

2020

Development of Practice Guidelines Based on Need-Driven Dementia-Compromised Behavior Model

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Walden University

College of Health Sciences

This is to certify that the doctoral study by

Amy Nolan

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2020

Abstract

Development of Practice Guidelines Based on Need-Driven Dementia-Compromised

Behavior Model

by

Amy Marie Nolan

MSN, Walden University, 2015

BSN, Bowling Green State University, 2003

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2020

Abstract

People with dementia, who experience cognitive decline, memory loss, and reasoning difficulties, often exhibit compromised behaviors such as agitation or aggressive behavior that impact negatively upon the person's quality of life and increase safety risks. The purpose of this project was to develop an evidence-based clinical practice guideline (CPG) to improve the use of effective evidence-based interventions by staff in a skilled long-term care nursing facility to manage the compromised behavior of residents with dementia. The Need-Driven Behavioral Model, which suggests that compromised behaviors occur when patient attempts to accomplish a goal or express a need, provided the framework CPG development. To assess what evidence would support the CPG development, an exhaustive review of the literature was completed. Of the 386 articles evaluated according to GRADE II tool, 36 articles were used to support the guidelines. Findings based on responses to the AGREE II tool by a 5-member expert panel and 7 key stakeholders suggest a high level of agreement to supports the accuracy of the guidelines and a recommendation for implementation in practice in this long-term care setting. Implementing these practice guidelines has the potential for positive social change by providing staff with effective intervention to manage disruptive behaviors and improve the quality of life for people with dementia.

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Dedication

I dedicate this project to my grandparents, Doris and Walter Eagleson, and Robert and Margaret McDonald, and my uncle, Gregory McDonald, all whom have passed away, but have inspired me in my life. My Grandma Eagleson dedicated her life to the care of others, caring for my Grandpa for decades, and teaching me what it meant to serve others. My Grandpa Eagleson, bedridden from illness, lived each day with a smile on his face. My Grandpa McDonald lived life to the fullest, even after health challenges, leaving a legacy of stories and good examples in the lives of his children. My Grandma McDonald lived her life for her family showing presence, hard work and determination all her life. And my Uncle Greg, had a servant's heart, having served others his whole life from education, to music, and art. These treasured family members demonstrated the power of serving others, attitude, hard work, determination, love, and the impact using one's skills can have on the world.

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I want to thank my parents, Barb and Jeff McDonald, who raised me to seek answers and strive to make things better for others, and as an adult have helped me in more ways than I could count. I want to thank my children, Isaac, Jillian and Kayla, and my husband, Nate, who have assisted at home and sacrificed time and activities as I focused on my research. I want to thank my siblings and their spouses, Aaron and Lori Ortner, Heather and Nick Graffice, Jenny and Craig Ridge, and Jonathan and Tonia McDonald, because it truly takes a village to raise a family, and the meals, rides, and encouragement you have provided were needed and appreciated. I also want to give a special thanks to my aunt, Brenda Ward, who sacrificed many years, assisting me to get through early career and schooling, assisting at home, and with my children. I truly would not be where I am today had you not been there for critical years in the beginning of my young family. I also want to thank my aunts, uncles, cousins, nieces, nephews, and my in-laws, as I have received endless encouragement and assistance over the years that could never be repaid.

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Section 1: Nature of the Project

Introduction

Alzheimer's disease and other dementias affect 5.3 million individuals, with greater than 5.1 million of those aged 65 or older; many of these individuals require services within a skilled or long-term care setting (United States Department of Health and Human Services, 2016). According to the National Study of Long-Term Care Providers for the years 2013-2014, approximately 50.4% of the residents in 15,600 nursing homes are Persons with Dementia (PWD), which is a higher rate than any other dementia provider. The numbers are projected to increase with the growing numbers in this age group (United States Department of Health and Human Services, 2016). A person with dementia (PWD) often presents with cognitive decline in function, decline in ability to think, and exhibits difficulty with memory and reasoning, all of which impedes their daily activities of living and affects their quality of life (Healthy People, 2017). Safety risks increase for a PWD (Apostolova et al., 2014; Healthy People, 2017). Compromised behavior symptoms for a PWD, including symptoms of agitation, questions asked repetitively, psychosis, aggressive behaviors, difficulty sleeping, wandering and perceptive thought issues, all increases the challenges faced by the PWD, their family and caregivers (Oliveira et. al., 2015). Development of practice guidelines are needed to reduce complication and safety risks, optimize quality of life and outcome measures, and to provide support for caregivers, both informal and formal, for the care of a PWD. The purpose of this section is to state the practice problem, purpose, nature of the doctoral project, and relevance to practice in the care of a PWD.

Problem Statement

All types of dementia are progressive in nature (Alzheimer's Association, 2017a). If present in residents of long-term care facilities, dementia can lead to cognitive decline in function, or the abilities to think, remember and reason, impeding daily activities which in turn affects their quality of life (Healthy People, 2017). Safety risks exist for a PWD include unsuccessful management of medications and medical conditions; decision-making challenges; difficulties with vehicle, appliances or tool use; inability to avoid injuries and maintain social relationships; and behaviors with affect, distress, tension and impulse control issues (Healthy People, 2017). These safety risks are all correlated with symptomatology from the disease process (Apostolova et. al., 2014). Evidence-based practice guidelines needed to be developed to support formal and informal caregivers in providing care that reduces risks of complications described previously, promoting optimization of quality of life, and promoting safety in PWD. The development of evidence-based practice guidelines aimed at providing appropriate needs-based behavioral care to PWD has the potential for positive social impact by providing consistent continuity of care as well as promote improved behaviors for the PWD in the skilled and long-term care settings. Improved behaviors for the PWD decreases stress levels in the caregivers and improves caregiver experience, reduces psychotropic medication use, and improves safety measures.

Skilled and long-term care facilities are required by law to develop care plans for each resident and there has been an increased national focus on implementation of person-centered care practices (Center for Medicare and Medicaid Services, 2018). However, specific practice guidelines do not exist to guide the care of PWD who exhibit problematic behaviors.

Regulations had recently become more focused on problematic behavior management while reducing the use of psychotropic medication in skilled and long-term care settings. The regulatory factors, along with the symptoms of a PWD, placed the PWD, their caregivers and the facilities providing the care at greater risk for safety issues and complications trying to meet each.

Purpose Statement

The purpose of this project was to develop a practice guideline for use in skilled and long-term care settings for management of disruptive behaviors in a PWD. Skilled and long-term care facilities focus on skilled and extended care services with goals for discharge to home, to other facilities, or provision of end of life care through the dying process. Administrative duties and care are recognized as significant because of the risks associated with a PWD and the regulation requirements within the Ohio Administrative Code (Ohio Department of Health, 2017). Ohio is chosen for the number of nursing homes and my state of origin. Federal regulations direct the standards for staff within skilled and long-term care settings. Persons with Alzheimer's Disease and other dementias frequently require these services.

The project question is as follows: What effective interventions can be utilized in a skilled and long term setting to manage the problematic behaviors in residents with dementia? Family caregivers, community-based caregivers, and professional caregivers in health care settings are faced with the challenges when caring for PWD.

This project has the potential to contribute to social change by developing effective interventions designed to address the challenges of caring for PWD in the skilled and long-term care settings. When negative behavior in a PWD are reduced or eliminated, the costs to the

caregivers, the residents, and their families improve. Developing evidence-based practice guidelines enhance the quality of life for the resident with dementia, their caregivers and the staff at the skilled or long-term care facility. A controlled environment, like skilled and long-term care, provides the consistency and continuity to determine the effectiveness of practice guidelines that, when effective, could be transferred to other settings, such as post-acute, home health, group homes, and private home settings.

Nature of the Doctoral Project

The focused setting for these practice guidelines is skilled and long-term care facilities. The setting provides the ability to determine patterns of behavior in residents with dementia, has 24-hour supervision for providing information about resident's behavior, and has the potential to look at prior behavioral patterns of familial relationships and involvement. The setting also allows for the implementation of multiple interventions consistent with the potential guidelines after the practice guidelines are developed.

I accessed the following databases using Walden University library: CINAHL, Medline, Alzheimer's Association, Centers for Medicaid and Medicare Services (CMS), Cochrane Database of Systematic Reviews, ProQuest Nursing & Allied Health Source, Ovid, Joanna Briggs Institute. I also used the local community hospital medical library, the Health Services Advisory Group (HSAG), National Association of Directors of Nursing Association, Ohio Directors of Nursing Association. Other resources became available during interdisciplinary team involvement.

For this project, I developed clinical practice guidelines for use in skilled and long-term care setting for the management of problematic behaviors in residents with dementia. I did so to

address the lack of consistency and continuity of care for PWD. The evidence selection criteria were developed and then procedures for evidence integrity, assurance, and analysis were declared. A literature search was completed and evidence was critically appraised using the GRADE criteria (see Guyatt et al., 2010). In this way, I used synthesized evidence to develop evidence-based practice guidelines. An expert panel, compiled of skilled and long-term care director of nurses, administrators, or assistant director of nurses, was identified for use of the AGREE II Instrument to validate and evaluate the content of the practice guidelines (see Smith et al., 2015). After expert review, I then revised the evidence-based practice guidelines based on the results of the evaluation. The key stakeholders, or end-users, were identified to review the revised guidelines for content validation and to ensure usability. A final report will be completed and distributed to the key stakeholders.

Significance

Stakeholders affected by having access to evidence-based guidelines included the PWD and family, informal and formal caregivers, nurses, doctors, nurse practitioners, physician assistants, therapists, director of nursing, social workers, environmental services workers, dietary, and health care administrators involved in the care of PWD. PWD should have an individualized, person-centered plan of care that anticipates their needs and appropriately addresses these needs (Centers for Medicare and Medicaid Services, 2018). Successful use of the developed guidelines may result in reduced frustration and unmet needs, decreased problematic behaviors, and improved quality of life in a PWD (see Apostolova et al., 2014; Healthy People, 2017). Families may have improved interactions with their loved one and sense of peace with care provision. Caregivers, both informal and formal, along with all health care

providers may have improved practice, reduced stress levels, and reduced need for pharmacological intervention (see Apostolova et al., 2014; Healthy People, 2017).

These doctoral project guidelines could be transferred to other post-acute care provider settings. Home health, assisted living, long term acute care hospital, other skilled and long-term care facilities, group homes, and private home setting environments could utilize the practice guidelines or adapt them to personalize them for their individualized needs. With improved management of behaviors, reduction of psychotropic use, and improved safety in the skilled and long-term care settings proven, the transfer of information used in other areas may allow for significant social change in the care of the at-risk population (see Apostolova, et al., 2014; Healthy People, 2017).

