Development of a Social Marketing Plan to Decrease Long Term Care Nurses Use of Unnecessary Pharmacological Interventions to Address Residents' Behavioral Disturbances

Kela Spikes Bickham
University of Southern Mississippi

Follow this and additional works at: https://aquila.usm.edu/dnp_capstone

Part of the Geriatric Nursing Commons

Recommended Citation
Bickham, Kela Spikes, "Development of a Social Marketing Plan to Decrease Long Term Care Nurses Use of Unnecessary Pharmacological Interventions to Address Residents' Behavioral Disturbances" (2016). Doctoral Projects. 33.
https://aquila.usm.edu/dnp_capstone/33
DEVELOPMENT OF A SOCIAL MARKETING PLAN TO DECREASE LONG TERM CARE NURSES USE OF UNNECESSARY PHARMACOLOGICAL INTERVENTIONS TO ADDRESS RESIDENTS’ BEHAVIORAL DISTURBANCES

by

Kela Spikes-Bickham

Abstract of a Capstone Project
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Nursing Practice

May 2016
ABSTRACT

DEVELOPMENT OF A SOCIAL MARKETING PLAN TO DECREASE LONG TERM CARE NURSES USE OF UNNECESSARY PHARMACOLOGICAL INTERVENTIONS TO ADDRESS RESIDENTS’ BEHAVIORAL DISTURBANCES

by Kela Spikes-Bickham

May 2016

Seventy-six percent of long term care (LTC) residents display behavioral disturbances associated with psychiatric disorders, including dementia, which “often occur in clusters and include depression, psychosis, aggression, agitation, anxiety, and wandering” (Agency for Healthcare Research and Quality [AHRQ], 2014 para. 2; Perkins, 2012). Forty percent of LTC residents with behavioral disturbances receive pharmacological treatments to manage their behavioral disturbances, but these medications have limited efficacy and significant adverse effects (Gustafsson, Karlsson, & Lövheim, 2013). This remains important because the population, ages 65 and older (approximately 88% of all LTC residents), represent the most vulnerable to the effects of pharmacological interventions (PIs; American Association of Retired Persons [AARP], 2007).

According to the United States (U.S.) Food and Drug Administration (FDA, 2005), the use of atypical antipsychotic medications for off-label purposes of treating behavioral disturbances in elderly residents with dementia in LTC facilities remains dangerous and can lead to death. Because of this, the U.S. FDA (2005) included a black-boxed warning in their labeling to describe the risks, noting these...
drugs remained unapproved for the treatment of behavioral disturbances in residents with dementia. Under the Food and Drug Administration Amendments Act (FDAAA), the U.S. FDA (2008) applied safety related changes to conventional antipsychotics drugs and atypical antipsychotic drugs.

The purpose of this capstone project involves developing a social marketing plan that may help decrease LTC nurses use of unnecessary PIs to address residents’ behavioral disturbances and to increase their use of non-pharmacological interventions (NPIs). Evidence of PIs long-term effectiveness is lacking and can cause further debilitating conditions. While the use of antipsychotic drugs should decline, the use of NPIs should increase, since NPIs remain highly effective. Concerning long-term effect, nurses remain important partners in the decision-making process of the patients receiving PIs. Using the 10-Step social marketing plan framework developed by Lee and Kotler (2016) and Kotter’s (2012) 8-Step Change Model, a social marketing plan was developed and presented to LTC administrators at a facility in Covington, Los Angeles. The plan was aimed at efforts to replace PIs with evidenced-based NPIs in the care of LTC residents with behavioral disturbances. The LTC Administrator and the Director of Nursing (DON) were very satisfied with the quality of the plan’s content, proposed factors for the implementation of NPIs, their understanding of the benefits of the using NPIs, and their ease of understanding of the social marketing plan. They agreed to implement the plan as a social marketing campaign at the LTC facility.

iii
DEVELOPMENT OF A SOCIAL MARKETING PLAN TO DECREASE LONG TERM CARE NURSES USE OF UNNECESSARY PHARMACOLOGICAL INTERVENTIONS TO ADDRESS RESIDENTS’ BEHAVIORAL DISTURBANCES

by

Kela Spikes-Bickham

A Capstone Project
Submitted to the Graduate School
and the Department of Systems Leadership and Health Outcomes
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Nursing Practice

Approved:

____________________________________________________
Dr. Karen L. Rich, Committee Chair
Associate Professor, Systems Leadership and Health Outcomes

____________________________________________________
Dr. Patsy L. Anderson, Committee Member
Associate Professor, Systems Leadership and Health Outcomes

____________________________________________________
Dr. Anita D. Boykins, Committee Member
Associate Professor, Systems Leadership and Health Outcomes

____________________________________________________
Dr. Karen S. Coats
Dean of the Graduate School

May 2016
DEDICATION

I would like to give a special feeling of gratitude to God, who is head of my life, and for giving me my loving earthly parents, Leverne Spikes and Glinda Spikes Little. I am honored to have you as my parents and forever grateful for your endless love, support, and encouragement given to me throughout my life, and continued efforts of being the best parents with the guidance of God. Proverbs 22:6: “Train up a child in the way he should go, even when he is old he will not depart from it.” While growing up, my brother, Demond Lamont Spikes, and sister, Keosha Michelle Spikes, deserve my wholehearted thanks as well. I would also like to thank my husband especially, Huey Lee Bickham, Jr., for his love, support, patience, and understanding while completing this capstone project, as he has been by my side since the beginning of my continued educational success.

This capstone project is dedicated to my father, Leverne Spikes, for his inspiration and respect for education that was instilled at an early age. Dad, thank you for getting mad at me when my report card did not have high enough grades; this realization made me put more time into my work, while improving my overall performance, and striving to be the best that I can. While growing up, you strived to be the best father a daughter could ask for, and I thank you! Dad, now, your fatherhood continues with my sisters, Keiarra and Ke’Shayla Spikes, whom I hope my accomplishments have given you the drive for future success. Dad, your efforts have been passed down to my daughter, whom I have also instilled the importance of education at an early age. This project is also dedicated to my daughter, Zariana Mo’Nae Bickham, who I challenge to follow your dreams always, as I have proven to you that
there is no mountain higher as long as God is on your side. Zariana, always strive to be
the best that you can be; Mommy loves you!
ACKNOWLEDGMENTS

I wish to thank my committee members, Dr. Anderson and Dr. Boykins, who were more than generous with their expertise and time, while steering me in the right direction and offering me additional support throughout this capstone project.

A special thanks to Dr. Rich, my committee chair, for her countless hours of reflecting, reading, and patience throughout the entire process of me successfully completing my capstone project. Dr. Rich you made me believe that I had so much strength and courage to persevere even when I was lost. You remained tolerant and determined to see me through, and I will be forever grateful.

Sonia Adams deserves a special recognition for going beyond her call of duty, as she is a great asset to the University of Southern Mississippi. Sonia, I really appreciate your kindness and unconditional support of you have given from the beginning of my continued educational journey.

In addition, I would like to express a special gratitude to my In-Laws, Mrs. Doris Bickham, and Mr. Huey Bickham, Sr., as they helped me with my daughter, Zariana, during the start of my nursing career. Often, I would depend on their help of making sure my daughter was safe and attended to, while balancing being a mother and becoming successful with my continuing education. I could not have completed my capstone project without your support. Finally, I would like to acknowledge and thank all of you from a distance who continued to show love, support while praying for my successful completion of this capstone project. The journey in doing this project and completing my degree has been a great learning experience and one I take pride in accomplishing.
# TABLE OF CONTENTS

ABSTRACT ......................................................................................................................... ii

DEDICATION ....................................................................................................................... iv

ACKNOWLEDGMENTS ......................................................................................................... vi

TABLE OF CONTENTS ....................................................................................................... vii

LIST OF TABLES ............................................................................................................... ix

LIST OF ABBREVIATIONS ................................................................................................. xi

CHAPTER

I. INTRODUCTION ............................................................................................................. 1

  Background of the Problem
  Needs Assessment
  Significance of the Project
  Statement of the Purpose and Project Objectives
  Review of Related Literature
  Theoretical Framework

II. METHODOLOGY .......................................................................................................... 50

  Design
  Target Population
  Setting
  Detailed Procedures
  Ethics
  Project Evaluation
  Assumptions
  Resource Requirements
  Doctor of Nursing Practice Essentials

III. RESULTS ..................................................................................................................... 88

IV. SUMMARY .................................................................................................................. 93

  Limitations
  Implications for DNP Practice
  Implications for Research
  Implications for Education
  Benefits
Conclusions

APPENDIXES ........................................................................................................100

REFERENCES .......................................................................................................130
LIST OF TABLES

Table

1. Sample Implementation Plan……………………………………………………78
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AACN</td>
<td>American Association of Colleges of Nursing</td>
</tr>
<tr>
<td>AAGP</td>
<td>American Association for Geriatric Psychiatry</td>
</tr>
<tr>
<td>AARP</td>
<td>American Associated of Retired Persons</td>
</tr>
<tr>
<td>AGS</td>
<td>American Geriatrics Society</td>
</tr>
<tr>
<td>AHRQ</td>
<td>Agency for Healthcare Research and Quality</td>
</tr>
<tr>
<td>ASCP</td>
<td>American Society of Consultant Pharmacist</td>
</tr>
<tr>
<td>CMS</td>
<td>Center for Medicare and Medicaid Services</td>
</tr>
<tr>
<td>DHH</td>
<td>Department of Health and Hospitals</td>
</tr>
<tr>
<td>DNP</td>
<td>Doctor of Nursing Practice</td>
</tr>
<tr>
<td>EBP</td>
<td>Evidence Based Practice</td>
</tr>
<tr>
<td>FDA</td>
<td>Food and Drug Administration</td>
</tr>
<tr>
<td>HRSA</td>
<td>Health Resources and Services Administration</td>
</tr>
<tr>
<td>JCAHO</td>
<td>Joint Commission Accreditation of Healthcare Organizations</td>
</tr>
<tr>
<td>LTC</td>
<td>Long Term Care</td>
</tr>
<tr>
<td>NIHCM</td>
<td>National Institute for Health Care Management</td>
</tr>
<tr>
<td>NPIs</td>
<td>Non-Pharmacological Interventions</td>
</tr>
<tr>
<td>NHQC</td>
<td>Nursing Home Quality Campaign</td>
</tr>
<tr>
<td>PIIs</td>
<td>Pharmacological Interventions</td>
</tr>
</tbody>
</table>
I. INTRODUCTION

Background of the Problem

Seventy-six percent of long-term care (LTC) residents display behavioral disturbances associated with psychiatric disorders, including dementia (Perkins, 2012). These behavioral disturbances often “occur in clusters and include depression, psychosis, aggression, agitation, anxiety, and wandering” (AHRQ, 2014, para. 2). Forty-percent of LTC residents with behavioral disturbances receive pharmacological treatments, such as antipsychotic drugs, to manage their behavioral disturbances, but these medications have limited efficacy and significant adverse effects when given for these problems (Gustafsson et al., 2013).

Cody, Beck, and Svarstad (2002) reviewed the effects of The Nursing Home Reform Act of 1987 that encouraged nursing home staff to try non-pharmacological interventions (NPIs) before pharmacological interventions (PIs) when possible. Laurence (2010) defined NPIs “as any intervention intended to improve health or well-being that does not involve the use of [drugs]” (p. 1). The U.S. FDA (2012) defined PIs as using drugs to diagnose, treat, or prevent disease. Although the use of PIs decreased during the period of reform, little evidence existed of an increased use of NPIs (Cody et al., 2002).

Snowden, Sato, and Roy-Byrne (2003) reported the American Geriatrics Society (AGS, 2003) in conjunction with the American Association for Geriatric Psychiatry (AAGP, 2003) organized an expert panel to make recommendations, which were presented in a consensus statement, for improving the quality of mental health care in nursing homes. The AGS (2003) published the consensus statement with four recommendations, including the importance of identifying behaviors and the
recommendation to use NPIs. These recommendations stated these changes should receive support through regulation and policy that provides reimbursement only when the facility follows evidence-based procedures, meaning inappropriate use of PIs over NPIs should not receive reimbursement. Snowden et al. (2003) reported the most common mental health problems of nursing home residents include the inappropriate assessment and treatment of depression and dementia related behaviors. Snowden et al. (2003) reviewed the existing studies about PIs and NPIs, and concluded the use of NPIs remains effective, justified, and evidenced based.

According to the U.S. Food and Drug Administration (FDA, 2005), the use of atypical antipsychotic medications for off-label purposes of treating behavioral disturbances in elderly residents with dementia in LTC facilities remains dangerous and can lead to death in this population. Off label use represents one label used in a different way from what the U.S. FDA (2015) approved label described. Due to these findings, the U.S. FDA (2005) included a black box warning in their labeling to describe the risks of the use of atypical antipsychotics. Under the Food and Drug Administration Amendments Act of 2007 (FDAAA), the U.S. FDA (2008) applied these safety related changes to conventional antipsychotics drugs and the atypical antipsychotic drugs.

The Department of Health and Human Services (DHHS, 2011) requested the Office of the Inspector General (OIG) to evaluate the use of atypical antipsychotic drugs because of concern patients did not use the drugs in compliance with the U.S. FDA (2005) black-box warnings. Despite the warnings, these remained in use for off-label purposes. The concern was further investigated as to whether Medicare was reimbursing for medications not in the best interest of LTC facility residents.
In June 2011, a Policy Statement issued by the American Society of Consultant Pharmacists (ASCP, 2011) confirmed that antipsychotic drugs for elderly patients with dementia continued in use, despite the U.S. FDA (2012) warnings. ASCP (2011) reported findings, issued by the OIG of the DHHS (2011), that 14% of LTC facilities had Medicare claims for the use of antipsychotic drugs for LTC residents.

