p>	<p>Offers Care consultations- by phone or in person to caregivers Lending library- of books and videos Advocacy Network- for rights of victims and their families Education- several educational programs, free of charge, such as Stress Busting Program for Caregivers. Online- free educational courses that offer information on the course of disease. www.training.alz.org</p> <p>* Information and referral * Education and training * Monthly support groups * Provides 24-hour assistance, no matter when or where the person is reported missing.</p>
<p>WellMed Charitable Foundation</p> <p>Phone: 1-866-390-6491 Website: www.wellmedcharitablefoundation.org www.caregiversos.org</p> <p>8637 Fredericksburg Rd. Suite 100 San Antonio, TX 78240</p>	<p>Offers complimentary programs designs to support family caregivers on their caregiving journey, including wellness activities, information, support, and education. Caregivers SOS centers are staffed by a knowledgeable, caring specialist who help family members and friends who are caring for a loved one with Alzheimer's disease or dementia, as well as other chronic conditions such as stroke, cancer, diabetes, chronic lung disease and heart disease.</p>

Jefferson Outreach Website: www.jeffersonoutreach.org Phone: 210-734-5016 2201 St. Cloud San Antonio, TX 78228	Services *Free transportation to doctors' appointments in the SA area *Referrals and resources to optimize quality of life for the patient and caregiver *Telephone reassurance to increase independence, provide support, encouragement, and safety checks
Grace Place 4306 NW Loop 410 (at Babcock) San Antonio, Texas 78229 Phone: 210-735-2589 Website: www.mowsatx.org/grace-place 504 Avenue E (at McCullough in Grace Lutheran Church) San Antonio, TX 78215 Phone: 210- 271-9396 Serving Atascosa, Bandera, Bexar, Comal, Frio, Gillespie, Guadalupe, Karnes, Kendall, Kerr, McMullen, Medina, Wilson	Services Grace Place is an Alzheimer's- specific adult activity center providing caregiver respite, caregiver support, groups and community education. The activities focus on the strengths and remaining abilities of clients and are conducted by trained dementia care staff. Offers *Meals on wheels * adult activity centers across the San Antonio area * caregiver support, education, and respite
<p style="text-align: center;">Comprehensive Senior Centers</p> <p style="text-align: center;">Offering San Antonio and Bexar County seniors 60+ comprehensive resource facilities where seniors can congregate to share meals, participate in activities and access needed services</p>	
West End Park Senior Center 1226 NW 18th Street San Antonio, TX 78207 Hours: 7:00 a.m. - 4:00 p.m. (Monday - Friday) 210.207.1720	District 2 Senior Center 1751 South W.W. White Road San Antonio, TX 78220 Hours: 7:00 a.m. - 4:00 p.m. (Monday - Friday) 210.207.5390
South Side Lions Senior Center 3303 Pecan Valley Dr. San Antonio, TX 78210 Hours: 7:00 a.m. - 4:00 p.m. (Monday - Friday) 210.207.1760	Willie M. Cortez Senior Center 5512 S.W. Military Drive San Antonio, TX 78242 Hours: 7:00 a.m. - 4:00 p.m. (Monday - Friday) 210.207.5294
District 5 Senior Center 2701 S. Presa San Antonio, Texas 78210 Hours: 7:00 a.m. - 4:00 p.m. (Monday - Friday) 210.207.5270	Normoyle Senior Center 700 Culberson San Antonio, Texas 78211 Hours: 7:00 a.m. - 4:00 p.m. (Monday - Friday) 210.207.5650
Alicia Treviño López Senior Center 8353 Culebra Road San Antonio, TX 78251 Hours: 7:00 a.m. - 4:00 p.m. (Monday - Friday) 210.558.0178	Doris Griffin Senior Center 6157 NW Loop 410 San Antonio, TX 78238 Hours: 7:00 a.m. - 4:00 p.m. (Monday - Friday) 210.780.7444
Bob Ross Senior Center 2219 Babcock San Antonio, TX 78229 Hours: 7:00 a.m. - 4:00 p.m. (Monday - Friday) 210.207.5300	Northeast Senior Center 4135 Thousand Oaks San Antonio, TX 78217 Hours: 7:00-4:00pm Monday -Friday 210-207-4590