Summary

Dementia residents exhibit problematic behaviors at times, causing increased risks for safety concerns (Alzheimer's Association, 2017a). Evidence-based practice guidelines need to be available for use in the skilled and long-term care settings to address the current practice gap, meet the challenges faced by caregivers and families, and remain in compliance with regulations for person-centered care, psychotropic use reduction efforts, and improve safety. The social change impact can be substantial from skilled and long-term care settings to all post-acute care providers. In Section 2, I will address the background and context of concepts that can best be addressed within a theoretical framework or research method to maintain organization and focus.

Section 2: Background and Context

Introduction

Persons with dementia (PWD) often presents with cognitive decline in function, decline in abilities to think, difficulty with remembering and reasoning; these experiences impede daily activities and affects their quality of life (Healthy People, 2017). A PWD has safety risks from disease process symptoms leading to behaviors that can result in unsuccessful management of medications and medical conditions; decision-making challenges; difficulties with vehicle, appliances or tool use; and inability to avoid injuries and maintain social relationships (Apostolova, et al., 2014; Healthy People, 2017). Evidence-based practice guidelines need to be developed to support formal and informal caregivers, in providing care that reduce risks of complications described previously, promote optimization of quality of life, and promote safety in PWD. The project question is as follows: What effective interventions could be utilized in a skilled and long term setting to manage the problematic behaviors in residents with dementia? The purpose of this section is to describe the concepts, models or theories, relevance to nursing practice, local background and context, and the role of the Doctoral of Nursing Practice (DNP) student.

Concepts, Models, and Theories

McEwen & Wills (2014) described theory as a process which includes phases for concept analyzation, relationship construction, testing, and validation, and as a product in which combinations of concepts with relationships lead to phenomena description, explanation, prediction, and prescription. This process informs research and evidence-based guidelines, policies, and nursing practice. The basis of understanding of why an event occurs can be gained

through theory by doctoral-prepared nurses for use in clinical practice (McEwen & Wills, 2014). Changes from current practice to new evidence-based practice guidelines lead to cost-effective and higher quality outcomes positively effecting the population served (McEwen & Wills, 2014).

Evidence-based practice guidelines are developed by significance of evidence being properly searched to improve the outcomes of the populations served (Grove, Burns & Gray, 2013). Those same factors emphasize theory use for care coordination, research and education for both current and future professionals (McEwen & Willis, 2014). Literature review can strengthen or weaken the merit of theory or practice problem findings. Improved outcomes occur when skill level and preferred interest assessment findings are the basis for interventions and activities that strengthen both the theory and practice problem with their study results (Kolanowski, Litaker & Baumann, 2002; Kolanowski, Litaker, Buettner, Moeller, & Costa, 2011). Overall, all strengthen the practice problem with use of theory.

Need-Driven Dementia-Compromised Behavior Model

The Need-Driven Dementia-Compromised Behavior (NDB) Model was used for this project. The NDB Model presents the position that challenging behaviors occur in a PWD in their attempt to accomplish a goal or express a need, and have causative factors, versus the will to behave in an adverse manner (Algase et al., 1996; Norton et. al., 2010). Need-driven behaviors included verbalizations, restlessness, body movements, wandering, repetitive questioning, memory problems, crying, outbursts, resistance to care, aggression, and withdrawal from activities (Norton et al, 2010). The NDB initially identified factors, background and proximal, that lead to a need state and can be targeted for a response (Kolanowski et al., 2002; Norton et al., 2010). The NDB then followed with strengths, weaknesses and coping styles of

resident determination of background factors for personalized intervention planning with an end goal of positive outcomes matching personal preferences (Kolanowski et al., 2002; Norton et al., 2010).

Background factors for a PWD involves the neurological, cognitive, health status, co-morbidities, and psychosocial attributes (Norton et al., 2010). Examples of neurological factors include motor activity, sleep-wake cycle disturbances from circadian rhythm deterioration, imbalance of neurotransmitters, and involvement of specific regions of the brain. Psychosocial factors include gender, education, occupation, personality type, history of psychosocial stress, and behavioral response to stress (Algase et al., 1996). Cognitive factors addressed with this model are attention, memory, visuo-spatial ability and language skills. Health factor skills include the general health, functional ability, and affective state of the individual (Algase et al., 1996). Proximal factors consists of social and physical environments and the needs that adjust as internalized by the PWD, including pain or anxiety levels (Norton et al., 2010). Factors correlated to wandering includes the amount of social engagement, design complexity of environment, crowding, patterns, locomotion cycle percentages, distribution in 24-hour timeframe, alignment of ability and assistance, presence of others, room size, caregiving speed, burnout of staff, and the demeanor of the caregivers (Algase et al., 1996). The NDB provided opportunities for review of specific behaviors with a reflection of the background factors with changeable proximal factors, using clinical observations and research to provide focus and support (Norton et al., 2010).

Dementia, Etiology, and Symptoms

Dementia was a decline in cognitive ability which interfered with activities of daily living; Alzheimer's disease and vascular dementia, which could be post-stroke dementia, are examples of types of dementia (Alzheimer's Association, 2018; Mijajlović et al., 2017).

Symptoms included memory issues, communication or language challenges, inability to focus and pay attention, struggles with reasoning and judgment, and perceptions visually impaired.

These issues impede normal day to day activities (Alzheimer's Association, 2018). Etiology was from brain cell damage which interfered with the flow that controls the normal activities, with variances dependent upon the location in the brain where the cells were damaged (Alzheimer's Association, 2018; Mijajlović, et al., 2017).

Symptoms and Care of the Compromised PWD

Compromised behaviors were those actions exhibited by PWD that were challenging in both psychological and behavioral manifestations but should be explored as the underlying cause and triggers leading to these misplaced coping mechanisms (Halek, Holle, & Bartholomeyczik, 2017). Examples of symptoms included agitation of repetitive verbalizations, vocalizations and motor activities inconsistent with appropriate social standards, which can be as simple as screaming or asking questions repetitively, or more complex with aggressive physical movements, restlessness, or threats (Norton et al., 2010). Management of symptoms for a PWD was dependent upon the presentation of symptoms, the cause, and many times, was not reversible or curable (Alzheimer's Association, 2018; Bond, et al., 2016; Mijajlović et al., 2017). Preventive measures have been identified to include reduction in cardiovascular risks and focuses on healthy diet and exercise (Alzheimer's Association, 2018; Bond et al., 2016;

Mijajlović et al., 2017). The current modes of treatment had included both nonpharmacological, including stressor elimination, environment modifications, and routine establishment, and pharmacological management with use of antipsychotic medications or analgesics for the relief of behavioral disorders in dementia (Norton et al., 2010; Reese, Thiel, & Cocker, 2016).

Additional interventions trialed in these populations included distraction techniques with task-oriented activities, reminiscence therapy, simulated presence therapy, validation therapy, acupuncture, aromatherapy, light therapy, massage or touch therapy, music therapy, reinforcement technique therapy, animal-assisted therapy, and exercise (Reese et al., 2016).

Use of Practice Guidelines

Evidence-based practice guidelines provided continuity and consistency to the care provided for any given condition to optimize outcomes. Practice-guidelines were widely used in the care of individuals with pain, falls, dyspnea, and pressure ulcers in home-care settings, with positive effects for the consumer, regardless of the individual provider providing the care (Goran et al., 2014). Evaluation of effectiveness of practice guidelines required specificity for assessments and consistency tools (Doran et al., 2014). Because burdens on caregivers and negative health effects occur when managing compromised behaviors in a PWD, there was a need for development of evidence-based practice guidelines to improve these effects and experiences optimizing outcomes and experience for all PWD, families and caregivers (Bond et al., 2016).

Relevance to Nursing Practice

Strategies for assessment needed to evaluate the availability of gathering data on the population and through choice of an environment that can be monitored most thoroughly, the

skilled and long-term care setting (Friis & Sellers, 2014b). The research question was designed with ecologic principles because the question could be addressed by comparing the current metrics to post implementation of intervention metrics (Friis & Sellers, 2014b). By looking at things through both ecologic and cross-sectional study designs, the research looked at the group population when the intervention was put into place and at the individual's response to the same (Friis & Sellers, 2014b).

Zetteler (2008) described simulated presence therapy as “playing an audio tape or videotape to an individual, personalized by the caregiver and containing positive experiences from the client's life and shared memories involving family and friends” (p.779). Medication of this same at-risk population for the behaviors showed many risks and few benefits with side effects that include an increased risk for falls, sleepiness and extrapyramidal symptoms (Zetteler, 2008). Views show challenging behaviors could be a form of communication of distress for the individual, and therefore, the need to provide a sense of comfort and familiarity can help to reduce the tension experienced resulting in decreased stress (Zetteler, 2008). Systematic review and meta-analysis were completed through use of eight studies that were reviewed between publish dates of 1995 and 2007 showing seven that met criteria for the study, because one did not show personalized intervention (Zetteler, 2008). Reduction of behaviors with use of simulation presence therapy was noted in four of the studies with moderate positive effect, and three others showing improvement with variance depending on the attachment of the individual (Zetteler, 2008).

Cheston, Thorne, Whitby and Peak (2007) described positive outcomes for people with dementia in long term care settings with improvement from isolation socially, aggressive

verbally and agitation and increases in things like smiling, singing and verbalizations, when simulated presence was used. No significant difference between simulated presence therapy and preferred music was noted in this study (Cheston et al., 2007). Zetteler's (2008) findings demonstrated a positive correlation of effectiveness to the relationship or attachment with their caregiver (Cheston et al., 2007). Three stage processing was used for gathering data from target behavior excesses and deficits, to operationalization of gathered information to the implementation of the simulated presence therapy tape and observation (Cheston et al., 2007). Comparisons of music with the simulated presence therapy did not produce enough data because five out of six individuals declined the music intervention (Cheston et al., 2007).

Woods and Ashley (1995) presented a 64% rate of behavior problems in skilled nursing facilities when 1000 residents were looked at specifically with Alzheimer's diagnosis. For this study, a quasi-experimental design was used with pre-test post-test formatting (Woods & Ashley, 1995). Inclusion criteria was Alzheimer's dementia diagnosis, display of one or more behaviors as discussed by nursing staff with confirmation by researchers, capacity for verbalization intact, and willingness for family to participate (Woods & Ashley, 1995). In the observation period of two months, 425 total episodes of documented problem behavior were identified, including isolation socially, aggressive verbalizations, agitation, and pacing (Woods & Ashley, 1995). Limitations of this study included small size, lack of controls and the style of data collection could be biased, so the study should be considered preliminary and further studies warranted on larger scale with different observers (Woods & Ashley, 1995).