In 2012, the DHHS Centers for Medicare and Medicaid Services (CMS, 2012) announced the creation of the Partnership to Improve Dementia Care, with providers and caregivers, ensuring the appropriate use of antipsychotic medications and setting a national goal of reducing 15% of antipsychotic drug use in LTC facilities by the end of 2012. In order to achieve the goal for improved care, the CMS (2012) reported taking steps towards enhancing training, increasing transparency, and increasing the use of alternatives to antipsychotic medications.

The CMS (2013) joined stakeholders to improve dementia care in nursing homes, while reemphasizing seven key principles to increase the quality of care and the quality of life for LTC residents. These principles include:

1. Person-centered care,
2. Quality and quantity of staff,
3. Thorough evaluation of new or worsening behaviors,
4. Individualized approaches to care,
5. Critical thinking related to antipsychotic drug use,
6. Interviews with prescribers, and
7. Engagement of residents and or their representatives in decision-making, while tracking the progress and emphasizing the importance of determining the cause of behavioral disturbances before utilizing PIs (CMS, 2013, p. 2).

The challenge for LTC nurses remains that, while the use of NPIs stays preferred as the first choice for treating LTC residents with behavioral disturbances, PIs can often work as the first intervention (Seitz et al., 2013). Perkins (2012) reported that nurses’ approaches in using NPIs could have a positive influence on the behavior of their patients, especially if the nurses receive skills training focused on behavior management and the appropriate use of NPIs.

This capstone project involved the creation of a social marketing campaign to change behaviors in LTC residents, according to the recommended best practices guidelines. Lee and Kotler (2016) posited social marketing campaigns design influences behaviors to improve health and prevent the risk of injuries. Lee and Kotler (2016) developed the 10-step strategic market planning process to progress a plan to decrease LTC nurses’ unnecessary use of PIs and to increase the use of NPIs to manage behavioral disturbances among LTC residents.

Needs Assessment

A systematic review of randomized controlled trials (RCTs) has demonstrated the efficacy of NPIs, such as person-centered care, communication skills training, adapted dementia care mapping, activities therapy, and music therapy (Livingston et al., 2014). While the use of antipsychotic drugs should decline, the use of NPIs should increase, especially since these interventions demonstrate as highly effective.
The DHHS (2011) OIG revealed that, between the period of January 1 through June 30, 2007, 304,983 nursing home residents in the U.S. had at least one Medicare claim for atypical antipsychotic drugs. Of these prescription drugs, 88% remained for off-label uses, which the U.S. FDA (2005) specifically labeled with a black box. It remains concerning this survey did not take into account conventional antipsychotic drugs, which researchers have linked to death in patients, who took these drugs for off-label purposes.

The CMS (2014a) reported that its initial goal, to reduce the use of antipsychotic drugs in LTC populations, had slightly exceeded its goal of a 15% reduction over the first two years. Due to the warnings of the U.S. FDA, Louisiana (LA) achieved an antipsychotic drug use reduction of 14.1%. However, Los Angeles ranked last in the nation for improvement as reported in 2014 by the CMS (2014b) Partnership to Improve Dementia Care in Nursing Homes. This demonstrates that the state of Los Angeles is in great need of further reducing the rate of off-label uses of antipsychotic drugs. CMS (2015a) reported a continued decline in using PIs, but Los Angeles continued to have the lowest reduction in the nation. The neighboring state of Mississippi (MS) ranked 48th in the nation.

Then, CMS (2015b) issued a set of trend graphs produced by Point Right (2015) that tracked the use of antipsychotic drugs at one LTC facility in St. Tammany Parish, Los Angeles, as well as the incidence of behavioral disturbances at the same facility over the same period. The graphs, as a part of an August 2015 to October 2015 report, show that the LTC facility’s staff have been successful in reducing the use of antipsychotic drugs for off-label purposes between November 2013 to October 2015. The reduction has dropped the facility’s rate below the national baseline to nearly 0% by January 2015 to
October 2015. However, during that period, the incidence of behavioral disturbances rose about 3% above the national benchmark in June 2014 to a high of approximately 20% above the benchmark in February 2015 (Point Right, 2015). In October 2015, the rate of behavioral disturbances among residents in the facility remains almost 10% above the national benchmark.

Because persons of authority consider the use of antipsychotic drugs for off-label purposes in nursing homes too risky for residents’ health, this method of treatment must become replaced by one that remains both safe and effective. Below, I state the significance of the problem, followed by a review of related literature, which further helps to establish the need for a plan to increase the use of NPIs for LTC residents exhibiting behavioral disturbances.

Significance of the Project

According to the findings of Cohen-Mansfield and Jensen (2008a), 90% of LTC medical doctors (MDs) consulted nurses concerning residents’ behaviors in LTC facilities, and 80% of MDs and 77% of nurse practitioners (NPs) provided a PI for the treatment of behavioral disturbances. The fact most interventions derived from information obtained in residents’ charts or through proxy assessments conducted by nurses demonstrates the reliance on information provided by LTC nurses (Cohen-Mansfield & Jensen, 2008a). Additionally, about 61% of the MDs reported having met with at least one care team member in the process of assessing a resident’s behavior in making their diagnosis and developing a treatment plan (Cohen-Mansfield & Jensen, 2008a). The researchers reported that MDs remained less likely to consult with family
members due to the limited time MDs remain present in the LTC facility (Cohen-Mansfield & Jensen, 2008a).

Cohen-Mansfield, Jansen, Resnick, and Norris (2012) conducted a study and established that all MDs, psychologists (PhDs), and NPs equally relied on information from nursing staff, including nursing assistants and care team meetings, in conducting their assessments of behavioral disturbances among LTC residents. Therefore, nursing staff in LTC facilities should feel empowered to complete accurate assessments of the behavioral disturbances among residents with dementia because MDs largely rely on information from the nursing staff to diagnose and develop a treatment plan.

Since the off-label use of atypical and conventional antipsychotic drugs in elderly LTC residents with dementia has begun to decline, and may drop further, more residents will need alternative treatment approaches, such as NPIs (CMS, 2015a). As current data has shown from the selected LTC facility in St. Tammany Parish, Los Angeles, in which the capstone project occurred, behavioral symptoms remain on the rise, as antipsychotic drug use decreases (Point Right, 2015).

This project contributes to the continuing efforts to replace PIs with evidenced-based NPIs in the care of LTC residents with behavioral disturbances. If they become exposed to the social marketing campaign developed for this project, I expect that LTC nurses will remain more likely to use NPIs as their first intervention, instead of their last, for treating residents’ behavioral disturbances. The social marketing plan, if implemented, also may raise LTC nursing staff awareness of the ethical implications of decisions regarding the use of PIs versus NPIs for treating behavioral disturbances among LTC residents. Additionally, administrators of LTC facilities benefit from information
regarding how to develop and implement a social marketing campaign to change the behaviors of nursing staff for the better.

Statement of the Purpose and Project Objectives

The purpose of this capstone project involved developing and presenting to administrators, at one LTC facility, a social marketing plan, they may implement to decrease LTC nurses’ use of unnecessary PIs to address residents’ behavioral disturbances and to increase the LTC nurses’ use of NPIs.

Problem Statement

LTC nurses often use PIs to minimize behavioral disturbances, exhibited by LTC residents, even though evidence-based research and leading agency recommendations indicate that the use of NPIs for behavioral disturbances may remain the most effective way to treat the behavior.

The project objectives were to

1. Develop an effective social marketing plan focused on changing LTC nurses’ behaviors, so they use NPIs, rather than PIs, when appropriate, to manage residents’ behavioral disturbances.
2. Present information about the social marketing plan and its implementation as a campaign to nursing service administrators at one LTC facility in St. Tammany Parish, Los Angeles.

Outcomes

The following points highlight the intended outcomes of this project:

1. Nursing service administrators at one LTC facility in St. Tammany Parish, Los Angeles implement the proposed social marketing plan as a campaign.
2. LTC nursing service administrators feel satisfied with their knowledge about how to successfully develop and implement a social marketing campaign to change staff behaviors for the better.

Review of Related Literature

Searches of online scholarly databases and search engines included Joanna Briggs Institute EBP Database, ScienceDirect, Web of Science, Sage, Medline, PsycINFO, CINHAL Plus, and Cochrane. I performed these searches to locate evidence-based articles. I restricted the search to evidence-based databases and relied on search terms that related to the problem statement, such as *pharmacological intervention*, *non-pharmacological interventions*, *chemical restraint*, *behavior modification*, *nursing*, *psychotropic*, *behavior disturbances*, *delirium*, and *dementia*. I retrieved 85 articles based on the abstracts and titles. I used 57 articles in the review. Inclusion criteria included articles published from 2001, applicable articles, and articles related to the topic. Criteria for exclusion included articles published before 2001 and opinionated or subjective articles.

Behavioral disturbances in LTC residents remain an important area of research for this review of related literature. While PIs, such as sedation and anti-psychotic medications, remain frequently used to treat behavioral disturbances, many researchers indicate that PIs lead to negative health outcomes, including mortality, especially in the elderly population. The focus of recent studies is to investigate the causes and potential management strategies for the elderly population who exhibit behavioral disturbances in LTC facilities. I conducted this extensive review of related literature to analyze a wide array of studies and evidence concerning the effectiveness of NPIs for behavioral
disturbances, and the dangers of PIs, including

1. The safety and efficacy of NPIs versus PIs,
2. The ethics of treatment, the influence of staff knowledge, and experience,
3. The benefits and evidenced based research with social marketing,
4. The evidenced based guidelines, and
5. The recommended best practices investigated in this review of related literature.

**Risks of Pharmacological Interventions**

McHenry (2006) asserted that selective serotonin reuptake inhibitors (SSRIs) present a “major moral issue for the corporate model of medicine” (p. 405). Gibson and Ferrini (2012) proposed that PIs may help different conditions, such as bipolar and schizophrenia, in LTC residents; however, PIs have little impact on the management of behaviors associated with personality disorders.

Tschoner et al. (2007) explored the side effects of second-generation antipsychotic medications to include cardiovascular disease, diabetes mellitus, weight gain, and the atherogenic lipid profile, which not only increase morbidity, but also impair the level of patients’ adherence to treatments. The second-generation anti-psychotics with the highest rating of risk include olanzapine and clozapine, followed by newer anti-psychotics, such as aripiprazole and risperidone (Tschoner et al., 2007). Tschoner et al. (2007) concluded the metabolic effects of PIs should stay of high concern in patient treatment planning strategies. Life style changes should enter consideration as well, as a therapeutic approach combined with a PI.
Tan et al. (2015) asserted that many atypical antipsychotic drugs, such as risperidone, clozapine, and olanzapine, remain used to manage behavioral disturbances in patients with psychiatric disorders such as dementia. They observed that studies on the safety and efficacy of these drugs seemed conflicting (Tan et al., 2015). Tan et al. (2015) conducted a systematic review of randomized clinical trial studies on the use of atypical antipsychotic medications for patients with dementia. From the findings, 23 randomized clinical trials confirmed the significant efficacy of the drugs in treating behavioral disturbances. Tan et al. (2015) concluded that risperidone and aripiprazole help reduce cognitive functional decline and improve the behavioral disturbances in patients with dementia. However, Tan et al. (2015) did not confirm the usefulness of PI as the appropriate initial intervention.

Perkins (2012) confirmed limited research evidence about the safety of PIs for treating the elderly with behavioral disturbances in LTC facilities. Additionally, the risks of PIs were reported in Huybrechts et al.’s (2012) cohort study. Huybrechts et al. (2012) examined the mortality risks associated with the use of PIs among LTC residents in the U.S. Huybrechts et al. (2012) used proportional hazard tools to assess the risks and mortality of elderly patients, above 65 years of age in LTC facilities, taking haloperidol, ziprasidone, olanzapine, quetiapine, and risperidone. Comparisons of these PIs, using proportional hazard models, revealed that mortality risk remained highest among haloperidol users, compared to the other drugs. Proportional hazard models relate to the time that passes before some event occurs (Walters, 2009). Lonergan, Luxenberg, Colford, and Birks (2012) reported haloperidol as one of the oldest and most widely used drugs for control of agitation due to dementia or psychosis. The mortality risk for users of
quetiapine seemed greatest during the initial start of treatment of behavioral disturbances. However, Lonergan et al. (2012) concluded a risk of mortality existed for elderly residents, using prescribed PIs with these treatment approaches, showing no improvement with managing the behavioral disturbances.

Seitz et al. (2013) presented a review of safety and efficacy of PIs for behavioral disturbances of dementia in LTC facilities. Medications from 29 studies were analyzed to include typical and atypical antipsychotics, cholinesterase inhibitors, and anticonvulsants. The success of PIs was rated based on Neuropsychiatric Inventory (NPI) rating scales, whereas the safeness of the medications was rated based on trial withdrawals. The “Neuropsychiatric Inventory [is] one of the most commonly used research tools to measure behavior” (AHRQ, 2014, para.8). Seitz et al. (2013) concluded that evidence to support particular use of the atypical antipsychotics and some other medications in LTC settings remained limited, and the risk of adverse outcomes warrants further research into the safety of PIs for the LTC dementia residents.