Miller et al. (2001) discussed the benefit of auditory interventions strategies for improvement of behaviors in the dementia population in nursing home elderly. Another quasi-

experimental pre-test post-test study design was utilized, and each resident served as their own control (Miller et al., 2001). Instruments used included the demographic data sheet, Mini Mental Status Exam (MMSE), and Haycox Rating Scale (HRS), and the intervention was an adaptation of the SPT that included a phone conversation tape that was more guided but simpler process (Miller et al., 2001). Decreased behaviors were identified when intervention completed and associated with attention and social behaviors (Miller et al., 2001). This project focused on the development of practice guidelines to address the variance in care for a PWD to optimize outcomes and the experience for the PWD, the family, and the caregivers.

Local Background and Context

Interventions were designed to meet the individualized needs of Alzheimer's Disease residents in skilled and long-term care facilities to improve safety and reduce fall impulse control, and psychotic behaviors in residents with dementia in skilled and long-term care facilities (Apostolova et al., 2014; Zettler 2008). The purpose of this section was to propose the intervention chosen and review the literature that supports use of the intervention chosen.

The skilled and long-term care facility had developed a protocol for use of simulated presence therapy for residents to address and prevent challenging behaviors with the diagnosis of dementia or Alzheimer's disease. Education of the technique was provided to all staff, families and residents who are part of the research. Return demonstrations and active participation was the expected outcome of the education.

Role of the DNP Student

I work as a director of nursing within a skilled and long-term care facility within a larger health care organization. I saw the care required for dementia residents and assist staff with 1:1

care on a regular basis to attempt to prevent and alleviate problematic behaviors. Over my career, I had been hit, bit, scratched, pinched, urinated and defecated on, yelled at and things thrown at me more times than I can count. The behaviors were out of confusion, frustration and lack of needs being met for the resident. When approaches were adjusted and individualized, positive implications could occur. I wanted to reduce the negative behaviors within my facility and be able to provide evidence-based guidelines for use by other facilities to do the same.

I completed the research for development of evidence-based practice guidelines and reviewed and analyzed the literature. I distributed the guidelines initially to members of an expert panel to review for accuracy and usefulness using the AGREE II. Subsequently, the stakeholders from post-acute reviewed the developed guidelines for practicality and potential. Potential biases I possessed included preconceived solutions and ideas of what I would find in the research. Plan was to review all literature based on review plan of search terms using the resource methods described.

Summary

Concepts, models and theories had been discussed in correlation to dementia residents with problematic behaviors in skilled nursing and long-term care facility settings. Relevance to nursing practice were presented. Local background, context and the role of the DNP student were also shown. Section 3 presents a collection and evidence of the evidence.

Section 3: Collection and Analysis of Evidence

Introduction

Dementia has many forms with one commonality: a progressive declination in function cognitively leading to the inability to complete activities of daily living (Alzheimer's Association, 2017a). Quality of life is altered when residents living in long-term care facilities with dementia have cognitive decline, evidenced by thinking ability challenges, symptoms of reasoning and remembering difficulties, and impeding their ability to complete their day to day routine consistently or safely (Healthy People, 2017). A Person with Dementia (PWD) has safety risks because of their cognitive deficits associated with medication and medical management, ability to avoid injuries, and impulse control issues that are part of the disease (Apostolova et al., 2014; Healthy People, 2017).

Law requires skilled and long-term care facilities to develop care plans for each resident and national focus on implementation of person-centered care practices has been increased recently (Center for Medicare and Medicaid Services, 2018). Despite regulations for reduction in psychotropic medication use in skilled and long-term care settings, specific practice guidelines do not exist to guide the care of PWD who exhibit problematic behaviors. The regulatory factors, along with the symptoms of PWD, places the PWD, their caregivers and the facilities providing the care at greater risk for safety issues and complications trying to meet PWD needs.

Management of disruptive behaviors in a PWD through the development of practice guidelines is the purpose of this project. This project has the potential to contribute to social change by developing effective interventions designed to address the challenges of caring for PWD in the skilled and long-term care settings. When disruptive or challenging behaviors in a

PWD are reduced or eliminated, the costs to the caregivers, the residents and their families may be improved. Developing evidence-based practice guidelines can improve the quality of life for the PWD, their caregivers and the staff at the skilled or long-term care facility. Skilled and long-term care, a controlled environment, was used to provide the consistency, continuity, and the resources necessary to determine the effectiveness of practice guidelines that, if effective, could be transferred to other settings, such as post-acute, home health, group homes and private home settings. In Section 3, I address the practice-focused question, sources of evidence, published outcomes and research, and analysis and synthesis.

Practice-focused Question

The purpose of this project was to develop a practice guideline for use in skilled and long-term care setting for management of disruptive behaviors in a PWD. Skilled and long-term care facilities focus on skilled and extended care services with goals for discharge to home, to other facilities, or provision of end of life care through the dying process. Administrative duties and care are recognized as significant because of the risks associated with a PWD and the regulation requirements within the Ohio Administrative Code (Ohio Department of Health, 2017). Federal regulations direct the standards for staff within skilled and long-term care settings. Persons with Alzheimer's Disease and other dementias frequently require these services.

The project question was as follows: What effective interventions can be utilized in a skilled and long term setting to manage the problematic behaviors in residents with dementia? Family caregivers, community-based caregivers and professional caregivers in health care settings are faced with the challenges when caring for the PWD.

Sources of Evidence

The following resources were reviewed to develop the evidence-based practice guidelines with dementia: use of local community hospital medical library, use of Health Services Advisory Group (HSAG), National Association of Directors of Nursing Association (NADONA), Ohio Directors of Nursing Association (ODONA) and resources that became available by interdisciplinary team involvement. The information that was gathered from these sources provide the basis for development of the evidence-based practice guidelines that will promote the improved management of problematic behaviors in PWD in a long-term care setting. To complete the literature search, I conducted a critical appraisal of the evidence using the GRADE criteria and synthesized the newly found and graded evidence for the evidence-based practice guidelines. An expert panel of nursing home administrators and nursing home directors and assistant directors of nursing were identified to use the AGREE II to validate the content of the guidelines. Recommendations that the expert panel provided were used to revise the evidence-based practice guideline revisions. Finally, key stakeholders, or end-users, consisting of nursing staff, therapy staff, state tested nurse assistants, housekeeping staff, maintenance staff, human resources staff, activities staff, social services, and dietary staff reviewed the revised guidelines for content validation and to ensure usability. A final report was completed and distributed to the same key stakeholders. The evidence collected and analyzed was the framework for the practice guidelines to address the gap in current care of a PWD in skilled and long-term care settings.

Published Outcomes and Research

Many databases were utilized to provide a significant amount of evidence and instruments for use to develop practice guidelines in the management of problematic behaviors in PWD. These databases included CINAHL, Medline, Alzheimer's Association, Centers for Medicaid and Medicare Services (CMS), Cochrane Database of Systematic Reviews, ProQuest Nursing & Allied Health Source, PubMed, PsycINFO, Ovid, Joanna Briggs Institute, Health and Psychosocial Instruments (HAPI), Mental Measurements with Yearbooks in Print, and PsychTESTS. Search terms and combinations that were used included:

- *Dementia OR Alzheimer's Disease OR Lewy Body Dementia OR Dementia with Lewy Bodies OR Vascular Dementia OR Mixed Dementia OR Frontotemporal Dementia;*
- *Behaviors OR Aggression OR Combative OR Anger OR Paranoia OR Oppositional Behavior OR Violence OR Anxiety OR Agitation OR Repetition OR Suspicion OR Sleeping Disturbances OR Wandering OR Verbalizations OR Verbal Disruptions OR Vocalizations OR Restlessness OR Repetitive Questions OR Repetitive Movements OR Exit-Seeking;*
- *Psychotropic Use OR Antipsychotics OR Antianxiety OR Anxiolytics OR Antidepressants OR Hypnotics OR Analgesics OR Narcotics;*
- *Caregiver Stress OR Burnout OR Professional Caregiver Stress OR Health Care Burnout OR Nurse Burnout OR Nurse Stress OR Nurse Aide Burnout OR Nurse Aide Stress;*
- *Geriatrics OR Elderly;*

- *Nursing Homes OR Long-Term Care OR Extended Care Facility OR Skilled Nursing Facility;*
- *Non-Pharmacological Interventions OR Non-Pharmacological Measures OR Non-Pharmacological Treatments OR Activities OR Music OR Sensory OR Therapy OR Evidence-Based Practice OR Distraction Techniques OR Task-Oriented Activities OR Reminisce Therapy OR Simulated Presence Therapy OR Validation Therapy OR Acupuncture OR Aromatherapy OR Light Therapy OR Massage OR Touch Therapy, Reinforcement Technique OR Animal Assisted Therapy OR Exercise;*
- *Theory-Based Intervention OR Middle Range Theory OR Need-Based Dementia-Compromised Model;*
- *Quality Outcomes OR Positive Outcomes OR Performance Improvements;*
- *Dementia AND Alzheimer's Disease AND Lewy Body Dementia AND Dementia with Lewy Bodies AND Vascular Dementia AND Mixed Dementia AND Frontotemporal Dementia;*
- *Behaviors AND Aggression AND Combative AND Anger AND Paranoia AND Oppositional Behavior AND Violence AND Anxiety AND Agitation AND Confusion AND Repetition AND Suspicion AND Sleeping Disturbances AND Wandering AND Verbalizations AND Verbal Disruptions AND Vocalizations AND Restlessness AND Repetitive Questions AND Repetitive Movements AND Exit-Seeking;*
- *Psychotropic Use AND Antipsychotics AND Antianxiety AND Anxiolytics AND Antidepressants AND Hypnotics AND Analgesics AND Narcotics;*

- *Caregiver Stress AND Burnout AND Professional Caregiver Stress AND Health Care Burnout AND Nurse Burnout AND Nurse Stress AND Nurse Aide Burnout AND Nurse Aide Stress;*
- *Geriatrics AND Elderly;*
- *Nursing Homes AND Long-Term Care AND Extended Care Facility AND Skilled Nursing Facility;*
- *Non-Pharmacological Interventions AND Non-Pharmacological Measures AND Non-Pharmacological Treatments AND Activities AND Music AND Sensory AND Therapy AND Evidence-Based Practice AND Distraction Techniques AND Task-Oriented Activities AND Reminisce Therapy AND Simulated Presence Therapy AND Validation Therapy AND Acupuncture AND Aromatherapy AND Light Therapy AND Massage AND Touch Therapy AND Reinforcement Technique AND Animal Assisted Therapy AND Exercise;*
- *Theory-Based Intervention AND Middle Range Theory AND Need-Based Dementia-Compromised Model;*
- *Quality Outcomes AND Positive Outcomes AND Performance Improvements;*
- *Dementia NOT Confusion;*
- *Dementia NOT Memory Loss; and*
- *Dementia NOT Delirium.*

I searched literature from 1978 to 2018 to be exhaustive and comprehensive on the topics to be able to extrapolate significant information for the development of practice guidelines that reviewed how things were done prior to the advancements in technology and medications of

current day. By evaluating the effectiveness of past strategies for managing dementia-compromised behavior, I was able to identify effective evidence-based care for the current day.

Analysis and Synthesis

Critical appraisal of the evidence served two functions, to determine validity of the information for application to the question at hand and reliability of the evidence for use (Terry, 2015). Evidence was labelled according to degree of evidence, usability and reliability in levels. Recording and tracking of the evidence was completed within that critical appraisal with labelling of level of evidence pertinent to this setting and evidence discovered. The evidence was analyzed in three phases. The first phase involved analyzing the articles gathered using the GRADE tool to evaluate the strength of the evidence included in the guidelines. The GRADE tool use started with what the research question was to be answered, which was “What effective interventions can be utilized in a skilled and long term setting to manage the problematic behaviors in residents with dementia?” Using the four levels of quality of evidence, very low, low, moderate, and high, each piece of literature was reviewed and coded according to the certainty, or level. Very low certainty indicates that the estimated and true effects are probably markedly different. Low certainty indicates the evidence might vary between the true and estimated effects. Moderate certainty level indicates that the belief of authors is the true and estimated effects are probably close. High certainty indicates high confidence in the true and estimated by the authors. Each article reviewed was coded at one of the levels, with those at the high level being chosen for use in the study applicable to the focus areas of cognitive status, need-driven behaviors, caregivers, falls and safety, medications and pain. (Guyatt, Oxman, Akl, Kunz, ...Schunemann, 2011). The second phase involved obtaining feedback from the expert

panel of nursing home administrators and directors and assistant directors of nurses in skilled and long term care settings with use of the AGREE instrument to determine the accuracy of the content of the guidelines. The AGREE tool (See Table 1) had a total of 22 questions. Of those questions, 20 were on a seven-point scale of *strongly agree, somewhat agree, agree, neither agree or disagree, disagree, somewhat disagree, and strongly disagree*, with allowance for comments, one question for declaration of expert or stakeholder professional role, and one question allowing for additional comments. The questions address domains for scope and purpose, stakeholder involvement, rigor of development, clarity of presentation, applicability, and editorial independence (National Collaborating Centre for Methods and Tools, 2011).

Table 1
AGREE Instrument with Findings

AGREE II Question	Expert Responses	Expert Comments	Key Stakeholder Responses
Q1 The overall objective(s) of the guideline is (are) specifically described.	4 <i>Strongly Agree</i> ; 1 <i>Agree</i>	"The objectives of this guideline are made clear throughout the paper. The objectives are to provide caregivers an evidenced based guide to support and provide care to PWD."	2 <i>Strongly Agree</i> ; 5 <i>Agree</i>
Q2 The health question(s) covered nu the guidelines is (are) specifically described.	4 <i>Strongly Agree</i> ; 1 <i>Agree</i>	"The health question covered by the guideline is clearly described. The question is how to provide appropriate care to PWD to help them optimize their lives."	3 <i>Strongly Agree</i> ; 4 <i>Agree</i>
Q3 The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.	3 <i>Strongly Agree</i> ; 2 <i>Agree</i>	"The target population of this paper is clearly described. The population is PWD and the target audience is caregivers for this population."	3 <i>Strongly Agree</i> ; 4 <i>Agree</i>
Q4 The guideline development group includes individuals from all relevant groups.	3 <i>Strongly Agree</i> ; 1 <i>Agree</i> ; 1 <i>Somewhat Agree</i>	"Yes, the guideline development group includes the individuals from the entire interdisciplinary team and what aspects of care they need to address."	2 <i>Strongly Agree</i> ; 5 <i>Agree</i>
Q5 The views and preference of the target population (Patients, public, etc.) have been sought.	3 <i>Strongly Agree</i> ; 2 <i>Agree</i>	"Yes, the views of the target audience is taken into account. The views of PWD is sought the best overall care for them."	4 <i>Strongly Agree</i> ; 3 <i>Agree</i>
Q6 The target users of the guideline are clearly defined.	3 <i>Strongly Agree</i> ; 2 <i>Agree</i>	"The target user is clearly defined as the caregivers for PWD."	5 <i>Strongly Agree</i> ; 2 <i>Agree</i>
Q7 The health benefits, side effects, and risks have been considered in formulating the recommendations.	3 <i>Strongly Agree</i> ; 2 <i>Agree</i>	"The benefits of using the guideline is clearly defines and the risk posed from inadequate care is also discussed."	3 <i>Strongly Agree</i> ; 4 <i>Agree</i>
Q8 There is an explicit link between the recommendations and the supporting evidence.	3 <i>Strongly Agree</i> ; 2 <i>Agree</i>	"The guidelines I based in evidence and the link between the recommendations, the rationale, and supporting evidence is made clear throughout the guideline."	2 <i>Strongly Agree</i> ; 5 <i>Agree</i>
Q9 The guideline has been extremely reviewed by experts prior to its' publications.	3 <i>Strongly Agree</i> ; 2 <i>Agree</i>	"This reviewer is an unbiased professional caregiver of PWD, therefore this standard is met."	1 <i>Strongly Agree</i> ; 4 <i>Agree</i> ; 2 <i>Neither Agree nor Disagree</i>
Q10 The recommendations are specific and unambiguous.	3 <i>Strongly Agree</i> ; 1 <i>Agree</i> ; 1 <i>Somewhat Agree</i>	"The guideline gives specific recommendations on how to provide care for PWD and dealing with behaviors, pain and assessing cognitive status."	2 <i>Strongly Agree</i> ; 5 <i>Agree</i>
Q11 The different options for management of the condition or health issue are presented.	2 <i>Strongly Agree</i> ; 3 <i>Agree</i>	None	2 <i>Strongly Agree</i> ; 5 <i>Agree</i>

(continued)

AGREE II Question	Expert Responses	Expert Comments	Key Stakeholder Responses
Q12 Key recommendations are easily identifiable.	3 <i>Strongly Agree</i> ; 1 <i>Agree</i> ; 1 <i>Somewhat Agree</i>	"Yes, the recommendations are easily identifiable, and the charts make navigating the guideline easy."	4 <i>Strongly Agree</i> ; 3 <i>Agree</i>
Q13 The guidelines described facilitators and barriers to its' applications.	3 <i>Strongly Agree</i> ; 2 <i>Agree</i>	"Yes, the guideline described facilitators and barriers to effective use. The clearly laid out path makes it easy to use for professional caregivers as well as lay caregivers."	2 <i>Strongly Agree</i> ; 4 <i>Agree</i> ; 1 <i>Somewhat Agree</i>
Q14 The guideline provides advice or tools on how the recommendation can be put into practice.	2 <i>Strongly Agree</i> ; 3 <i>Agree</i>	"The guideline gives clear cut recommendations on how to easily implement the actions into the care of PWD."	2 <i>Strongly Agree</i> ; 5 <i>Agree</i>
Q15 The potential resource implications of applying the recommendations have been considered.	3 <i>Strongly Agree</i> ; 1 <i>Agree</i> ; 1 <i>Neither Agree nor Disagree</i>	"The potential resource implications of applying the recommendations are clearly considered and the writer makes clear the benefits of utilizing the guideline."	2 <i>Strongly Agree</i> ; 4 <i>Agree</i> ; 1 <i>Neither Agree or Disagree</i>
Q16 The guideline presents monitoring and/or auditing criteria.	3 <i>Strongly Agree</i> ; 2 <i>Agree</i>	"Yes, Each step provides a clear set of monitoring procedures to ensure that the approaches are appropriate for the individual being care for."	2 <i>Strongly Agree</i> ; 5 <i>Agree</i>
Q17 The views of the funding body have not influenced the content of the guideline.	2 <i>Strongly Agree</i> ; 2 <i>Agree</i> ; 1 <i>Somewhat Agree</i>	"The guideline shows no evidence of biases or influences from outside parties."	1 <i>Strongly Agree</i> ; 5 <i>Agree</i> ; 1 <i>Neither Agree or Disagree</i>
Q18 Competing interests of guideline development group members have been recorded and addressed.	3 <i>Strongly Agree</i> ; 1 <i>Agree</i> ; 1 <i>Neither Agree nor Disagree</i>	"No competing interests of this guideline are seen by this evaluator. The main objective is held steady throughout the paper."	2 <i>Strongly Agree</i> ; 4 <i>Agree</i> ; 1 <i>Neither Agree or Disagree</i>
Q19 Rate the overall quality of this guideline.	3 <i>Strongly Agree</i> ; 1 <i>Agree</i> ; 1 <i>Somewhat Agree</i>	"Very high quality"	5 <i>Strongly Agree</i> ; 2 <i>Agree</i>
Q20 I would recommend this guideline for use.	5 Yes	None	7 Yes
Q21 Current Role	2 <i>Administrators</i> 2 <i>Directors of Nursing</i> ; 1 <i>Assistant Director of Nursing</i>	None	2 <i>Registered Nurses</i> ; 2 <i>Licensed Practical Nurses</i> ; 1 <i>Physical Therapy Assistant</i>
Q22 Comments or Notes	See Next Column	"As a Director of Nursing, this guideline would be easily used to educate caregivers, families and others in the community on how we must implement and monitor the care of PWD to ensure they are given the best care and allowed to flourish as individuals. I would recommend this guideline for use in the care of a PWD. The overall quality of this guideline is excellent. The rationale for this score is that it is easy to navigate for both a professional caregiver and for a lay person caregiver. The language used makes it easily applicable for a wide variety of PWD from several demographic areas."	"I feel this was very well put together & very relevant."

The third phase included feedback from the key stakeholders, nursing staff, therapy staff, state tested nurse assistants, housekeeping staff, maintenance staff, human resources staff, activities staff, social services, and dietary staff within the designated setting to determine usefulness and practicality of following the guidelines. Outliers and missing information will be approached by use of criteria as set with the AGREE instrument and will be discussed accordingly with the expert panel and key stakeholders for final determination and follow-up requirements. All analyses were focused on addressing the practice-focused question, through use of coding of the information and descriptive and inferential statistical analysis.

Summary

Sources of evidence had been determined in correlation to problematic behaviors in skilled nursing and long-term care facility settings for PWD. Published outcomes and research discussion for databases, search terms, and scope of review were presented. Analysis and synthesis plans were highlighted. Section 4 showcases the findings and recommendations, implications and strengths and limitations of the project.