Gustafsson et al. (2013) performed a cohort study on the long-term administration of PIs of behavioral disturbances among an elderly population with dementia. Gustafsson et al. (2013) conducted the study on 344 dementia patients, residing in 40 specialized health units in Sweden. Gustafsson et al. (2013) found that 38% of the population received PIs, but only 39% of the population received medications according to the dosage recommended by national guidelines. A follow-up examination after 6 months revealed that 80% of the patients still received PIs, using the same dosage for their cognitive impairment and behavioral disturbances. The findings revealed that patients in LTC facilities frequently use PIs, and the inappropriate administration of medications
remains common. Gustafsson et al. (2013) concluded that a need to address inappropriate medication use to ensure the safety of patients exists.

**Non-Pharmacological Interventions**

Cohen-Mansfield, Thein, Marx, and Dakheel-Ali (2012) explored barriers to the use of NPIs to treat behavioral disturbances among residents in LTC settings. In a controlled trial study, consisting of 89 dementia patients from six Maryland nursing homes, the researchers identified resident and external barriers for implementation of NPIs by using the Barriers to Intervention Delivery Assessment tool (Cohen-Mansfield, Thein et al., 2012). The residential barriers included resident resistance to treatments, unavailability, and unresponsiveness of patients. The external barriers included system processes, staff and family related barriers, and environmental barriers (Cohen-Mansfield, Thein et al., 2012). The NPIs that pertained to food, drink, and socializing equated to the least amount of barriers, while the interventions that consisted of participation in activities equaled the highest challenges. Therefore, Cohen-Mansfield, Thein, et al. (2012) concluded that barrier identification tools maximize the use of NPI delivery.

Hshieh et al. (2015) conducted a meta-analysis of multiple NPIs for the elderly with behavioral disturbances. Hshieh et al. (2015) evaluated 14 intervention research studies focused on NPIs. Some of the NPIs reviewed, “include art therapy, behavioral therapy, cognitive interventions [or] memory training, distraction techniques, diversional therapy, exercise training, and music therapy” (p. 42). Their analysis showed that NPIs significantly reduced incidences of behavioral disturbances (Hshieh et al., 2015). In addition, the interventions reduced hospitalization rates and length of stay for patients
with behavioral disturbances (Hshieh et al., 2015). Based on these findings, the authors concluded that multi-component NPIs remained effective in lowering the incidence of behavioral disturbances, reducing length of stay, reducing hospital readmissions, and preventing falls among LTC residents (Hshieh et al., 2015).

Cohen-Mansfield and Jensen (2008a) observed the results of studies showing that behavioral disturbances associated with dementia might often trigger because of environmental and or psychosocial factors. This continues to support evidence that NPIs used for such behavioral symptoms may represent the most appropriate way to treat them. Furthermore, Cohen-Mansfield and Jensen (2008a) discussed the degree to which physicians understand NPIs and how to use them. In conclusion, Cohen-Mansfield and Jensen (2008a) found that physicians have an acceptable level of knowledge in the realm of NPIs. The treatments of choice for physicians who seem familiar with NPIs included physical-activity interventions and sensory interventions.

Lewis, Tarrier, and Drake (2005) reported one of the most challenging in the treatment of Psychiatric Disorders is the range of behavioral disturbances associated with psychosis. Lewis et al. (2005) examined the nature and efficacy of psychological, NPIs for psychotic symptoms in patients with schizophrenia. They showed highly encouraging results for combining interventions, such as cognitive behavioral therapy (CBT) and family treatment, and revealed that 80% of patients in the midst of their first psychotic episode will achieve positive remission at a rapid pace (Lewis et al., 2005). Furthermore, Lewis et al. (2005) discovered that rates of non-adherence to drug treatments seem high among schizophrenics; thus, they highlighted the importance of preventing or
Ameliorating the first psychotic episode through NPI. This lends additional support to the idea that combining evidence-based NPIs remains more effective compared to using PIs.

As complaints of an increase in frequency of sleep problems occurred, especially among elders, Montgomery and Dennis (2004) conducted research into the use of NPIs for behavioral disturbances. The researchers examined three common NPIs, including physical exercise, bright light, and CBT. Montgomery and Dennis (2004) found that the evidence supported the use of CBT with insomnia.

O’Neil et al. (2011) reported the most common behavioral symptoms of dementia include agitation, aggression, wandering, and sleep disturbances. These symptoms lead to patient health problems, increased caregiver burden, and increased healthcare costs (O’Neil et al., 2011). However, PIs, the side effects, and the contraindications can often harm patients to an unacceptable degree. The researchers examined the effectiveness of NPIs to treat these symptoms (O’Neil et al., 2011). They revealed that stimulation and sensory-oriented approaches, such as light therapy, massage, and aromatherapy, remain the most effective NPIs to treat these symptoms (O’Neil et al., 2011). They demonstrated the best NPI consisted of those tailor-made for the individual and the environmental factors contributing to the behavioral disturbance (O’Neil et al., 2011). This reinforces the use that utilizing NPIs for behavioral disturbances often begins and ends with environmental/psychosocial factors.

Gitlin, Kales, Lyketsos, and Althouse (2012) researched peer-reviewed articles published between 1992 and 2012 about behavioral management using NPI and PI. Based on their findings, Gitlin et al. (2012) proposed the use of NPIs, concerning the use of PIs (such as atypical antipsychotics) became often used to manage behavioral
disturbances in the elderly population with dementia, with limited evidence based research of the medication’s effectiveness. Gitlin et al. (2012) observed that PIs often associated with warnings from the U.S. FDA (2012). These warnings have increased interest in the use of NPIs, such as in exercise, communication, and music.

The findings by Livingston et al. (2014), reported one of the most important sources of evidence for the effectiveness of NPIs in the context of behavioral symptoms in patients with dementia. The researchers reviewed all previous RCTs on various NPIs, and arrived at highly significant conclusions after systematically reviewing 33 RCTs utilizing at least 45 participants each (Livingston et al., 2014). One of the most important conclusions was that communication by staff members, coordinated care, and person-centered activities form the backbone of effective NPIs.

Livingston et al. (2014) posited, “There is convincing evidence that when implementation is supervised, interventions that aim to communicate with people with dementia, helping staff to understand and fulfill their wishes, reduce symptomatic and severe agitation during the intervention and for 3-6 months afterward” (p. 439). Against expectations, they found a 30% reduction of overall agitation was found when NPIs where utilized (Livingston et al., 2014). More specifically, the researchers found the effectiveness of the following NPIs demonstrated through RCTs: structured individual and group activities; music therapy; sensory interventions, such as therapeutic touch and massage; training staff in dementia communication techniques; and person-centered care, which includes the previous techniques as well as other strategies to improve the bond between staff and residents (Livingston et al., 2014). The researchers did not find evidence supporting the effectiveness of light therapy, aromatherapy, or training family
members in behavioral management techniques (Livingston et al., 2014). Livingston et al. (2014) concluded that although agitation and other behavioral disturbances usually attributed to changes in brain function, ranges of environmental and communication-based factors also contribute. This represents imperative findings because it demonstrates the likelihood that the increase in behavioral disturbances, which accompanies reductions in antipsychotic drug use, can reduce by using safe interventions (Livingston et al., 2014).

Gitlin et al. (2012) reported NPIs and their effectiveness in patients with dementia. Gitlin et al. (2012) took a novel approach to the topic by investigating documented anecdotes, such as the case of Mr. A, who experienced apparent hallucinations at night, including hearing voices. Although this symptom seems often addressed in LTC facilities through the administration of an antipsychotic drug, in this case the patient was evaluated, first. Gitlin et al. (2012) discovered that hearing problems seemed to contribute to the behavioral disturbance. Finally, with adjustment, the discovery of hearing aids solved the problem without the use of PIs (Gitlin et al., 2012). Gitlin et al. (2012) illustrated the traditional approach of utilizing PIs, first; however, this may represent an unwarranted intervention. The researchers continued, “Essential to a nonpharmacological approach is educating caregivers in ways to effectively prevent and manage behavioral symptoms” (Gitlin et al., 2012, p. 4). Therefore, enlightening caregivers remains essential to preventing and managing these symptoms.

Ethical Issues in Pharmacological Interventions

Advancements in neuroscience and biology have resulted in developing selective PIs that change the state of the human brain for medicalization of a human condition, and
enhancement in the absence of ethics or personal safety considerations (Esposito, 2005). This has resulted in an influx of PIs, marketed as optimal treatments with little regard for the indirect biological impact of the treatments on the patient. However, several advancements in research of NPIs occurred, which demonstrate effective ways to treat behavioral disturbances through social, behavioral, and cognitive approaches. A behavioral approach to treatment through programs that address the diagnosis, without the administration of medications, represents an alternative to PIs.

Using insight and directly answering the most widespread debate, regarding PIs versus NPIs, Douglas, James, and Ballard (2004) opined, “It is increasingly recognized that PIs for behavioral disturbances should be used as a second-line approach and that NPIs should, in best practice, be pursued first” (p.172). The integrity of the use of PIs to treat or to control behavioral disturbances in the residents of LTC facilities remains of debate, especially concerning ethics and the risks associated with such treatments (Desai & Grossman, 2001). Many elderly patients suffer from dementia and exhibit some form of behavioral disturbance. McHenry (2006) asserted the scientific and moral integrity of PIs should stay under scrutiny, and an industry based on illness intervention, lacking ethical commitment threatens the “first, do no harm” (p. 405) imperative and displays weakness in the corporate medicine model. Concerning the elderly population, the appropriateness of treatment interventions remains crucial, as the elderly become more susceptible to experiencing adverse reactions to drugs (Bruckenthal & D'Arcy, 2007). Therefore, along with ethical concerns, the safeness of PIs is of legitimate concern.

Desai and Grossberg (2001) explored factors that precipitate behavioral disturbances in LTC residents, such as hoarding and aimless wandering. Their study
results indicated that PIs might stay effective once identifying the cause of the behavior occurs. Gilbert and Simon (2009) concluded that the long-term adverse side effects of some PIs, concerning improper use, required further researched about medical practice, legal rights, and medical ethics.

Roberts and Jain (2011) conducted a study focused on the ethics of PI. The researchers observed that psychotropic medications are commonly used to improve the mental health of millions of people (Roberts & Jain, 2011). However, the reliance on these medications poses ethical concerns, such as paradoxical effects (Roberts & Jain, 2011). For example, Roberts and Jain (2011) stated a paradoxical effect occurred when one drug reduces depression, but increases suicidal behavior, adverse effects on the metabolic system, and over-prescription. Their analysis revealed that nurses must consider ethical issues when deciding to use PIs (Roberts & Jain, 2011).

The ethical conflicts of PIs versus NPIs often directly result from the nursing home patient's willingness to cooperate with the selected intervention. From a nursing perspective, ethical issues continue concerning PI, such as hiding the medication in food or drink (Latha & Phil, 2010). It remains of ethical concern, when patients seem unwilling to accept PI, and then LTC nurses disguise the medication in a solution, such as water or juice, to administer the medication. Some researchers viewed the administration of medications without the informed consent of the patient as a breach in medical ethics; however, particularly in cases of mental health, some also viewed surreptitious medication administration as best for the patient (Latha & Phil, 2010). Latha and Phil (2010) posited this challenge extends to LTC residents not competent enough to make sound decisions regarding their treatment, and LTC nurses find themselves at opposition
with family members or the administrative staff. The nurse may not agree with the family member or the facility's decision. In these cases, the nurse may have to adhere to the LTC facility’s policies and terms of employment, even when interventions conflict with personal beliefs and values.

A large part of the ethical dilemma surrounding PIs consists patient rights concerning treatment options. Patients’ willingness to accept PIs should must undergo influence from full disclosure of the potential risks and side effects of the proposed treatment. Ibuka, Chapman, Meyers, Meng, and Galvanni (2010) surveyed 1,290 adults about their risk perceptions of preventive and curative PIs, to treat behavioral disturbances. The research methodology included a measurement of the participants' willingness to accept PIs. The study found that participants from larger household sizes were more interested in taking medications and the perceived risk of PIs increased over time. Ibuka et al. (2010) concluded the perceived risk leads to a dynamic and varied demographic and geographic profile of the participants, and the perceived risk influences the effectiveness of the control measure.

Ludwig and Burke (2014) argued that HCPs do not have to provide a service, which conflicts with a patient’s personal beliefs, especially when 30% to 50% of patients fail to follow HCPs recommendations for treatment. The HCP remains responsible for providing an accurate diagnosis with intervention options and providing patients with a full disclosure of information pertaining to their illness (Ludwig & Burke 2014).

Lomas and Santry (2010) examined the concept of ethics in nursing and health care. Lomas and Santry (2010) discovered the possibility that nurses are administering drugs to patients without fully understanding the medications’ range of effects, side
effects, and contraindications with other drugs. Therefore, a fear remains that nurses use PIs to treat behavioral disturbances as a matter of convenience (Lomas & Santry, 2010). A shocking 25% of nurses administered medications without fully understanding their side effects and contraindications (Lomas & Santry, 2010). One nursing educator described this as a failure to enforce the nursing code of conduct (Lomas & Santry, 2010). Consequently, one in ten nurses admitted to not knowing the normal or average dose of a medication before administering it to a patient. This stays especially worrisome in the context of the finding that 1 in 4 patients become discharged before fully understanding their medications (Lomas & Santry, 2010).

Gibson and Ferrini (2012) researched some of the common behavioral disturbances among residents in LTC facilities that present ongoing challenges for the professional team. They identified residents who exhibit behavioral disturbances, and they documented other behaviors, such as rejecting treatments, practicing self-destructive patterns of denial, and clinging (Gibson & Ferrini, 2012). Moreover, Gibson and Ferrini (2012) indicated these patients wear down the nursing staff (2012).