Section 4: Findings and Recommendations

Introduction

Dementia presents in variable forms with a similar cause: a progressive declination in cognitive function resulting with the inability to perform activities of daily living (Alzheimer's Association, 2017a). Alterations in quality of life are obvious when residents living in long term care facilities with dementia has declined cognitive status, evidenced by challenges in processing thoughts, symptoms of memory and critical thinking difficulties, and impeding their consistent, safe ability to complete their day to day routine (Healthy People, 2017). Additional safety risks exist for a Person with Dementia (PWD) are associated with their inability to manage their own medications and medical conditions; struggle with making decisions; tool, appliance and vehicle use; social relationship maintenance; and injury avoidance from the disease processes (Apostolova et al., 2014; Healthy People, 2017).

Regulatory requirements for skilled and long-term care demand the development of care plans for each resident and national focus on implementation of person-centered care practices has increased recently (Center for Medicare and Medicaid Services, 2018). Despite the laws for reduced use of psychotropic medication in skilled and long-term care settings, specific practice guidelines do not exist to guide the care of PWD who exhibit problematic behaviors. The regulatory factors, along with the symptoms of PWD, places PWD, their caregivers and the facilities providing the care at higher risk for safety issues and complications trying to meet them.

The purpose of this project was to develop a practice guideline for use in skilled and long-term care setting for management of disruptive behaviors in PWD. This project has the

potential to contribute to social change by developing effective interventions designed to address the challenges of caring for PWD in the skilled and long-term care settings. When disruptive or challenging behaviors in PWD were reduced or eliminated, the costs to the caregivers, the residents, and their families may improve. Developing evidence-based practice guidelines enhances the quality of life for the PWD, their caregivers, and the staff at skilled or long-term care facilities. The controlled environment of skilled and long-term care facilities provided the consistency, continuity, and the resources necessary to determine the effectiveness of practice guidelines that, when proven effective, can be transferred to other settings, such as post-acute, home health, group homes, and private home settings. In Section 4, I showcase the findings and implications, recommendations, strengths, and limitations of the project.

Sources of Evidence

Search results produced thousands of articles, requiring combinations of search groupings to narrow the results to applicable and manipulative numbers. I reviewed articles for applicability to the development of practice guidelines. Articles were narrowed down to 379 for review, which were evaluated according to the GRADE tool (see Figure 1). A pattern of findings showed similar categories of focus pertinent to the care of the dementia population, including cognitive status, need-driven behavior, caregivers, falls and safety, medications and pain. Consistent need for assessments of each area of focus was identified as a priority and a need for a set of standard actions with tools, schedules and designated responsible key stakeholders was imperative in the literature. Twenty-six articles provided the basis for the development of the guidelines.

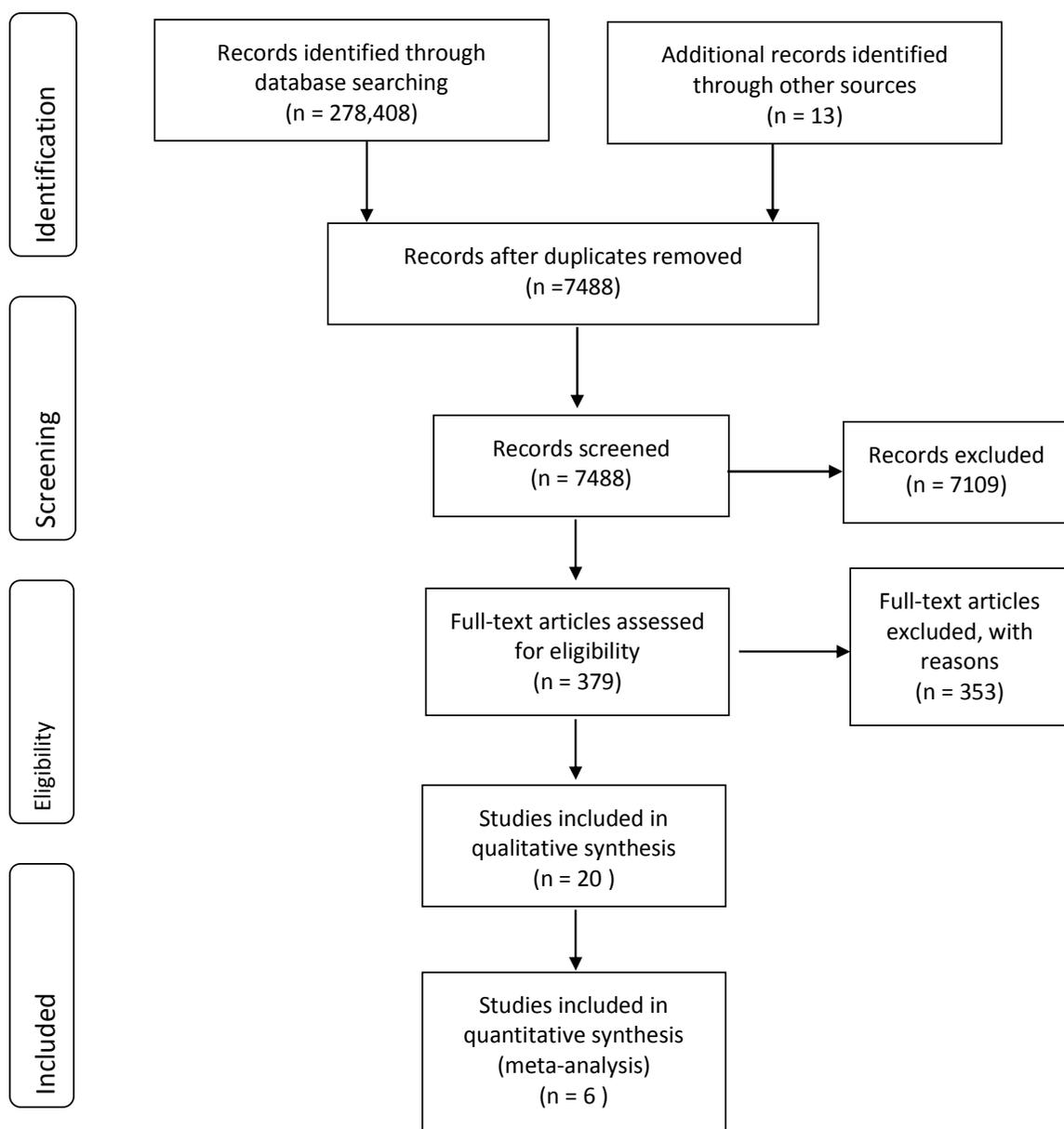


Figure 1. Literature search results.

The practice guidelines were organized according to the steps of the nursing process (Serafina, 1976) and provided a list of residents for each of the resident's needs (see the Appendix). After practice guidelines were developed, an expert panel consisting of five skilled

and long-term care professionals, two licensed nursing home administrators, two directors of nursing, and one assistant director of nursing, reviewed the guidelines using the AGREE II Instrument and provided feedback through an anonymous online survey. After the expert panel provided feedback, a group of seven key stakeholders, including two registered nurses, two licensed practical nurses, two state tested nurse assistants, and one physical therapy assistant, responded to requests and reviewed the guidelines and provided feedback through an anonymous online survey.

Findings and Implications

IRB approval from Walden University was obtained prior to sending the guidelines to expert panel members and stakeholders for their review (IRB protocol #07-20-18-0498772). Responses from expert panel members on the AGREE II demonstrated strong support for use of the guidelines (See Table 1). Written comments stated that the format for the guidelines would be easy to use for front line staff and could serve as a guide for providing care to PWD. Written responses from the expert panel also supported potential use of the practice guidelines in home health setting in the future. No changes were warranted prior to key stakeholder feedback inquiries. Key stakeholders were consistent in recommending the use of the guidelines.

The ability to obtain feedback from the expert panel and key stakeholders in a timely manner was challenging. I sent out multiple requests in multiple forms and to multiple groups, through use of professional contacts. Research times were delayed while waiting for feedback.

Implications

Individuals affected include the PWD, the caregivers, and the nursing staff. The PWD will be impacted by improved assessments of their conditions on admission, routine intervals,

and with changes in condition. Plans of care will be able to be individualized to best serve the PWD, optimizing care based on information gathered, improving outcomes for the PWD. Need-driven, dementia-compromised behaviors will be minimized, improving the quality of life for the PWD. Caregivers and nursing staff are able to provide consistent, standardized care with the use of the guidelines, minimizing risks to the PWD and themselves. Communities will have increased opportunities for the care of their loved ones. Caregiver stress levels will be minimized. Families will cope with the care of a loved one with dementia in a more favorable fashion. The findings agree with the research showing that when the behaviors of the PWD are managed, the stress of the PWD, professional caregivers and lay caregivers reduces, satisfaction and quality of life improve (Baker et. al., 2015; Cheston et. al., 2007; Oliveira et. al., 2015; Tang et. al., 2016; Zetteler, 2008).

Institutions will be improved by the standardized processes and workflows, with every individual receiving high level of care, individualized to that person. With individual's needs being met, the environment will be improved having decreased behaviors affecting others. Institutional staff members will have improved training and tools for dementia care consistency. Marketing opportunities can include the standardized use of practice guidelines for the care of dementia population.

Systems will be able to utilize these standards within the skilled and long-term care parts of their continuum. Optimization of care in this setting decreases risk for infections and readmission rates to hospitals. Cost efficiencies of care is also improved with reduced negative effects from behaviors or rejection of care associated with the same.

Implications for Positive Social Change

Positive social change will be visible in the care of the dementia population. Attitudes of the resident, the families, the staff, the visitors, and the community will be changed towards the PWD and the care continuum from use of these standard guidelines and the ability to communicate the positive outcomes in this setting for potential use elsewhere. Visitation for the PWD will increase due to improved interactions and positive outcomes observed. Other areas will want to adapt and develop similar practice guidelines to improve the care in their settings too. Acute care settings, home health settings, group homes, and family caregivers will want these guidelines adjusted to assist in their areas.

Recommendations

Recommendations moving forward are full implementation into all skilled and long-term care settings, with a focus on continued research for further development of this care continuum. Continued research recommendations would include development of practical actions for potential interventional methods for prevention of behaviors, to include further exploration of simulated presence therapy, use of weighted blankets and clothing, essential oils, exercise, Tai Chi, music, and environmental adjustments. Additional research should be completed for how to adjust current and future developments into the settings of home health care, assisted living and independent living environments, group homes, and home care with non-medical caregivers.

Strengths and Limitations of the Project

Strengths of the study are consistency in the findings of the research for development of the guidelines and the feedback from both the expert panel and the key stakeholders with experience caring for a PWD. An extensive review of the literature was completed. The

literature was evaluated using the GRADE criteria. The guidelines were organized using the nursing process and guided by a theoretical model.

Limitations center around the small number of members of the expert panel and stakeholders who evaluated the guidelines are the small design of the study. The expert panel consisted of only five individuals. The key stakeholders were only seven individuals. In addition, members of the expert panel and key stakeholders all work in long term care facilities in rural areas. Feedback data could vary from the limited number and the isolated area setting.

Summary

After an extensive review of the literature, practice guidelines aim in meeting the needs of PWD residing in skilled and long-term care settings were developed. After review by an expert panel of nursing home administrators, directors and assistant directors of nursing, the actions outlined in the guidelines were determined to be accurate and no changes were recommended. Key stakeholders also agreed that the guidelines were usable and practical. Potential improvement for the individual, community, institutions, system and promotion of positive social change presented. Recommendations are for implementation of the practice guidelines into practice and to consider further research for additional specified interventions and the ability to adapt to other settings. Section 5 will discuss the dissemination plan and analysis of self.

Section 5: Dissemination Plan

Introduction

I selected the population of Persons with Dementia because of the prevalence of in numbers with the challenges associated with dementia and the ramifications to themselves and those around them (United States Department of Health and Human Services, 2016). The gap in literature clearly showed that guidance for care of this high-risk population was needed. The practice guideline was developed and will be used by the administrators, directors, and staff at skilled and long-term care facilities. My plans would be for the guidelines to be placed in new employee orientation, in policy procedural manuals, and resource guides.

The dissemination of the findings from this study will be with multiples audiences starting with the submission of the final project to ProQuest. The IRB at my current employer will receive a copy of my results. The results will then be shared with the nursing home collaborative groups for the county in which I work. I will email the post-acute care collaborative meeting for nursing homes, home health companies, hospitals, emergency agencies, and durable medical equipment companies. I will provide poster presentations for Ohio Health Care Association Conference and for an annual conference sponsored by National Association of Director of Nursing Administration (NADONA), Ohio Direction of Nursing Administration (ODONA), Association of Advanced Nurse Practitioners (AANP), and Gerontological Advanced Practice Nurses Association (GAPNA). I also hope to publish my results in a professional geriatric nursing journal, like *The Director*, *Journal of the American Geriatrics Society*, *Journal of Aging and Health*, or *the Journal of Nursing Home Research*.

Self-Analysis

Completion of the project was both challenging and fulfilling endeavor for me as I strive for more education in my own life. My belief is that education, no matter what the preferred specialty, is significant, important, and something that no one can ever take from you. My studies challenged me to think in new ways and explore their own capabilities pushing through challenges and developing solutions to everyday problems. I believe that each day I learn something about myself, my profession, and about human nature. With each encounter, I am allowed the privilege of gaining insight I can build upon for the next encounter.

Role as Scholar-Practitioner

As a scholar practitioner, my current focus is on the care of those Persons with Dementia, especially those who demonstrate behaviors, their caregivers, both formal and informal, and their families. I will consider future research on implementation of more specific interventions in the care of dementia clients, crossing sensory-based interventions into the care for dementia population, and mandatory widespread training for all staff in skilled and long-term care settings to the guidelines. I want to continue to research and make advances on the guidelines that can be taught for other settings and personnel to assist them, to include emergency personnel. My professional growth and development are determined by my effectiveness in dissemination of the research findings, which I plan to continue to do with each project and put into different media forms for use in different settings. My goal would be to develop a national and then international practice guideline of care for Persons with Dementia.

Role as Project Manager

The project challenged my skills in project development, writing, and time management. I am clinical and analytical. In being this way, I had a difficult editing, and feeling like things were fully complete. I also had challenges in getting survey respondents to complete the survey in timely fashion due to calendar timing of the survey aligning with major changes in the specialty area from a regulatory standpoint raising demands and stress for my targeted expert panel. The delays served as a reminder that the swiftness desired is not always the outcome experienced. As a DNP-prepared nurse, I want to continue to use my knowledge to develop other projects in the advancement of healthcare.

Summary

The doctoral project was a development of practice guidelines in the care of PWD who exhibit behaviors in skilled and long-term care facilities to provide consistency and standardization to a highly prevalent and high risk population. The journey involved challenges of obtaining the right literature in the right quantity and with the right focus, and in obtaining feedback. Overcoming obstacles is key to a professional nursing career, and this was no different. I made adjustments to the search term combinations to get the right information and I approached multiple people from multiple companies until my desired number of respondents was obtained. Research is hard work and the hard work pays off, impacting and promoting social change in the lives of others. The results of this project will affect PWD for years to come.

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Appendix: Practice Guidelines

An Evidence-Based Practice Guideline using a Need-Driven Dementia-Compromised Behavior Model for Care of Persons with Dementia by Amy Marie Nolan MSN, RN

Introduction

Alzheimer's disease and other dementias are diagnoses of more than 5.3 million individuals, with greater than 96% of those aged 65 or older, and large numbers in need of a skilled or long-term care setting (United States Department of Health and Human Services, 2016). According to the National Study of Long-Term Care Providers for years 2013-2014, over half of the residents in the 15,600 nursing homes were Persons with Dementia (PWD), which exceeds any other dementia provider, and the numbers are projected to increase the age group numbers rise (United States Department of Health and Human Services, 2016). A Person with Dementia (PWD) often presents with cognitive decline exhibiting difficulty with memory and reasoning impeding daily activities of living and affecting their quality of life (Healthy People, 2017). Safety risks therefore increase for a PWD (Apostolova, et al., 2014; Healthy People, 2017). Compromised behavior symptoms for a PWD, including symptoms of agitation, questions asked repetitively, psychosis, aggressive behaviors, difficulty sleeping, wandering and perceptible thought issues all increase the challenges faced by the PWD, their family and caregivers (Oliveira, et. al., 2015). Development of practice guidelines are needed to reduce complication and safety risks, optimize quality of life and outcome measures, and to provide support for caregivers, both informal and formal, for the care of a PWD.

Aim

The aim is to provide evidence-based provider guidelines for use with care of persons with dementia to prevent and react to exhibited disruptive behaviors from them.

Disclosure to Expert Panelist Form for Anonymous Questionnaires

To be given to expert panelist prior to collecting questionnaire responses—note that obtaining a “consent signature” is not appropriate for this type of questionnaire and providing respondents with anonymity is required.

Disclosure to Expert Panelist:

You are invited to take part in an expert panelist questionnaire for the doctoral project that I am conducting.

Questionnaire Procedures:

If you agree to take part, I will be asking you to provide your responses anonymously, to help reduce bias and any sort of pressure to respond a certain way. Panelists' questionnaire responses will be analyzed as part of my doctoral project, along with any archival data, reports, and documents that the organization's leadership deems fit to share. If the revisions from the panelists' feedback are extensive, I might repeat the anonymous questionnaire process with the panel of experts again.

Voluntary Nature of the Project:

This project is voluntary. If you decide to join the project now, you can still change your mind later.

Risks and Benefits of Being in the Project:

Being in this project would not pose any risks beyond those of typical daily professional activities. This project's aim is to provide data and insights to support the organization's success.

Privacy:

I might know that you completed a questionnaire but I will not know who provided which responses. Any reports, presentations, or publications related to this study will share general patterns from the data, without sharing the identities of individual respondents or partner organization(s). The questionnaire data will be kept for a period of at least 5 years, as required by my university.

Contacts and Questions:

If you want to talk privately about your rights in relation to this project, you can call my university's Advocate via the phone number 612-312-1210. Walden University's ethics approval number for this study is 07-20-18-0498772.

Before you start the questionnaire, please share any questions or concerns you might have.

Please use the following link for completion of the anonymous survey questions.

<https://www.surveymonkey.com/r/W5KLH33>

Terms

Behaviors: actions exhibited by a PWD that are challenging in both psychological and behavioral manifestations but should be explored as the underlying cause and triggers leading to these misplaced coping mechanisms (Halek, Holle, & Bartholomeyczik, 2017).

Dementia: decline in cognitive ability which interferes with activities of daily living, with Alzheimer's disease and vascular dementia, which can be post-stroke dementia, are examples of types of dementia (Alzheimer's Association, 2018; Mijajlović et al., 2017).

Need-Driven Dementia-Compromised Behavior Model (NDB): presents the position that challenging behaviors occur in a PWD in their attempt to accomplish a goal or express a need, and have causative factors, versus the will to behave in an adverse manner (Algase et al., 1996; Norton et. al., 2010).

Persons with dementia (PWD): present with cognitive decline in function, decline in abilities to think, difficulty with remembering and reasoning, all which impedes daily activities living affecting their quality of life (Healthy People, 2017).

Practice Guidelines

The practice guidelines will be presented in a series of tables for each concept area affecting the care of PWD. In each table, the concept will be reviewed for the nursing process for assessment, diagnosis, planning, implementation, evaluation, and resource links to be used for those wanting further information or the tools discussed in the guidelines. The concept topic areas will be cognitive status, behaviors, caregivers, falls and safety, medications, and pain.

Cognitive Status

Understanding dementia is imperative to the care of those inflicted with the challenges it causes. Health care providers must know what level of dementia each individual is currently in in order to best serve them now and plan for their future. Cognitive assessments in different formats provide an objective way to monitor current deficit and progressive declines when systematically completed over time by a variety of professional disciplines. The following table describes the assessment, diagnosis, planning, implementation and evaluation guidelines for dementia focusing on the resident's cognitive status.