**Nursing Knowledge in Regard to Non-Pharmacological Interventions**

The level of knowledge and experience of nursing staff have a significant impact on the success or failure of PIs and NPIs in LTC facilities. Eliopoulos (2015) proposed that nursing homes lack a sufficient number of registered nurses to meet the demands of resident dependency and the diversity of the nursing home patient population. Consequently, many practical and vocational LTC providers practice outside their legal areas of specialization due to under staffing decisions made by the administrative staff. Eliopoulos (2015) concluded that such knowledge deficiencies in staffing and long-term
care experience could significantly contribute to low quality care, patient dissatisfaction, and poor outcomes to treatment, which may cause staff to use PIs, as their first approach to treating disruptive behaviors instead of their last approach.

Cohen-Mansfield and Jensen (2008b) conducted a study of 110 staff members to measure their attitudes and knowledge of NPIs to treat behavioral disturbances in residents with dementia. Cohen-Mansfield and Jensen’s (2008b) methodology consisted of using a Likert scale to measure responses, concerning behavioral disturbances, the knowledge of selected NPI, and their attitudes towards the treatments. The researchers concluded that range of knowledge of the treatments remains broad, that NPIs were appropriate for many cases, but the level of knowledge among the staff remained lacking. Cohen-Mansfield and Jensen (2008b) also indicated that increasing the level of knowledge about NPIs might increase the probability the treatments would become used. In addition, Cohen-Mansfield and Jensen (2008b) showed that physicians with greater knowledge about the NPIs remained more likely to apply such treatment in the process of patient care. Similarly, Cohen- Mansfield, Jansen, et al. (2012) revealed that despite NPs having a lower knowledge level of the NPIs compared to those with high levels of education, the NPs had a more favorable attitude towards the treatment method and seemed more likely to use it to help LTC residents with behavioral disturbances.

Evidence-Based Guidelines

In 2008, The Los Angeles Department of Health and Hospitals (DHH, 2015) stated that all nursing homes in the state of Los Angeles must meet minimum licensure guidelines, but the workers themselves must also undergo training with certain curricular
standards. The previous training curricula became augmented to include four of the modules from the CMS (2013) Hand in Hand Toolkit. These include

1. Module 1: Understanding the world of dementia: the person and the disease, which provides a scientific overview of the disease, its causes, and its treatment.

2. Module 3: Being with a person with dementia: listening and speaking, which covers the appropriate modes of communication with demented patients.

3. Module 4: Actions and reactions continue the training to include other forms of interaction with the patient.

4. Module 6: Making a difference provides an overview of how HCPs can help to mitigate behavioral symptoms through non-pharmacological means. (DHH, 2015)

Although the Los Angeles DHH (2015) encouraged workers to review the entire CMS (2013) Hand in Hand training program, they did not legally have to oblige. This means that important information, regarding specific NPIs, remains absent from these training requirements, despite the strong recommendations from the federal agency (DHH, 2015). However, minimum requirements for the DHH (2015) require the curriculum to cover behavior management, although the extent remains difficult to discern.

The National Institute for Health Care Management (NIHCM, 2009) proposed that NPIs remained useful in treating behavioral disturbances. The organization’s guidelines specify limits on the use of PIs, while cautioning clinicians to identify any risks of behavioral change in patients, such as the risk of extra pyramidal symptoms.
(NIHCM, 2009). The NIHCM (2009) provided guidelines to recommend that clinicians must use NPIs to modify or control symptoms in the elderly population with behavioral disturbances.

The Agency for Healthcare Research and Quality (AHRQ, 2014) studied NPIs for agitation and aggression in dementia. The AHRQ (2014) published an evidence-based practice center systematic review protocol in decreasing the prevalence of PIs, while clinical guidelines existed, recommending NPIs as first choice therapies for behavioral disturbances. They continue to report that behavioral problems not only represent a threat to the well-being and quality of life of the patients themselves, but also for the caregivers, as well as adding stress and reducing overall psychological health (AHRQ, 2014). The AHRQ (2014) further reported that one of the most serious results of behavioral disturbances remains the tendency for nurses and physicians at LTC facilities to overprescribe anti-psychotic and other medications to mitigate the behavior. This has occurred despite the fact these medications have serious contraindications for use in the elderly population.

To explore the effectiveness of NPIs in LTC residents, AHRQ (2014) discussed four theoretical frameworks used to explain the etiology of behavioral disturbances in the elderly population: “biologic/genetic, behavioral, reduced stress threshold, and unmet needs” (para. 3). First, the biologic/genetic model identifies the specific brain disorders that causes the dementia, and simply demonstrates the behavioral problems stem from a manifestation of this biological condition (which may also stem from genetic anomalies; AHRQ, 2014). Second, the behavioral model demonstrates behavioral disturbances arise from various factors relating to the care of the patient and the environment in which the
patient lives (AHRQ, 2014). More specifically, this model suggests that patients “act out” (AHRQ, 2014, para. 2) because they find that it results in increased caregiver attention, resulting in perceived positive feedback for the patient and increasing frequency of behavioral disturbances. Third, the reduced stress threshold model posits that, since patients with dementia remain less sensitive to sensory stimuli, such as light and sound, behavior problems, such as frustration, loudness, or yelling, may result from manifestations of this reduced sensitivity (AHRQ, 2014). Fourth, the unmet needs model suggests that patients may exhibit behavioral disturbances as a way of communicating the presence of an unmet need, such as pain, discomfort, or hunger (AHRQ, 2014). Due to the cognitive difficulties associated with dementia, the patient may remain unable to communicate these needs in the traditional manner. AHRQ (2014) continued to stipulate that these four etiological frameworks may be used in conjunction with each other, and are not mutually exclusive. AHRQ (2014) continued to report that a decrease in use on NPIs may result from the lack of knowledge among LTC staff, such as nurses and physicians.

I compiled the following categories and types of NPIs from the AHRQ (2014). These include

- Sensory interventions, such as “music therapy, light therapy, pet therapy, multisensory stimulation, [and] hearing aids” (para. 10);
- Active therapy/structured activities, such as “dancing, exercise, social interaction, music therapy (playing/singing), art therapy, [and] outdoor walks” (para. 10);
• Complementary or alternative medicine therapies, such as “aroma therapy, reflexology, massage, [and] Reiki” (para. 10);

• Psychological therapies, such as “validation therapy, reality orientation, reminiscence therapy, psychosocial therapy, cognitive-behavioral therapy, relaxation training, [and] structured support groups” (para. 10);

• Environmental therapies, such as “walled-in areas, wandering areas, natural/[enhanced] environments (e.g., pictures on walls), [and] reduced stimulation environments (e.g., quiet areas)” (para. 10);

• Delivery of care such as “care consultation and patient centered care, patient education, such as specific curriculum” (i.e. distraction components) (AHRQ, 2014, para. 10).

The AGS (2015) presented clinical practice guidelines for preventing perioperative delirium in elderly patients. AGS (2015) used the guideline to recognize the importance of education targeted to HCPs about the NPI of delirium. AGS (2015) recommended that healthcare systems should provide HCPs with formal and or informal refresher courses to enhance their understanding of the condition’s epidemiology, assessments, prevention, and treatment. AGS (2015) recommended the educational program content should focus on screening tools to identify delirium, NPIs and PI. AGS (2015) used the guideline to state that no potential harm of all NPI to delirium prevention and management has established, but a multicomponent delirium intervention remains ideal to ensure cost effectiveness.

The Joint Commission Accreditation of Healthcare Organizations (JCAHO, 2015) developed standards for the use of chemical restraints. This organization described
chemical restraints as medications for discipline, such as penalizing patients, and not for treating medical symptoms. The JCAHO (2015) found that elderly patients in LTC facilities encountered adverse events from chemical restraints, such as memory impairment, functional decline, agitation, and withdrawal. The JCAHOs (2015) findings affirmed the ethical concerns with the use of chemical restraints.

JCAHO (2015) outlined five key component requirements for accreditation of nursing care center for memory-influencing conditions, such as dementia:

1. Care coordination: This entails articulate staff collaboration in assessing, planning, and provision of current care practices.

2. Staff knowledge and competency: Attain relevant standards of staff qualifications, training, skills, and education level need to ensure effective assess and provision of care for patients with memory impairment.

3. Activity programming based on abilities: The staff should demonstrate ability to provide activities required to address the needs of patients, such as attention deficit, memory, and physical functioning.

4. Behavior management: The standard emphasizes on the use of NPIs, as alternatives to antipsychotic medications.

5. Safe and supportive physical environment: The organization should demonstrate the presence of a physical environment that support safety and minimize negative effects on the patients.

Organizations, seeking accreditation, must fulfill the above key factors in their setting.
Social Marketing

Brawley, Rejeski, and King (2003) carried out an evidence-based study on the promotion of physical activity among older adults by using social marketing. The purpose of their study aimed to examine strategies for behavior change, targeting the elderly population (Brawley et al., 2013). In particular, the study concentrated on behavior change strategies for physical activity among older adults (Brawley et al., 2013). The researchers observed that social marketing provided alternative communications for alleviating barriers to physical activity among the elderly (Brawley et al., 2013). Furthermore, the researchers reported that social marketing provides an avenue for addressing social problems through behavior change, and they proposed that nurses link social communication channels with individual interventions for better physical activity among the elderly population (Brawley et al., 2013). The researchers continued to report social marketing strategies provide viable options for behavior change in population-based health programs (Brawley et al., 2013).

The success of social marketing was described by Eijk, Avorn, Porsius, and de Boer (2001). Eijk et al. (2001) conducted a study on the influence of individual educational training compared to group training using social marketing. The purpose of the comparison involved demonstrating how the training affected the use of PIs among the elderly population (Eijk et al., 2001). Eijk et al. (2001) conducted a randomized controlled trial on 227 pharmacists and general practitioners in Southwest Netherlands. The results showed greater decline in PIs among the HCPs that received individual education compared to those that received group education. Eijk et al. (2001) concluded that group and individual education reduced the use of PIs among the elderly population.
Eijk et al. (2001) reported continuing changed behavior through social marketing provides practical means for decreasing PIs.

Aras (2011) provided insight into the relevance of social marketing in the healthcare sector. Aras’ (2011) purpose involved reviewing literature on the benefits of using social marketing. Aras (2011) reviewed periodical literature on marketing concepts and social marketing from online databases. The researchers asserted that social marketing could be used to help identify the right products, right location, and right strategies for promoting health behaviors (Aras, 2011). However, to achieve these benefits, Aras (2011) proposed that nurses must consider financial feasibility, market sustainability, and technical sustainability.

Evans (2006) affirmed the success of social marketing in the healthcare sector. The researcher argued that social marketers could use this marketing concept to influence health behaviors through health communication strategies on mass media or interpersonal communication. Evans (2006) observed that social marketers can influence public health in six stages, including (a) developing a plan, (c) choosing communication material and channels, (d) creating materials, (e) creating a campaign, (f) evaluating effectiveness of the campaign, and (g) re-designing the material to support future communication. The last phase produced a continuous plan where social marketing campaigns loop through planning, adoption, and improvement. Evans (2006) concluded that social marketing remained useful in the health care sector and that HCPs could contribute to marketing strategies by providing alternative communication channels for reaching the target audience.
Evans and McCormack (2008) agreed on the success of social marketing. They observed that social marketing adopts strategies used in commercial marketing to influence behavioral change in individuals or organizations (Evans & McCormack, 2008). Evans and McCormack (2008) added that social marketing remains effective in health care because it can help change the behavior of patients and HCPs. Evans and McCormack (2008) illustrated the use of counter-marketing in tobacco control as an effective and successful social marketing strategy in health care. Evans and McCormack (2008) the relevance of social marketing as a behavior change strategy in the health care environment.

**Recommended Best Practices**

Cody et al. (2002), in efforts to increase the use of NPIs, used the Poras stream organization model to find four internal factors, which may be preventing the use of NPIs, including “(a) organizing arrangements, (b) social factors, (c) technology, and (d) physical setting” (p. 1403). Cody et al. (2002) found that organizing arrangements or communication between the different levels of staff, at nursing homes remained much less collaborative than at hospitals. Furthermore, low-paid and untrained workers on the “front-lines” (Cody et al., 2002, para. 4) remained the most likely to witness behavioral disturbances in residents and remained unable to diagnose or evaluate the behavior correctly, which could help determine an appropriate NPI.

Furthermore, Cody et al. (2002) revealed that nursing assistants had negative feelings about patient behavior disturbances, and viewed pharmacological sedation as the most preferable intervention. In terms of technology, Cody et al. (2002) found that nursing homes do not typically have tracking technology for behavior disturbances and
the use of NPIs, while nursing students also were inadequately trained in NPIs. Cody et al. (2002) stated that physical settings in nursing homes aggravated behavioral disturbances, and were almost never altered for the comfort of the patients. Externally, they found a range of legal, economic, and regulatory forces, which hindered the expanded use of NPIs (Cody et al., 2002). The researchers recommended sweeping changes to the four organizational factors in nursing homes (Cody et al., 2002). Above all, the researchers emphasized the importance of close coordination between all nursing home staff, including physicians and mental health consultants (Cody et al., 2002). Homes with a resident-centered culture remained the least likely to use antipsychotic drugs. External regulatory forces must also be challenged on a political level (Cody et al., 2002).