Table 1. Cognitive Status

	Action	Rationale	Tool and Schedule	Responsible Person or Discipline
Assessment	1. Each resident will have a comprehensive multidisciplinary assessment completed on admission, readmission, quarterly, and with status changes.	The Centers for Medicare and Medicaid Services regulation 483.20 states “The facility must conduct initially and periodically a comprehensive, accurate, standardized, reproducible assessment for each resident’s functional capacity.”	Shown as follows with each topic.	Inter-disciplinary Team (IDT)
	2. Each resident will have monitoring of cognitive functioning completed through dementia screening and staging by interdisciplinary team members.	The Global Deterioration Scale (GDS) is used in combination with the Brief Cognitive Rating Scale and Functional Assessment Staging Tool to provide the stages of degenerative dementia. ¹	GDS every 1-2 months with visit	Physician, Nurse Practitioner, or Physician Assistant
		Brief Interview for Mental Status (BIMS)	BIMS; Admission, quarterly, discharges and with significant changes to align with MDS Schedule	Social Worker
		Mini-Mental Status Exam (MMSE)	MMSE; Triggers noted in the documentation for onset of behaviors, ineffectiveness of interventions, or misalignment of presentation in functional status with BIMS findings.	Social Worker
		Montreal Cognitive Assessment (MoCA) more comprehensive test that includes visuospatial/ executive functions, naming, memory, memory, attention, language, abstraction, delayed recall, and orientation questions which identifies gaps in function that are unseen in BIMS or MMSE assessments.	MoCA; To be used as part of assessment when receiving therapy services, change in status, or when BIMS or MMSE assessment results do not align to presentation of resident’s abilities.	Occupational Therapist or Occupational Therapy Assistant
		Multi-Dimensional Dementia Assessment Scale (MDDAS) measures Activities of Daily Living (ADL), cognitive, behavioral, and psychological functional status, which provides information not seen in the BIMS, MMSE, or the MoCA.	MDDAS; Admission, readmission, quarterly, and with significant changes to align with the MDS schedule requirements.	Front-line Nursing Staff

(table continues)

Diagnosis (es)	1. Medical diagnosis (es) will be determined and documented thoroughly and in compliance with current ICD-10 standards.	Primary diagnosis and co-morbidities affect the current and progressive care needs of a resident with cognitive status impairments.	ICD-10 Classification System; Admission, monthly visits, change in status and discharge.	Physician
	2. Nursing diagnoses for the plan of care will be determined using the data gathered during the assessment and reference to the medical diagnosis (es) in forms of actual or potential for format.	Primary diagnosis, co-morbidities, subjective and objective assessment findings all affect the current and progressive care needs of a resident with cognitive status impairment.		Front-line and MDS Nursing Staff
Planning	1. Plan of care to be developed, all-inclusive of diagnoses and in alignment with cognitive status for all areas.	Cognitive status plays a role in the needs and perceptions if an individual.	Basic plan of care format will include diagnosis of actual or potential for issue, goals, and the actions used to meet goal; Admission, quarterly, significant change, and discharge.	Resident; Family or Resident Representative; Nursing, Therapies, Social Service, Dietary, Activities
Implementation	1. Staff education to be completed on dementia, its' stages, changes in mentation, the tools being utilized for cognitive testing, how they are completed, the schedule for completion, and which role is responsible (Reese, Thiel, & Cocker, 2016).	Staff need to be educated on the populations they provide care to remain competent in the care provided.	Orientation handouts and checklists; Upon hire and at least annually.	Leadership; nursing staff; Education
	2. Provider education to be completed on documentation guidelines for ICD-10 classifications and the use of the GDS assessment with visits.	Providers need to know expectations of performance and the GDS assessment completion requirements.	ICD-10 Classification System; Prior to implementation and then as needed for identified gaps in performance.	Coding, Staff, Education
	3. Standardized protocols are to be utilized for treatment of change in mental status using evidence-based practice.	Standardization provides guidance and consistency between caregivers based on evidence to optimize outcomes.	INTERACT	Nursing Staff, Leadership
	4. Assessments computerized with set schedules in place that auto-trigger for completion.	Standardized assessments within a computer system with set schedules that trigger eliminate user error for initiation.	GDS, BIMS, MMSE, MDDAS, MoCA; Scheduled as listed in planning phase	Information Services, Nursing Staff, Clerical Staff
Evaluation	1. Audits to be completed on education of staff and providers and findings discussed at quarterly Quality Assurance Meeting.			Leadership
	2. Audits to be completed on use of the standardized protocols and findings discussed at quarterly Quality Assurance Meeting.			Leadership
	3. Audits to be completed on use of the computerized scheduled assessments.			Leadership

Resources and Links

Brief Interview for Mental Status (BIMS) Link available at

<http://www.foundationsgroup.net/files/126558935.pdf>

e-INTERACT Link available at <http://www.pathway-interact.com/>

Global Deterioration Scale (GDS) Link available at

<https://www.fhca.org/members/qi/clinadmin/global.pdf>

Gustafsson, M., Isaksson, U., Karlsson, S., Sandman, P., & Lovheim, H., (2016). Behavioral and psychological symptoms and psychotropic drugs among people with cognitive impairment in nursing homes in 2007 and 2013. *European Journal of Clinical Pharmacology*, 72, 987-994. DOI: 10.1007/s00228-116-2058-5

ICD-10 Coding Link available at <https://www.icd10data.com/>

Mini-Mental Status Exam (MMSE) Link available at

<http://www.heartinstitutehd.com/Misc/Forms/MMSE.1276128605.pdf>

Montreal Cognitive Assessment Link available at <http://www.memorylosstest.com/dl/moca-test-english-7-1.pdf>

Multi-Dimensional Dementia Assessment Scale Link available at

Reese, T. R., Thiel, D. J., & Cocker, K. E. (2016). Behavioral disorders in dementia: Appropriate nondrug interventions and antipsychotic use. *American Family Physician*, 94(4), 276–282. Retrieved from

<https://ezp.waldenulibrary.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=27548592&site=ehost-live&scope=site>

Need-driven Behavior

Need-driven behavior present in a PWD as an attempt to express their desire or need, or accomplish a goal, and have a causative factor (Algase et. al., 1996; Norton et. al., 2010). Examples of need-driven behavior may include verbalizations, irritability, body movements, wandering, repetitive questioning, memory problems, crying, outbursts, care resistance, aggression, and activity withdrawal (Norton et. al., 2010). Background factors involve neurological, cognitive, health status, co-morbidities, and psychosocial attributes, while proximal factors involve social and physical environments, along with internalized needs like pain or anxiety (Norton et. al., 2010). Recognizing the reason for the behavior and thus addressing the cause versus the behavior itself, improves the outcomes for the PWD, the other residents, the family, and the caregivers.

Table 2. Behavior

	Action	Rationale	Tool and Schedule	Responsible Person or Discipline
Assessment	1. Assess behavioral history.	Care is best provided when staff knows expectations and how to address them. Without a history, individualized planning is not efficient.	Revised Memory and Behavior Checklist (RMBC); On admission, with readmission	Social Services or Admitting Nurse
	2. Determine preferences of everyday living routine.	Routine schedules aligned with personal preferences improve satisfaction, contentment, and sense of security, reducing behavioral outbursts.	PELI, Admission, readmission, quarterly, and significant change	Activities
	3. Assess sleep history.	Sleep deprivation can lead to emotional triggers	Sleep history and physical questions; On admission, readmission, quarterly	Nursing Staff
Diagnosis (es)	1. Diagnose behavior of focus for the PWD.		ICD-10 Classification System; On admission, readmission, quarterly and with any changes	PCP, NP PA, Nursing Staff

(table continues)

Planning	1. Develop a standardized daily routine using preferences identified during the assessment	Routine provides a sense of security	On admission, readmission, quarterly		Interdisciplinary Team
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	2. Determine effective solutions to most common physical and emotional stressor.	Preparation reduces time and severity of behaviors for the resident, the staff, and others in the area.	On admission, readmission, quarterly		Interdisciplinary Team
	3. Develop a standardized pathway for use in resident when exhibiting behavior.		CMS-20067 Behavioral-Emotional Status Critical Element Pathway; On admission, readmission, quarterly		Interdisciplinary Team
Implementation	1. Complete daily routine as scheduled consistently according to preferences using key scripting.		Daily with documentation as provided within organization system structure		Interdisciplinary Team
	2. Complete standardized pathways in event behavior exhibited.		Upon occurrence with documentation within organization system structure		Interdisciplinary Team
Evaluation	1. Audit documentation for completion of routine	All interventions should be evaluated for completion and effectiveness to determine whether applicable or changes need to occur.	With MDS schedule on admission, readmission, quarterly and with significant changes.		Administrator, DON or nurse designee
	2. Audit effectiveness of daily schedule with preferences by review of documentation questions for needs for interventions and effectiveness for use of them	All interventions should be evaluated for completion and effectiveness to determine whether applicable or changes need to occur.	With MDS schedule on admission, readmission, quarterly and with significant changes.		Administrator, DON or nurse designee
	3. Audit review each case of behavioural outburst to determine effectiveness and alignment of pathway.	Events that occur intermittently may have inconsistent results, so monitoring each helps to improve consistency.	With each outburst or behavioral event		Administrator, DON or nurse designee

Resources/Links

CMS-20067 Behavioral-Emotional Critical Element Pathway Link available as

<http://cmscompliancegroup.com/wp-content/uploads/2017/08/CMS-20067-Behavioral-Emotional.pdf>

ICD-10 Coding Link available at <https://www.icd10data.com/>

Preferences for Everyday Living Inventory Link available at

<https://www.abramsoncenter.org/media/1200/peli-nh-full.pdf>

Reese, T. R., Thiel, D. J., & Cocker, K. E. (2016). Behavioral disorders in dementia: Appropriate nondrug interventions and antipsychotic use. *American Family Physician, 94*(4), 276–282. Retrieved from

<https://ezp.waldenulibrary.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=27548592&site=ehost-live&scope=site>

Revised Memory and Behavior Checklist Link available at

http://www.alz.org/national/documents/C_ASSESS-RevisedMemoryandBehCheck.pdf

Sleep History and Physical Questions Link available at

[https://aasm.org/resources/medsleep/\(harding\)questions.pdf](https://aasm.org/resources/medsleep/(harding)questions.pdf)

Caregivers

Family caregivers, community-based caregivers and professional caregivers in health care settings are faced with the challenges when caring for the PWD. Zetteler's (2008) findings demonstrated a positive correlation of effectiveness to the relationship or attachment with their caregiver (Cheston, et al., 2007). Compromised behavior symptoms for a PWD, including symptoms of agitation, questions asked repetitively, psychosis, aggressive behaviors, difficulty sleeping, wandering and perceptive thought issues all increase the challenges faced by the PWD, their family and caregivers (Oliveira, et. al., 2015). Development of practice guidelines are needed to reduce complication and safety risks, optimize quality of life and outcome measures, and to provide support for caregivers, both informal and formal, for the care of a PWD.

Table 3. Caregivers

	Action	Rationale	Tool and Schedule	Responsible Person or Discipline
Assessment	1. Each resident will have a comprehensive multidisciplinary assessment including community caregiver status completed on admission, readmission, quarterly, and with status changes.	The Centers for Medicare and Medicaid Services regulation 483.20 states "The facility must conduct initially and periodically a comprehensive, accurate, standardized, reproducible assessment for each resident's functional capacity."	Shown throughout this document.	Inter-disciplinary Team (IDT)
	2. Assess the emotional, psychological, physical, spiritual, and financial factors that contribute as stressors for family caregivers.	Multiple factors contribute to the stressors for family caregivers.	Zarit Burden Interview (ZBI); On admission, readmission, quarterly, and significant change.	Nursing Staff

(table continues)

	3. Assess the emotional, psychological, physical, spiritual, and financial factors that contribute as	Multiple factors contribute to the stressors for professional caregivers.	On admission, readmission, quarterly, and significant change.	Nursing Staff
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	stressors for the professional caregivers.			
Diagnosis (es)	1.Information from assessments reviewed and diagnoses determined for plan of care needs for current caregivers.		Completed on admission, readmission, quarterly and with significant changes.	PCP, MDS Nurse, IDT
Planning	1.Develop plan of care using assessment findings.	Regulatory requirements for care planning that are individualized	Upon admission, readmission, and update quarterly or with significant changes.	PCP, Nurse, IDT
	2. Develop interventions to prevent stressors for emotional, psychological, physical, spiritual, and financial issues for family caregivers.	Managing the stress for family caregivers can improve interactions between the caregivers and PWD, reducing undesirable behaviors.	Upon admission, readmission, quarterly, and as needed for changes in needs.	PCP, Nurse, IDT
	3. Develop interventions to prevent stressors for emotional, psychological, physical, spiritual, and financial issues for professional caregivers.	Managing the stress for family caregivers can improve interactions between the caregivers and PWD, reducing undesirable behaviors.	Upon admission, readmission, quarterly, and as needed for changes in needs.	PCP, Nurse, IDT
Implementation	1.Implement each intervention developed in planning stage.		Upon admission, readmission, quarterly, and when changes made.	IDT
Evaluation	1.Audit for frequency of undesirable behaviors and effectiveness of interventions for PWD.		Documentation system for behaviors; With MDS schedule on admission, readmission, quarterly, and significant changes.	Nursing
	2.Discuss with family caregivers effectiveness of interventions.		Plan of care conferences held on admission, readmission, quarterly, and as needed thereafter.	IDT
	3.Discuss with professional caregivers' effectiveness of interventions.		Monthly team meetings and rounding.	Administrator, DON, or nurse designee

Resources/Links

- Baker, C., Huxley, P., Dennis, M., Islam, S., & Russell, I. (2015). Alleviating staff stress in care homes for people with dementia: protocol for stepped-wedge cluster randomised trial to evaluate a web-based Mindfulness- Stress Reduction course. *BMC Psychiatry, 15*, 317. <https://doi-org.ezp.waldenulibrary.org/10.1186/s12888-015-0703-7>
- Cheston, R., Thorne, K., Whitby, P., & Park, J. (2007). Simulated presence therapy, attachment and separation amongst people with dementia. *Dementia, 6*(3), 442-449. Retrieved from <https://doi-org.ezp.waldenulibrary.org/10.1177%2F14713012070060030703>
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- Tang, J. Y.-M., Ho, A. H.-Y., Luo, H., Wong, G. H.-Y., Lau, B. H.-P., Lum, T. Y.-S., & Cheung, K. S.-L. (2016). Validating a Cantonese short version of the Zarit Burden Interview (CZBI-Short) for dementia caregivers. *Aging & Mental Health, 20*(9), 996–1001. <https://doi-org.ezp.waldenulibrary.org/10.1080/13607863.2015.1047323>
- Zarit Burden Interview Link available at <https://cgne.nursing.duke.edu/sites/default/files/3%20Caregiver%20Support%20-%20The%20Zarit%20Burden%20Interview.pdf>
- Zettler, J. (2008). Effectiveness of simulated presence therapy for individuals with dementia: a systematic review and meta-analysis. *Aging & Mental Health, 12*(6), 779-785. Retrieved from

<http://web.a.ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?vid=6&sid=9141ac1c-4e8d-40fe-812e-638066db8865%40sessionmgr4008>

Falls and Safety

Dementia causes decline in cognition, function, balance, and safety awareness (Booth, Logan, Harwood & Hood, 2015). PWDs are unable to remember consistently the things that reduce falls, like use of their walker, locking the brakes on rollator walker or wheelchair, or calling for help. The ability to process cause and effect is decreased, increasing risks in all areas. Falls with injury have a high mortality rate in the older population. Prevention is key focus for this population.

Table 4. Falls and Safety

	Action	Rationale	Tool and Schedule	Responsible Person or Discipline
Assessment	1. Assess fall history.	Regulatory requirement in the MDS	MDS J1700-J1900; On admission, readmission, quarterly and with any fall.	Admitting nurse, MDS nurse, and assigned nurse
	2. Analyze each fall in history to determine potential to prevent future falls		On admission, readmission, quarterly, and with any fall	Admitting nurse, MDS nurse, and assigned nurse
Diagnosis (es)	1. Diagnose level of fall risk based on data gathered.		ICD-10 Classification System; On admission, readmission, quarterly, and with a fall	PCP, NP, PA, Nurse
Planning	1. Develop fall preventive measures based on findings from the assessments.	Individualized interventions provide improved compliance by the PWD.	Plan of Care; On admission, readmission, quarterly, and with a fall	IDT
	2. Involve the family caregivers and PWD in the planning process	Involvement improves the compliance and participation in the plans moving forward.	Plan of Care; On admission, readmission, quarterly, and with a fall	IDT
Implementation	1. Educate the staff and implement the preventive measures.	Knowing what to do improves compliance in completion and optimizes outcomes.		DON, nurse designee, or IDT leads
	2. Involve and document participation with family and PWD in the designated location regarding fall risk and interventions.			Nurse, IDT lead
Evaluation	1. Audit care planning for individualization and completion		On admission, readmission, quarterly.	IDT

Resources/Links

Booth, V., Logan, P., Harwood, R., & Hood, V. (2015). Falls prevention interventions in older adults with cognitive impairment: A systematic review of reviews. *International Journal of Therapy and Rehabilitation*, 22, 6, 289-296.

Medications

Safety risks exist for a Person with Dementia (PWD) associated with their inability to successfully manage medications and medical conditions, make decisions, use vehicles, appliances or tools, avoid injuries, maintain social relationships, and behaviors with affect, distress, tension and impulse control issues, all of which are associated from the disease processes (Apostolova, et al., 2014; Healthy People, 2017). Regulations have recently become more focused on problematic behavior management while reducing the of psychotropic medication in skilled and long-term care settings. Medication of this same at-risk population for the behaviors show many risks and few benefits with side effects that include an increased risk for falls, sleepiness and extrapyramidal symptoms (Zetteler, 2008).

Table 5. Medications

	Action	Rationale	Tool and Schedule	Responsible Person or Discipline
Assessment	1. Complete a medication reconciliation to include medications and compliance in taking them according to their orders.	Medications can affect the cognitive and physical function of an individual in a negative manner. If the PWD was not taking them as ordered at home, increased side effect potential may occur when administered consistently with meals.	Admission, readmission, quarterly, and with change in status	Nurse and Pharmacist
	2. Review each medication for black box warnings, increase safety risks, and the efficacy pertinent to use in that individual.	The risks and benefits of all medications should be determined and evaluated for interference with wellness, as many medications have black box warnings for PWD	Admission, readmission, quarterly, and with change in status	Nurse and Pharmacist
Diagnosis (es)	1. Diagnoses to align with each medication.	Medications should be given for a reason, an indication, and with a correlating diagnosis.	ICD-10 Classification System; On admission, readmission, quarterly, and as needed	PCP, NP, PA, Nurse, Pharmacist
(table continues)				
Planning	1. Develop plan for administration that aligns with schedule and preferences for administration	Consistency improves compliance and reduces side effects	On admission, readmission, quarterly, and as needed.	Nurse

	2. Determine supplemental documentation for all medications as warranted for safety.		Documentation System; On admission, readmission, quarterly and as needed	Nurse
Implementation	1. Implement Plan for administration to include the preferences for administration.	Compliance will be most consistent when preferences are honored.	On admission, readmission, quarterly, and as needed.	Nurse
	2. Add supplemental documentation requirements for all medication.	Monitoring of medications is imperative to the safety of each PWD.	On admission, readmission, quarterly, and as needed.	Nurse
Evaluation	1. Audit the administration records to determine acceptance, effectiveness and supplemental information.		Medication Administration Record; On admission, readmission, quarterly, and as needed.	Administrator, DON, or nurse designee

Resources/Links

Apostolova, L. G., Di, L. J., Duffy, E. L., Brook, J., Elashoff, D., Tseng, C., & ... Cummings, J.

L. (2014). Risk factors for behavioral abnormalities in mild cognitive impairment and mild alzheimer's disease. *Dementia & Geriatric Cognitive Disorders*, 37(5/6), 315-326.

Retrieved from <https://doi.org/10.1159/000351009>

Zettler, J. (2008). Effectiveness of simulated presence therapy for individuals with dementia: a systematic review and meta-analysis. *Aging & Mental Health*, 12(6), 779-785. Retrieved from

<http://web.a.ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?vid=6&sid=9141ac1c-4e8d-40fe-812e-638066db8865%40sessionmgr4008>

Pain

Proximal factors consist of the environments socially and physically and the needs that adjust as internalized by the PWD, including pain or anxiety levels (Norton, et al., 2010). Pain can lead to changes in behavior, especially when a PWD is unable to communicate the discomfort. Caregivers must be able to identify triggers and behaviors indicative of pain to be able to intervene most appropriately. Practice-guidelines are widely used in the care of individuals with pain, falls, dyspnea, and pressure ulcers in home care settings, with positive effects for the consumer, regardless of the individual provider providing the care (Doran, et al., 2014).

Table 6. Pain

	Action	Rationale	Tool and Schedule	Responsible Person or Discipline
Assessment	1. Assess current pain and history.	Regulatory requirements in the MDS.	MDS J0100-0800; On admission, readmission, quarterly, and as needed for change in pain	Nurse and PCP, NP, or PA
Diagnosis (es)	1. Determine diagnoses related to pain.	Knowing the diagnoses allows for improved planning that aligns with the specific cause versus overall pain	MDS Section I; On admission, readmission, quarterly, and as needed for changes or additions	PCP, NP, or PA; Nurse
Planning	1. Develop plan of care that aligns with assessment findings and includes both pharmacological and non-pharmacological findings.		On admission, readmission, quarterly, and as needed	Nurse, PCP, NP, PA
Implementation	1. Implement plan of care to include pain management to include both pharmacological and non-pharmacological measures and diagnoses correlated.		On admission, readmission, quarterly, and as needed	Nurse, IDT
Evaluation	1. Audit pain management documentation on MDS		On admission, readmission, quarterly, and as needed	Administrator, DON, or Nurse Designee
	2. Audit pain management on MAR		Monthly	Administrator, DON, or Nurse Designee

Resources/Links

Norton, M. J., Allen, R. S., Snow, A. L., Hardin, J. M., & Brurgio, L. D. (2010). Predictors of need-driven behaviors in nursing home residents with dementia and associated certified nursing assistant burden. *Aging & Mental Health*, 14(3), 303-309.

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