Snowden et al. (2003) reviewed the existing studies on PIs and NPIs, and found that both showed effectiveness; however, the researchers found a complete lack of formal comparative studies; resulting in no scientific results, which directly compared the efficacy of the two forms of treatment (Snowden et al., 2003). Snowden et al. (2003) also reviewed the assessment instruments for the effectiveness of NPIs, and found that the Minimum Data Set instrument was only useful for some behavioral disturbances, and was not indicated for depression. They found the Geriatric Depression Scale and the Mini-Mental State Examination as the most useful for diagnosis of behavior disturbances (Snowden et al., 2003). Snowden et al. (2003) discovered that recreational activities remained particularly useful NPIs for major and minor depressive symptoms, while structured activities demonstrated as effective for many behavioral disturbances. Snowden et al. (2003) also cited that group cognitive therapy remained more effective
than music therapy for mitigating behavioral disturbances. All four RCTs on NPIs for depression concluded that they remained effective, leading the researchers to conclude that the use of NPIs is justified and evidence-based (Snowden et al., 2003). However, the absence of systematic comparative studies meant Snowden et al. (2003) could not prioritize the effectiveness of individual NPIs, which led them to recommend further studies on NPIs, including comparative studies, which systematically rate NPIs against PIs.

The AGS (2003) published a consensus statement on the management of depression and behavioral changes, which garnered the support of over a dozen other agencies, journals, and groups. The consensus statement lists 31 recommendations, each of which is rated according to the strength of supporting evidence. Five of these recommendations relate to “education and training” (AGS, 2003, p. 1287), and include additional training for staff on observation and reporting of behavioral changes, as well as increasing the involvement of family members in care and consultation. Four recommendations exist that relate to “identification and screening” (AGS, 2003, p. 1287), including the importance of identifying and quantifying behaviors, such as verbal, non-verbal, or physical.

The Assessment and Diagnosis section of the statement contains five recommendations, which are worthy of elaboration. This section lays out several important recommendations for addressing behavioral disturbances in LTC facilities (AGS, 2003). The five recommendations include:

1. The importance of screening for contributing medical conditions as soon as new behavioral changes emerge;
2. In the assessment of some causes tested include evidence of constipation, adverse medical effects, infections, dehydration, pain, discomfort, delirium, or injury;

3. A range of environmental and other antecedents should be screened for, such as time, place, or events preceding the onset of symptoms; verbal or nonverbal signals, social contact (such as family visits or lack thereof), caregiver behavior or changes, engagement in activities, self-harm, deviations from normal life patterns, or environmental changes, such as room reassignments;

4. Laboratory and diagnostic imaging tests; and

5. Psychiatric screenings for psychosis, depression, anxiety, sleep disorders, and substance abuse withdrawal. (AGS, 2003)

Four recommendations exist for “referrals to mental health professionals” (AGS, 2003, p. 1287), such as situations in which patients show no improvement of behavior within 30-days of observation (AGS, 2003). For “treatment” (AGS, 2003, p. 1287), the consensus statement recommends NPIs, such as

- Sensory therapy,
- Activities therapy,
- Modifications of activities of daily living (ADLs) care to meet individual needs,
- Environmental modifications,
- Behavioral theory treatments, and
- Social contact intervention, which are strongly supported in the review of literature (AGS, 2003, p. 1294).
AGS (2003) concluded by stating important guidelines for monitoring exist, such as repeated attempts to decrease or discontinue PIs for dementia-related behavior (AGS, 2003), which remains particularly important because it establishes that the ultimate goal remains to stop administering PIs for behavioral disturbances.

The AGS (2003), in conjunction with the AAGP (2003), released a set of policy recommendations for changing the landscape of LTC facilities to meet the needs of patients better. Importantly, they called for increased funding and focus on studies comparing PIs and NPIs. The article also called for a cultural change in nursing homes, which emphasizes the need for resident-directed values. This remains relevant in light of evidence, showing that administration of PIs often occurs for the comfort and convenience of nursing home staff, rather than because it represents the best option for the patient (AAGP, 2003). AAGP (2003) stated these changes should be supported by regulation and policy, which provides reimbursement only when the facility follows evidence-based procedures, meaning inappropriate use of PIs over NPIs should not be reimbursed. AAGP (2003) also recommended the creation of a consumer-report for nursing homes, which grades them on a single mental-health outcome scale that carries data on the proper/improper use of PIs and NPIs. The associations call for increased training of nursing home staff, which demonstrates that HCPs remain unaware of the variety of NPIs, their effectiveness, and their appropriate use for treating behavioral disturbances (AAGP, 2003). Most importantly, this report discussed that insurance providers should cover all evidence-based NPIs. This coincides with the call for further research, since insurance providers demand extensive research on any covered treatments. The AAGP (2003) article shows the state of NPI research at that time, and
makes a useful comparison to more recent studies (discussed below) to determine how the field has advanced in the last decade.

Shortly after, the U.S. FDA (2005) released an extremely important national public health advisory warning showing an increase in mortality among elderly residents being treated for behavioral disturbances with antipsychotic drugs. The U.S. FDA (2005) examined 17 placebo-controlled studies on the use of the atypical antipsychotics, such as Zyprexa, Abilify, Risperdal, and Seroquel, for elderly patients with dementia and behavioral disturbances. Shockingly, 15 of these studies demonstrated that their use led to an increase in mortality for the group taking the drug, as compared with the group taking the placebo (U.S. FDA, 2005). The researchers examined 5,106 patients and found between 1.6 and 1.7-fold increase in mortality. The most common causes of death in the PI group resulted from heart failure and infections, such as pneumonia (U.S. FDA, 2005). The tested drugs fall into three separate categories, based on their chemical makeup, and all three categories demonstrated the effect of increased mortality. This led the U.S. FDA (2005) to conclude that all drugs in the atypical antipsychotic class, including Clozaril and Geodon (which were not tested) carry the same risks to patient health. However, while these drugs were approved for use in schizophrenia, none of them received approval for use in patients with dementia exhibiting behavioral disturbances. Because of these findings, the U.S. FDA (2005) issued a warning to the manufacturers of all atypical antipsychotics, as well as Symbyax (a combination product for use in patients with bipolar disorder) that they must include a boxed warning, indicating the disapproval of the drugs for use in patients with dementia, exhibiting behavioral disturbances. This landmark public health advisory presents some of the strongest evidence that PIs remain
overly prescribed and used, and they present a grave danger to the health of populations in LTC residents, demonstrating behavioral disturbances.

Three years later, a new public health advisory was issued regarding the older class of *conventional* antipsychotic drugs. Utilizing new powers granted to the organization through the FDAAA of 2007, the U.S. FDA (2008) could legally require drug manufacturers to place specific warnings on their products regarding their safe use. In addition to the *Boxed Warnings* previous issued by the U.S. FDA (2008), the agency can now require more specific warnings. Consequently, both conventional and atypical antipsychotics must be labeled in the following way: “Clinical studies indicate that antipsychotic drugs of both types are associated with an increased risk of death when used in elderly patients treated for dementia-related psychosis” (U.S. FDA, 2008, p. 2).

Despite the warnings, the use of these drugs for patients with dementia-related behavior disturbances remains the prerogative of the physician, meaning that increased education, training in their uses, and educating on their risks remains of the utmost importance. Both classes of drugs operate as dopamine receptor antagonists, which block naturally occurring dopamine (U.S. FDA, 2008). The conventional antipsychotics recently added to the list include Compazine, Haldol, Loxitane, Mellaril, Moban, Navane, Orap, Prolixin, Stelazine, Thorazine, and Trilafon. The U.S. FDA (2015) recommends that patients currently prescribed antipsychotics for off-label purposes should not have their medication abruptly discontinued, but that efforts to decrease and discontinue must quickly occur. The importance of these findings reframes the contexts of the studies previously cited, since researchers conducted those studies without the knowledge of the harmful effects of both classes of antipsychotics. Therefore, adding to the research and
evidence base for NPIs remains imperative, as NPIs offer a safe alternative to the use of PIs.

As mentioned above, The Department of HHS (2011) requested OIG to evaluate the use of atypical antipsychotic drugs with the associated costs. The report delivered a range of important findings about antipsychotic drug use in American LTC facilities. In the finding, over 300,000 residents had at least one Medicare claim for atypical antipsychotics (the report did not survey conventional antipsychotic prescriptions), and over 50% of these prescriptions did not meet Medicare criteria for reimbursement, amounting to $116 million in erroneous reimbursement claims (HHS, 2011). These claims seemed erroneous either because the stated usage of these drugs did not fall in compliance with the U.S. FDA (2005) black box warning, or because no documentation existed of the drug actually being administered. The fact that erroneous Medicare reimbursement claims for antipsychotic prescriptions continues to increase, raises the serious question of how often the usage of antipsychotic drugs for off-label purposes are recorded. The HHS (2011) recommended that nursing homes must provide accurate information regarding the specific usage of these drugs. Additionally, the HHS (2011) recommended the certification process for nursing homes should include highly specific regulations on the use of antipsychotic drugs, and that certifications should become revoked for nursing homes that continue the dangerous practice of using these drugs for behavioral symptoms (HHS, 2011). More specifically, 10.4% of the Medicare claims for these drugs displayed as erroneous because patients received an excessive dose. Furthermore, 9.4% displayed as erroneous because the duration of the dose was excessive, 8% occurred due to inadequate indications for use, 7.7% happened due to
inadequate monitoring, and 4.7% occurred because of the presence of adverse consequences, indicating the drug should be discontinued (HHS, 2011).

In a Policy Statement, the ASCP (2011), concerning the use of Antipsychotic medications in Nursing Facility Residents, reported a range of important statistics, which indicated the degree to which the antipsychotics drugs, as mentioned above, remained in use for elderly patients with dementia, despite the U.S. FDA (2012) warnings (ASCP, 2011). The OIG for the U.S. Department of HHS found that 14% of elderly patients in LTC facilities received antipsychotic drugs, and that 83% of them received drugs for off-label reasons. The office also found that 22% of atypical antipsychotic drugs were not administered according to guidelines for appropriate use (ASCP, 2011). The article continued to stipulate that off-label prescriptions are a common practice throughout the U.S. medical system; however, not all uses should be deemed inappropriate. The ASCP (2011) argued that off-label prescriptions are sometimes the most appropriate interventions for severe behavioral disturbances and that the benefits of such uses sometimes outweigh the mortality risks. However, only “medium-level evidence” (ASCP, 2011, para. 4) exists supporting such uses and this evidence does not mention the mortality risk. Although, the ASCP (2011) assembled a tepid support of the use of these drugs, it also endorsed the use of NPIs as a first-line of treatment for patients with dementia, exhibiting behavioral disturbances. Specifically, it endorses the use of environmental modifications as an initial treatment, but does not mention individual forms of treatment or the range of supporting evidence. The article is mostly dedicated to demonstrating that off-label uses are legal and therefore that the U.S. FDA (2015) public health advisories should not be taken to imply that all off-label uses of these drugs are
inappropriate. As the source of this information is an association of pharmacists, rather than medical staff trained in NPIs, its recommendations should be carefully evaluated.

The U.S. CMS (2012) announced the Partnership to Improve Dementia Care, a proactive effort meant to confront the off-label use directly of antipsychotic drugs in patients with dementia. This effort helps to demonstrate the degree to which the medical community was increasingly convinced that the use of these drugs in an off-label manner is dangerous to the health of LTC residents. The new policy stated the ambitious goal of reducing the use of these drugs in nursing homes by fifteen percent in the first year. This should be viewed as clear evidence, although off-label use is permissible by law, medical authorities are taking every measure to curb their inappropriate use. CMS (2012) cited data from a 2010 study, which found that at least 17% of nursing home residents were receiving doses of these drugs, which exceeded the recommended dosage. The major recommendation issued by the CMS (2012) to help curb this trend is indicative of the current consensus on how to address the over-prescription of dangerous drugs in vulnerable populations. These recommendations include:

1. Enhanced training for nursing homes nationwide, which emphasizes the importance of a patient-centered culture and high-quality care,
2. Increased transparency, which requires nursing homes to record and release data on the use of antipsychotic drugs in each facility, and
3. Alternatives to antipsychotic medication, which is an explicit call for the increased use of NPIs ranging from consistent staff assignments. (CMS, 2012)

This will allow the nursing staff to understand their residents on an individual basis, with increased exercise and time spent outside, closer monitoring of acute and
chronic pain, and the planning and execution of individualized activities (CMS, 2012). These latter recommendations are in line with other research gathered for this project demonstrating the importance of attention paid to each patient, physical activity, and the customization of NPIs for individual patients.

The CMS (2013) issued a Center for Clinical Standards and Quality/Survey & Certification Group, to the DHHS (2011) as a follow-up report in reference to progress made since the 2012 mentioned initiative. Since then, the office reports that it has forged partnerships with new stakeholders and has introduced changes to the State Operations Manual and training videos for nursing home workers (CMS, 2013). The CMS (2013) emphasized the importance of determining the cause of behavioral disturbances before prescribing antipsychotic medications. Possible epidemiological factors include physical, medical, functional, psychological, emotional, psychiatric, social, and environmental factors, which may be influencing the behavior of residents with dementia. The CMS (2013) reported what they believed the leading cause of inappropriate prescription drug use included. The CMS (2013) stated, “This concern is that nursing homes and other settings…may use medications as a ‘quick fix’ for behavioral symptoms or as a substitute for a holistic approach that involves a thorough assessment of underlying causes” (p. 2).

In addition to the increased risk of death associated with antipsychotics, the report lists movement disorders, falls, hip fractures, cerebrovascular adverse events, and other risk factors, which are likely to occur when these drugs are used without understanding the causes of the behavior (CMS, 2013). The CMS (2013) reported seven dementia care principles, including:
1) person-centered care; 2) quality and quantity of staff; 3) thorough evaluation of new or worsening behaviors; 4) individualized approaches to care; 5) critical thinking related to antipsychotic drug use; 6) interviews with prescribers; and 7) engagement of resident and/or representative in decision-making. (CMS, 2013, p. 2)

The dementia care principles help to demonstrate the steady evolution of the approach to NPIs in nursing homes, which began in earnest around 2002. These CMS (2012, 2013) reports help to illustrate the concerted effort being made to change nursing home culture in a way, which benefits the LTC residents, without leading to excessive risk.

Due to the evidence demonstrating the dangers of using antipsychotic drugs with elderly residents in LTC facilities, CMS (2014a) Partnership to Improve Dementia Care in Nursing Homes tracked the frequency of drug use in U.S. nursing homes. A recent trend update shows that use of these drugs has been steadily declining since measurements were first taken in 2011 (CMS, 2014b). Between 2011 and 2014, the percentage of LTC residents taking these drugs has reduced from 23.9% to 19.8%, an overall reduction of 17.1% (CMS, 2014b). In all regions, use of these drugs has declined over the period measured, demonstrating the moderate successfulness of the U.S. FDA (2015) and CMS (2014b) public health strategies. These percentages show that further social marketing is necessary to reduce the number dramatically of elderly patients taking these drugs for off-label purposes. Looking more closely at the statistics for Los Angeles and Mississippi, these states demonstrated some of the weakest rates of improvement in the nation. Los Angeles achieved an antipsychotic drug use reduction of 14.1%, and
ranks last in the nation for improvement. Mississippi achieved an antipsychotic drug use reduction at 10.5%, but due to a lower baseline rate of the use of such drugs, Los Angeles ranks 48th in the nation (CMS, 2014b). While both states are making progress, further improvement of decreasing the use of these drugs must occur, while also determining the factors contributing to their slower-than-average improvements.

The CMS (2014a) reported that its initial goal to reduce the use of antipsychotic drugs in LTC populations had slightly exceeded its goal of a 15% reduction over the first two years. For that reason, the agency set new, more ambitious goals for a 25% reduction by the end of 2015, and a 30% reduction by the end of 2016 (CMS, 2014a). These new milestones help to support the idea that the use of these drugs in LTC populations is considered highly dangerous; therefore, an aggressive campaign to curb such usage remains imperative. The chief medical officer of CMS (2014a), Patrick Conway, stated, “We know that many of the diagnoses in nursing home residents do not merit antipsychotics but they were being used anyway” (p. 1). He also explicitly endorsed the use of NPIs, such as behavioral therapy, and described NPIs as both safe and effective (CMS, 2014a). The announcement also referenced new members of the coalition, seeking to reduce the use of PIs for behavioral disturbances, including the Society for Post-Acute and Long-Term Care Medicine, the American Health Care Association, Leading Age, and Advancing Excellence in America’s Nursing Homes (CMS, 2014a). The CMS (2015a) addressed the tendency in some nursing homes to replace antipsychotic drugs with other PIs, such as sedative/hypnotic drugs and anxiolytics, which it deemed an inappropriate method for dealing with behavioral disturbances.
The most recent information from the CMS (2015a) Partnership to Improve Dementia Care in Nursing Homes was recently released and tracks the decline in antipsychotic drug use in LTC facilities through the second quarter of 2015 (CMS, 2015b). The data shows a steady decline down to an all-time low of 18% of LTC residents, or a total decline of 24.8%, since the 2011 beginning of the initiative (CMS, 2015b). Since 2011, Los Angeles continued to fall behind other states, with 20.3% overall reduction in antipsychotic drug reports. While this represented a big improvement, Los Angeles remained the lowest reduction in the nation (CMS, 2015b). While Mississippi started at a lower baseline, the state had a lesser percentage drop of 17.5%, while currently ranking 48th in the nation for improvement in antipsychotic drug reports (CMS, 2015b). As these numbers continue to drop, the need for NPIs will increase at a corresponding rate, since fewer patients will receive pharmacological treatment for their behavioral symptoms.

Concerning the effectiveness of the CMS (2015a) initiative, government policy plays an important role in quality of care delivered to LTC residents in the U.S. A recent publication by the CMS (2015a) explains the changes to policy established in section 6102(c) of the Affordable Care Act. Under that provision, the CMS (2015a) is now tasked with tracking and encouraging quality control in nursing homes through Quality Assurance and Performance Improvement (QAPI). After CMS (2015a) released its regulations, nursing homes will have one year in which to organize a QAPI system, which will allow them to report on all improvements to safety and care. The year of 2015 marked the first year in which the antipsychotic drug use measure became added as a requirement in all QAPI reporting; thus, it became a central goal of the CMS (2015a)
monitoring system. The CMS (2015a) also included new regulations requiring increases for time LTC residents spend visiting family members, engaging in outdoor activities and exercise, and engaging in individualized activities tailored to their needs. By including these requirements, the CMS (2015b) sent a clear message about its endorsement of NPIs as safe and effective alternatives to PIs.

In January of 2015, the Nursing Home Quality Campaign (NHQC, 2015) released a summary report detailing the results of a survey in several states, which asked how that state is ensuring quality improvement in their nursing homes. In Los Angeles, respondents reported that a new state law requiring mandatory dementia training, and the utilization of the CMS (2015a) Hand in Hand curriculum, were both recent advances in the realm of nursing home quality (NHQC, 2015). Los Angeles nursing homes also implemented an array of evidence-based NPIs including increased time allotments for activity programs, new activities, increased allotment of time for nurses to spend with residents, increased staff interventions in a timely manner, and prioritizing the needs and wishes of residents (NHQC, 2015). The respondents listed a range of successes and challenges with this approach. Under successes, they listed a significant reduction in the use of antipsychotic drugs, a decrease in disturbances between residents, and a decrease in outbursts by residents, and overall happier residents and family members (NHQC, 2015). Under challenges, they listed changing the mindset of staff, providing adequate staffing, the resistance of family and physicians to the reduction in use of antipsychotics, and the difficulties associated with managing the progression of residents’ diseases (NHQC, 2015). These highly encouraging results may provide useful guidelines for future research, as well as the creation of a social marketing campaign. By understanding
the challenges associated with the new NPIs for behavioral disturbances, researchers can attempt to mitigate these challenges through preparation and education.

Summary

In summary of the review of related literature, research study outcomes show a majority of support for NPIs as the first therapy option, and in treating behavioral disturbances in LTC residents. Additionally, the research studies support the instability of PIs that lack evidence concerning the risk and potential long-term side effects (Cohen-Mansfield, Thein, et al., 2012b). Common themes in the review include the ethical, safety, and efficacy concerns with the use of PIs for treating behavioral disturbances among elders. The studies reflect some knowledge deficiency among LTC staff members and a deficiency in adequate research, regarding the safety of PIs for behavioral disturbances, in patients with dementia in LTC facilities (Seitz et al., 2013). Evidence-based guidelines and recommended best practice guidelines emphasized more NPIs, in comparison to PIs. Although the research reflects a general preference for NPIs as the first approach to treatment, it proves how PIs must only find use as a last resort. A number of researchers demonstrate how PIs, such as SSRIs and atypical antipsychotics, have not been fully investigated and are not considered as optimal methods of treatment. Due to the increase in mortality rate, it remains imperative that nurses consider the utilization of evidence provided by the best practices recommendations. Molinari et al. (2013) concluded that although LTC facilities were designed to accommodate the needs of the elderly, addressing the social, mental, and behavioral needs of the residents, as choosing an NPI first, remains imperative.
Theoretical Framework

Kotter’s (2012) 8-Step Change Model forms the theoretical framework for the study. I used Kotter’s (2012) model because it helped to provide insight into the change process and helped LTC nurses and LTC facility administrators avoid the common challenges with change management (Kotter, 2012). Kotter (2012) developed the 8-step process for leading change to help managers with transformational methods and means to be continuously applied to achieve powerful results. The 8-step change model informed the development of the social marketing plan to change staff behaviors to make safe and ethical decisions, concerning the treatment of behavioral disturbances in LTC residents.

Therefore, Kotter’s (2012) 8-step process for leading change should be applied to provide the LTC staff with the skills to prompt appropriate interventions, while making the most ethical decisions for the treatment of behavioral disturbances among LTC residents (Melanie, 2013). Additionally, Kotter’s (2012) 8-Step Change Model remains vital for the successful implementation of EBP. While theoretical frameworks provide the means for addressing the right variables in EBP, it also provides a basis for determining whether all the essential facets of a program are in place and provide a reliable method of measuring effectiveness (Barker, 2010). A discussion of Kotter’s (2012) model follows below.

Step 1: Create Urgency

It remains vital to build up a sense of urgency about the needed change, in order for the whole organization to want the change. Creating this urgency requires the change leader to gather many people to talk about the proposed change. It involves initiating,
convincing, and open dialogues about market trends or environmental changes that make the change necessary, as well as clearly outlining the consequences of not making the proposed change (Kotter, 2012).

Step 2: Form a Leading Team

Leading change and convincing people to adopt the change takes visible support and strong leadership from influential individuals within the organization. The support of such a group will not only convince people to throw their entire effort and dedication behind the change, but will avail valuable input from diverse areas of the organization that will facilitate a smooth and effective change process. Effective change leaders need to act as influential individuals, whose power arises from various sources, such as expertise, job title, and status (Kotter, 2012).

Step 3: Create a Vision

While change occurs, numerous solutions and ideas tend to appear and float around during the process. Additionally, people may receive new instructions and directives they may find strange. Therefore, it remains necessary to create an overall vision and to link all the ideas and directives to this vision to stay on the right track while helping staff see the necessity of the new directives. The vision should integrate the central values of change while being accompanied by an ideal strategy for execution (Kotter, 2012).

Step 4: Disseminate the Vision

While having the right vision and strategy for execution remains necessary, more is needed to accomplish successful change. One needs to communicate this vision through all available channels of communication to ensure that the vision plays a central
role in driving the change (Kotter, 2012). In addition to communicating the vision in special meetings, change leaders need to talk about the vision continuously, while using the strategies daily to solve problems and make decisions (Kotter International, 2015).

*Step 5: Enable Action by Removing Obstacles*

Obstacles to change, such as unfavorable organizational structures and individuals resistant to the change, can hinder a successful change process (Kotter, 2012). Removing obstacles can empower the people responsible for executing the vision. The first step of removing obstacles involves ensuring the organizational structure, performance compensation systems, and job descriptions stay in line with the vision. The second step includes identifying the individuals opposing the change and convincing them of its benefits. One then needs to appreciate and reward people who make the change happen (Kotter International, 2015).

*Step 6: Generate Short-Term Successes*

Evidence of success throughout the period of change remains important for motivating staff and preventing critics from hurting the change process. Creating short-term, achievable targets that result in quick wins that the staff can see, and rewarding staff who help in the achievement of the targets, will help to spur motivation (Kotter, 2012).

*Step 7: Consolidate Change*

The change leaders need to use short-term successes to accelerate the process by building on goals that aligned correctly and identifying those that need improvement (Kotter, 2012). This use of increasing credibility helps to change policies, structures, and systems that remain out of line with the vision.
Step 8: Institutionalize the New Approaches

Change leaders must incorporate the core values of the change vision into the organizational culture to make the change lasting. The change should remain visible in every aspect of the organization. One needs to develop channels that facilitate leadership development and succession to achieve this objective (Kotter, 2012).
II. METHODOLOGY

Design

This section describes the design of the social marketing plan for the capstone quality improvement project. The U.S. DHHS (2011; Health Resources and Services Administration [HRSA], 2015) defined quality improvement (QI) as, “systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups” (p.1). In health care, quality consists of the correlation between health services and health outcomes in an individual or group (DHHS, 2011). By helping to educate nurses in LTC facilities about the benefits of NPIs, measurable improvements in the health status of LTC residents can reach success. While the dangers of off-label use of PIs are already known to many nurses, the overall quality of care can improve through further education about the use of NPIs.

One way to achieve QI in health services is through the implementation of a social marketing campaign. Social marketing borrows and develops tools and techniques from the field of commercial marketing but uses them for the health benefit of a group or groups in society (Truss, French, Blair-Stevens, McVey, & Merritt, 2010). To qualify as social marketing, rather than commercial marketing, the campaign must have the greater social welfare as its primary goal, rather than financial gain (Lefebvre, 2011). Those in social marketing seek to augment traditional modes of education with the innovative practices and concepts developed in commercial marketing, including advertising, distribution, and effective messaging (Lefebvre & Ward, 1988). Governments and other organizations have used social marketing campaigns to improve family planning.
practices, to promote vaccinations, and to achieve other similarly important social goals (Truss et al., 2010).

In this project, I employed the concepts and techniques of modern marketing for improving the quality of care in a LTC facility. I used the 10-step social marketing plan framework, developed by Lee and Kotler (2016), as the design for this capstone project. The steps and explanation of each, taken directly from Lee and Kotler (2016), are listed below.

STEP 1: Describe the Social Issue, Organization(s), Background, Purpose, and Focus of Your Plan

An actual social marketing campaign necessitates a clear explanation of the background, resolution, and concentration of the campaign, concerning the phenomenon that must be addressed through social marketing. This step provides a detailed description of the problem that must reach an explanation, including the actual situation and justification for implementation of the marketing plan. The plan reflects this through extensive data linking the off-label use of anti-psychotic drugs for behavioral interventions with death in elderly residents. After demonstrating the scientific consensus on the risks of these interventions, evidence is presented showing the safety and effectiveness of NPIs for use with behavioral problems in the elderly LTC population. This step is then used as an opportunity to explain the overall purpose and focus of the social marketing campaign, which aims to replace the use of PIs with NPIs and improve health outcomes for elderly residents.
**STEP 2: Conduct a Situation Analysis**

A situational analysis represented in the form of SWOT (strengths-weakness-opportunities-threats) reveals the organizationally focused strengths, weakness, environmentally focused opportunities, and threats as suggested by Lee and Kotler (2016). The purpose of this step is to explain the internal and external factors that will help or hinder the social marketing campaign.

Internal factors are organizational factors, including: “organizational resources, service delivery, capabilities, expertise, management support, issue priority, internal public concerns, current alliances and partnerships, and past performance” were considered (Lee and Kotler, 2016, p. 101). By closely examining the organization involved, i.e. the LTC facility, the plan provides a pragmatic analysis of the opportunities and challenges to be faced. For example, this step explains how LTC staff are often tempted to use PIs due to a lack of education about how best to address behavioral disturbances. Importantly, this step explains how that particular challenge is addressed via social marketing.

External factors are “cultural, technological, demographic, natural, economic, political/legal, external publics, and environmental factors”, including: legal, regulatory, and other environmental threats and opportunities in social marketing (such as contribution of LTC nurses in social marketing campaigns) (Lee and Kotler, 2016, p. 102). Examining the effects on the environment factors will allow determining existing laws, rules, or other factors that will hinder the implementation of social marketing campaign and ultimately the practice of PIs in addressing behavioral disturbances in health care centers. Environmentally, factors include environmental threats and
opportunities in social marketing (such as contribution of LTC nurses in social marketing campaigns). This step also calls for a review of past efforts to curb the use of PIs and to analyze them in detail to determine the ways in which they succeeded and failed. This analysis provides further guidance about how best to avoid past mistakes and emulate past successes.

**STEP 3: Select Target Audiences**

Selection or identification of the target audience remains a crucial component of the planning process. The target audience represents the specific segment of the population whose behavior needs alteration by the social marketing campaign, and who remains willing and active cooperation remains necessary for the campaign achieve its goals. Identification of the target audience includes a process of segmenting the population and prioritizing the segments based on the purpose of the marketing activities. At this step, it remains important to identify carefully those more open to changes and those at risk to determine the potential success or failure of the social marketing campaign. The plan specifies aspects of the primary target audience such as the size of the group, the incidence, and severity of the problem behavior among this group, as well as demographics, psychographics, values and lifestyles, geographies, related behaviors, and readiness to act. At this step, the HCPs at one LTC facility are described.

Understanding these aspects helps the campaign effectively and accurately communicate its goals to these individuals. Secondary target audiences must also enter the description. The secondary target audiences include the patients themselves, some of whom may be interested in the use of NPIs; the CNAs, who are stakeholders in the health and safety of the residents; and the LTC facility administrative staff, who must choose to implement
the campaign and who have a professional stake in the quality of care delivered at the facility.

**STEP 4: Set Behavior Objectives and Target Goals**

In step four, the objectives, and target goals of the social marketing campaign are specified in detail. Objectives are subcategorized as behavior, knowledge, and belief objectives. The plan describes the behavioral objective in terms of what the marketers want the target audience to *do differently* when choosing interventions for residents’ behavioral problems. A knowledge objective remains important because the target audience must know about alternative interventions and the evidence that supports their use. A belief objective specifies the desired target audience’s attitude that must change for the benefit of residents and staff. The behavior objective is then quantified as a measureable goal. The plan also includes quantifiable goals for the education of the LTC staff and the satisfaction of LTC administrators. Lee and Kotler (2016) suggested that goal setting should apply the SMART (specific, measureable, attainable, relevant, and time sensitive) concept. Therefore, all goals set forth in the plan remain held to these standards.

**STEP 5: Identify Target Audience Barriers, Benefits, and Motivators; the Competition; and Influential Others**

Specifying the target audience is not enough to form an effective social marketing campaign. Completing step five goes further by identifying the specific barriers to change that exist in the target audience. In this step, the plan covers the physical, psychological, economic, skills-based, knowledge-based, and attitudinal barriers to change among the healthcare workers at the LTC facility. The next phase of this step is to identify the
benefits that the target audience hopes to receive in exchange for the behavior change that is asked of them. For example, a sense of professional and personal satisfaction achieved through doing the more difficult but more accepted and ethical thing. The next phase is to identify motivators, which are gathered from the target audience themselves. The plan identifies the approaches that will motivate the target audience to accept and embrace the changes that are being sought. The fourth phase of this step describes the benefits and costs of alternatives to the desired behavior. In this case, the plan describes the real and perceived benefits to the target audience of using anti-psychotic drugs for behavioral problems, as well as the real and perceived costs of doing so. The final phase of this step identifies the people and sources of information that are influential to the nurses at the LTC facility, including individuals, groups, and those holding positions of power and influence. This allows the social marketing campaign to utilize the endorsement of these influential others, wherever possible.

**STEP 6: Develop a Positioning Statement**

In step six, a comprehensive positioning statement has been crafted to summarize the objectives, purpose, and benefits of the desired behavior clearly and succinctly. The positioning statement utilizes the following template: We want [TARGET AUDIENCE] to see [ADJECTIVES, DESCRIPTIVE PHRASES, SET OF BENEFITS, OR HOW THIS BEHAVIOR IS BETTER THAN THE COMPETITION]. In other words, “We want shoreline property owners engaged in landscaping to see native plants as beautiful, easy to find, less hassle to maintain, and a way to protect water quality and wildlife habitats” (Lee & Kotler, 2016, p. 510).
The development and use of a positioning statement helps to bring the fundamental elements of the entire project together in a way that helps everyone in the target and secondary audiences understand the current issue that needs an explanation and why the preferred behavior remains better than the most popular competing behavior. The position statement provides direction for developing and implementing the campaign and orients the target audience toward the use of NPIs rather than PIs.

**STEP 7: Develop Marketing Strategies**

Step seven shows the manner in which commercial marketing strategies have become repurposed for the development of the social marketing campaign. For example, this plan aims for the development of a strategic marketing mix using the four Ps (Product, Price, Place, and Promotion) with emphasis on identification of determinants or independent variables and the dependent variable, which is the behavior in question.

First, the product platform specifies the core product, the actual product, and the augmented product of the campaign. The core product represents the major “benefit from performing the desired behavior” (Lee & Kotler, 2016, p. 511). The actual product includes “specific goods or services” (Lee & Kotler, 2016, p. 511) that a campaigner wants the “target audience to acquire, utilize, and/or consume-those related to the desired behavior” (Lee & Kotler, 2016, p. 511). The augmented product includes tangible items and intangible efforts that are provided to make it easier for the target audience to perform the desired behavior. Delineating these products helps to summarize what this campaign is offering to its participants.

Just as the products must be offered, the price of these products must also be clearly stated. The price phase of this step describes the monetary and non-monetary
incentives and dis incentives for adopting the desired behavior. The next phase involves outlining the place, where, and when the desired behaviors may occur. The place should stay “convenient and pleasant” (Lee & Kotler, 2016, p. 512). Finally, the plan specifies the methods and tools of promotion that can be used to accomplish the campaign goals. The central messages intended for the target audience are spelled out. The messengers of this campaign are named and the creative strategies used are described, including visual elements, logos, taglines, colors, and other details.

**STEP 8: Develop a Plan for Monitoring and Evaluation**

Step eight describes the ways in which the objectives and goals of the campaign remain monitored and evaluated. This step explains the purpose of monitoring and evaluation, so the target audience and other stakeholders know what to expect in terms of measurement and evaluation. In this step, the precise nature of the monitoring program is explained, including the specification of which individuals will be monitored and how the successfulness of the program will be determined. The tools used to measure variables and the metrics are presented in detail. The evaluation timeframe is specified in this step, as is the projected cost of the measurement and analysis.

**STEP 9: Establish Budgets and Find Funding Sources**

Step nine provides details about the monetary costs of the project, budgeting, and funding sources. The specifics enumerated in this step include the costs of all product-related strategies, price-related strategies, place-related strategies, promotion-related strategies, and evaluation-related strategies. By outlining the costs of the campaign, funds can be allocated with specificity and accuracy. This step helps campaigners identify,
when needed, the organizations or individuals from which additional funding may be obtained.

**STEP 10: Complete an Implementation Plan**

The final step is the completion of an implementation plan, which takes the form of a table that displays what, who, when, and how much went into implementing the campaign. These categories are expanded to include other important details to provide a clear roadmap for carrying out the campaign. The implementation plan combines many of the key elements described in the previous steps in such a way that the fundamental ideas, values, and costs can be viewed at a glance.

**Target Population**

In the description of step three above, the importance of identifying and describing the target audience, or population was discussed. The primary target population consists of all nursing staff, both registered nurses (RNs) and licensed practical nurses (LPNs), who deliver direct patient care at the targeted LTC facility. These nurses influence or administer treatments for LTC residents’ behavioral disturbances by recommending, requesting, or implementing interventions. The LTC facility has 88 Nursing staff, including 26 LPNs, 12 RNs, 50 Certified Nursing Assistants (CNAs), with a 1:30 nurse-patient ratio and 1:8 CNA-patient ratios.

The secondary target audiences include the patients themselves, some of whom may stay interested in the use of NPIs; the Certified Nursing Assistants (CNAs), who are stakeholders in the health and safety of the residents; and the LTC facility administrative staff, who must choose to implement the campaign and who have a professional stake in the quality of care delivered at the facility.
Setting

The setting consisted of a LTC facility in St. Tammany Parish, Los Angeles. The facility includes a 145-bed health care and rehabilitation center, currently with the capacity for 133 residents. The three facility units include Dementia, Long Term Care, and Skilled Nursing Residents.

Detailed Procedures

In the detailed procedures section, the development of the social marketing plan (SMP) is discussed as the intervention of the project. The SMP, which will be implemented as a social marketing campaign (SMC), can help reduce the use of PIs for residents with behavioral disturbances in one LTC facility. While utilizing data about the dangers of off-label use of anti-psychotic drugs for elderly LTC residents, the plan focuses on promoting the use of evidence-based NPIs. By using Lee and Kotler’s (2016) 10 Step SMP worksheet for developing the plan and the support of Kotter’s (2012) 8-Step Change Model, the SMP developed for this capstone project guides LTC facility nurses in effectively managing the behaviors of LTC residents, while adhering to best practice guidelines.

*STEP 1: Describe the Social Issue, Organization(s), Background, Purpose, and Focus of Your Plan*

The social issue addressed by this SMP capstone project is the dangerous use of anti-psychotic drugs for off-label purposes in LTC facilities. This plan was developed by a DNP nursing student at The University of Southern Mississippi for implementation by administrators at a specific LTC facility in St. Tammany Parish, Los Angeles.
The U.S. FDA (2005) determined that the use of atypical and conventional antipsychotic drugs to treat behavioral disorders in elderly people leads to an “approximately 1.6-1.7% increase in mortality” (para. 1). Alternatively, NPIs exist, demonstrate as effective in the treatment of behavioral disturbances, and remain safe, without an increase in mortality.

- In November 2015, CMS (2015a) issued a set of trend graphs produced by Point Right (2015) that tracked the use of antipsychotic drugs at one LTC facility in St. Tammany Parish, Los Angeles, as well as the incidence of behavioral disturbances at the same facility over the same time.
- The graphs, as a part of an August 2015 to October 2015 report, show that the LTC facility’s staff have been successful in reducing the use of antipsychotic drugs for off-label purposes between November 2013 to October 2015.
- The reduction has dropped the facility’s rate, below the national baseline to nearly 0% by January 2015 to October 2015. However, during that time, the incidence of behavioral disturbances rose about 3% above the national benchmark in June 2014 to a high of approximately 20% above the benchmark in February 2015. (Point Right, 2015)

In October 2015, the rate of behavioral disturbances, among residents in the facility, remained almost 10% above the national benchmark. Therefore, the purpose of this SMP capstone project is to support a continued decrease in LTC nurses’ use of unnecessary PIs to address residents’ behavioral disturbances. The campaign focus is evidence-based NPIs. Step one also incorporates Step one of Kotter’s (2012) change process: create urgency. The SMC developed from this SMP should create a sense of
urgency in the target audience. Data about increased mortality among residents in LTC facilities should create this urgency. In implementing the SMC, facility administrators need to interview LTC nurses to acquire their perceptions of how often they utilize PIs to minimize behavioral disturbances in LTC residents. Communication with nursing staff is intended to enlighten them about the necessary changes needed, while informing them of the consequences if the changes are not implemented. Workshops must be held to encourage open dialogue between nurses and administrators about the change (Kotter, 2012).

**STEP 2: Conduct a Situational Analysis**

This involved organizational factors, such as “organizational resources, service delivery, capabilities, expertise, management support, issue priority, internal publics, current alliances and partnerships, past performances” (Lee and Kotler, 2016, p. 106). The strengths that maximize my plan follow:

- The LTC facility remains well staffed, so nurses will have time to do the NPIs.
- The LTC facility remains staffed with caring nurses, who seem willing to accept change to provide the best overall care for the LTC residents.
- Willingness and prioritization by administrators to implement the SMC.

The weaknesses that minimize my plane follows:

- Even with good staffing in the LTC facility, nurses stay busy with day-to-day work activities. Nurses are likely to use interventions (PIs) that are easy to deliver.
• The cost of training nurses in the use of NPIs may be perceived as prohibitive within current reimbursement parameters.

• Nurses decreased knowledge in the use of all EBP NPIs.

• Nurses decreased knowledge about recommendations and warnings regarding PIs.

This also included external forces, such as those that consisted of “cultural, technological, demographic, natural, economic, political/legal” (Lee and Kotler, 2016, p. 103), and external publics.

My plan will take advantage of the following opportunities:

• A Policy Statement issued by the ASCP (2011) confirmed that antipsychotic drugs for elderly patients with dementia were continuing to be used, despite U.S. FDA (2012) warnings.

• The CMS (2014a) Partnership to Improve Dementia Care in Nursing Homes demonstrated that Los Angeles needs further reduction in the rate of off-label uses of antipsychotics drugs.

• Since there is a decline in the off label use of atypical and conventional antipsychotics drugs in elderly LTC residents because of increasing emphasis by regulators about their dangers. More residents will be in need of alternative treatments to manage disruptive behaviors.

My plan will provide for the following environmental threats:

• Reimbursement parameters that make educational programs costly for LTC facilities.
- State of Los Angeles LTC nursing staff shortages may make the use of NPIs difficult to achieve, as they are time-consuming in comparison to PIs.

Findings from prior and similar efforts that remain noteworthy are as follows:

- The inclusion of U.S. FDA (2008) black box warnings on the packaging for anti-psychotic drugs has succeeded in achieving a nationwide reduction in the use of these drugs for off-label purposes.

- Public service announcements and EBP from other States have contributed to reductions in the use of these drugs. For example, “The National Partnership is now working with nursing homes to reduce the rate even further” (CMS, 2014a, p. 4).

- The targeted LTC facility’s administrator reported attempting to change from PIs to NPIs, such as utilizing redirection, sensory stimulation, reminiscence, outdoor walks, restorative therapy, TV, and calm environments. The administrator reported these past NPIs worked well with managing some of the behavioral disturbances. The administrator reported utilizing PIs, such as anti-anxiety medications and leaving anti-psychotics as a last resort. However, the state of Los Angeles is in great need of further reducing the rate of off-label uses of antipsychotic drugs. The CMS (2015b) reported a continued decline in using PIs, but Los Angeles remained with the lowest reduction in the nation.

**STEP 3: Select Target Audiences**

The primary target population is all nursing staff, both nurses RNs and LPNs, who deliver direct patient care at the targeted LTC facility. These nurses influence or
administer treatments for LTC residents’ behavioral disturbances by recommending, requesting, or implementing interventions. The LTC facility has 88 Nursing staff, including (26) LPNs, (12) RNs, and (50) Certified Nursing Assistants (CNAs) with a 1:30 nurse-patient ratio and 1:8 CNA-patient ratios.

The secondary target audiences include the patients themselves, some of whom may be interested in the use of NPIs; the CNAs, who are stakeholders in the health and safety of the residents; and the LTC facility administrative staff, who must choose to implement the campaign and who have a professional stake in the quality of care delivered at the facility.

Demographics of patients are elderly residents above 56 years of age with behavioral disturbances associated with psychiatric disorders, including dementia. The LTC facility in St. Tammany Parish currently has 129 residents, with an age range of 57-101, including 107 females, 22 males, and 95 residents with a diagnosis of dementia. The facility stands as licensed for 147 total residents.

Step 3 of the SMC should be implemented along with Step two of Kotter’s (2012) change process: form a leading team. Implementing the SMC should be a group effort by enthusiastic administrators who engage and motivate leaders within the nursing staff. Kotter’s (2012) second step involves assembling nurse leaders to determine the most powerful, energetic, and viable ideas suggested by all nursing staff. This will promote collaborative change efforts between the administrators and nurses as they strive to ensure that safe care is provided to the LTC residents. With success at the target LTC facility, a coalition of healthcare professionals can be formed to expand similar campaigns across Los Angeles.
**STEP 4: Set Behavior Objectives and Target Goals**

The objectives and goals outlined in step four of the SMP are campaign objectives and goals rather than objectives and goals for the capstone project itself. Therefore, they stand as different compare to the capstone objectives and outcomes outlined in Chapter I of this paper.

*Objective.* This section outlines the objectives, including behavior, knowledge, and belief.

*Behavior Objective.*

I want specifically to influence my target audience to *do* the following because of this campaign:

1. LTC nurses’ will use NPIs as a first choice, when appropriate, rather than PIs to manage residents’ behavioral disturbances.

*Knowledge Objectives*

The knowledge needed to act is as follows:

1. LTC nurses will know that using PIs to manage behavioral disturbances can be dangerous for residents.
2. LTC nurses will know how to use NPIs effectively to manage residents’ behavioral disturbances.
Belief Objective

The item I need them to believe is as follows:

1. LTC nurses will believe that the continued use of dangerous drugs is fundamentally unethical when there are safe alternatives.

Goals. This section answers the question: “What quantifiable, measurable goals are you targeting? Ideally, these are stated in terms of behavior change (e.g., increase in sales of native plants)” (Lee and Kotler, 2016, p. 508). Other potential target goals are “campaign awareness, recall, and/or response and changes in knowledge, belief, or behavior intent levels” (p. 508).

Behavior Goals

1. After nursing staff are exposed to the SMC for 6-months, they will self-report using NPIs as an initial approach to managing residents’ behavioral disturbances, when appropriate, as opposed to PIs, in 76 - 99% of cases.

2. After nursing staff are exposed to the SMC for 12-months, they will self-report using NPIs as an initial approach to managing residents’ behavioral disturbances, when appropriate, as opposed to PIs, in 100% of cases.

3. After nursing staff are exposed to the SMC for 6-months, State/CMS (2015b) surveys of PIs used will be 10% below the national benchmark.
**Knowledge Goals**

1. After nursing staff complete a series of educational sessions about why and how to use NPIs, they will score greater or equal to 90% on a post-test.

2. After being exposed to the campaign for 6 months, nurses will self-report that their use of NPIs is effective in managing residents’ behavioral disturbances in 51-75% of cases.

3. After being exposed to the campaign for 12 months, nurses will self-report that their use of NPIs is effective in managing residents’ behavioral disturbances in 76-100% of cases.

4. After nursing staff are exposed to the SMC for 6-months, State/CMS (2015b) surveys reflecting occurrences of residents’ behavioral disturbances will be 10% below national benchmark.

**Belief Goals**

1. After nursing staff complete a series of educational sessions about why it remains more ethical to use NPIs versus PIs to manage residents’ behavioral disturbances in appropriate situations, nurses will score 100% on a related post-test question.

   Step 4 of the SMP applies to Step six of Kotter’s (2012) change process: generating short-term successes. Over the initial six-months of the SMC, the aim is to generate a significant, positive cultural change at the LTC facility, which will facilitate achieving the long-term 12-month behavioral goal. This step involves managers embracing new measures to develop a consistent and regular routine to help stimulate nurses’ behavioral changes (Melanie, 2013). Realization of the desired change will
significantly rely on the motivation of the LTC nurses to support and embrace the proposed behavioral changes. As such, nurses need to be rewarded for achieving the short-term behavioral goal.

**STEP 5: Identify Target Audience Barriers, Benefits, and Motivators; the Competition; and Influential Others**

*Barriers.* My list of barriers is as follows:

- Although staffing at the targeted LTC facility is generally good, busy nurses tend to believe they are overworked and underpaid. Asking them to learn about and use complex new interventions may be perceived by the nurses as being too difficult.
- Behavioral disturbances among residents can be extremely disruptive towards the staff, and PIs may be viewed as the simplest and most reliable option.
- Training in the use of NPIs will require additional working hours.
- Competence in using NPIs grows with effort and frequent practice. Nurses may not be motivated to devote the time to developing their competence in using NPIs.
- Nurses may perceive that the time spent administering NPIs does not leave them enough time to complete their other required tasks.
- Nurses may not want prolonged personal contact with patients.
- Nurses may initially doubt the efficacy of NPIs when compared to PIs.
- Nurses may feel threatened and unsafe when residents behave disruptively, leading towards PIs as the quickest resort.
Benefits. The key benefits my target audience wants in exchange for performing the behavior are as follows:

- NPIs represent a chance for nurses, without a physician or nurse practitioner’s order, to choose and implement treatments they know to be effective, providing more autonomy that remains professional.
- Nurses want to feel proud about delivering the most ethical intervention.
- NPIs remain an excellent way to have meaningful personal contact with patients.
- If residents’ behavioral disturbances stay reduced more safely with the use of NPIs over time, nurses will have improved job satisfaction.

Motivators. The following points represent what my target audience will say to make it more likely that they would do the behavior:

- Nurses at LTC facilities want to see scientific evidence for the efficacy of NPIs.
- Nurses would like to hear about the practical implementation techniques of NPIs from other nurses with experience using those interventions.
- Nurses need to understand why the use of NPIs is a more ethical intervention than PIs in many situations.
- Nurses may be motivated by positive recognition from administrators, such as awards and celebrations.

Competition. The major competing alternatives behaviors includes the use of PIs whether antipsychotic or benzodiazepine drugs, for behavioral disturbances. The benefits seen by my audience associated with these behaviors is as follows:
• The use of PIs is viewed as less time consuming for nurses to use.

• The use of PIs is viewed as more convenient because this approach involves spending less time with the residents.

• The use of PIs is viewed as the nurses’ comfort zone in managing behavior disturbances among LTC residents.

The following points address costs my audience associates with these behaviors:

• Some PIs are only effective for short-term behavior disturbances treatment.

• Although not the focus of this campaign, if benzodiazepine drugs become used, they remain addictive and come with their own set of health risks for elderly persons.

• Nursing staff may feel like they are most concerned with having a good day, rather than providing the best quality care to residents. Uncomfortable guilt may result.

Influential others. Nurses in LTC facilities listen to physicians and other nurses, paying less direct attention to administrators, accreditors, and reimbursement sources. Nurses show some respect for peer-reviewed studies, but a number of nurses are not as open to evidence-based practice. They tend to rely on other nurses with extensive clinical experience and their own habits and traditions of practice.

The following points represent what I know about these midstream audiences currently say and do, regarding the desired behaviors:

• Cohen-Mansfield and Jensen (2008b) showed that physicians with greater knowledge about NPIs were more likely to apply such treatment in the process of patient care, thus possibly influencing nurses to do the same.
Cohen- Mansfield, Jansen et al. (2012) revealed the NPs had a more favorable attitude than other HCPs towards NPIs and were more likely to use these interventions to help LTC residents with behavioral disturbances.

Step 5 of the SMP correlates with Step five of Kotter’s (2012) change process: enable action by removing obstacles. This step involves gaining administrators’ willingness to remove obstacles hindering changes in the nurses’ practice. For example, Kotter (2012) proposed that administrators should ensure that healthcare institutions are neither understaffed nor staffed with unskilled and inexperienced nurses. Obstacles to change, such as unfavorable organizational structures and individuals’ resistance to the change can hinder a successful change process. Removing these obstacles empowers the nursing staff to be responsible for executing the vision. In addition, identifying any nursing staff opposing the change, while reiterating its benefits and consequences, is imperative. In reward, the nursing staff should be recognized for their willingness to participate in the change. Motivating nurses for organizational change will develop a new ‘army’ of healthcare professionals who promote and confirm the benefits of NPIs.

**STEP 6: Develop a Positioning Statement**

*Positioning statement.* I want RNs and LPNs working in one LTC facility in St. Tammany Parish, Los Angeles to see that using NPIs represents a safer, more autonomous, and ethical way to treat behavioral disturbances among LTC residents, rather than treating these disturbances with unsafe PIs. Step six of the SMP satisfies the requirements of Step three of Kotter’s (2012) change process: create a vision and Step four of Kotter’s (2012) process: disseminate the vision. These two steps involve the development of a vision steering the changes. The vision for the proposed change is that
LTC nurses will first consider the use of NPIs as opposed to PIs in the management of behavioral disturbances in LTC residents. An important part of this step is ensuring that the vision is shared and communicated among all LTC staff to ensure that the vision plays a central role in driving the change (Kotter International, 2015).

STEP 7: Develop Marketing Strategies

Product: Creating the product platform.

Core Product

The major perceived benefits for the target audience is providing safer, more ethical care to residents. NPIs represent a chance for nurses, without a physician or nurse practitioner’s order, to choose and implement treatments they know to be safe and effective. This will result in improved job satisfaction among nurses if residents’ behavioral disturbances are reduced more safely over time with the use of NPIs.

Actual Product

This social marketing plan does not offer tangible goods or services to the target audience.

Augmented Product

The target audience will receive professional education about evidence-based practices, particularly relevant to the aims of this plan. The audience also will engage in structured reflections about the ethics of choosing NPIs rather than PIs. Finally, the audience will receive training in the implementation of NPIs. A detailed program outline was provided to the LTC facility administrators for implementing the SMC.
Price: Fees and Monetary and Nonmonetary Incentives and Disincentives. The target audience will not receive any tangible goods or services during this campaign. The following points demonstrate monetary incentives for this campaign:

- Nurses who learn to use NPIs effectively will obtain valuable career skills that will improve their professional marketability.
- The LTC facility will gain public recognition for improving the quality of care for its residents resulting in an increased demand for admissions by new residents and their families. This may result in increased salaries for nursing staff.
- Training in the use of NPIs will require time expenditures from the nurses. The wages paid during this time will be covered by the LTC facility.

The following points demonstrate monetary disincentives I highlight:

- If nurses use PIIs as a first choice rather than NPIs, this might be reflected in their annual performance evaluations and, consequently, salary adjustments.
- If the facility receives negative accreditation surveys and reimbursement deficits, nurses’ jobs will be impacted.

The following points depict nonmonetary incentives for this campaign:

- Nurses will experience improved job satisfaction due to the ethical nature of their approach to care.
- For achieving campaign goals, nurses may receive recognition and non-monetary awards from facility administrators.

The following points describe nonmonetary disincentives:
• Nurses who do not make the change will not receive recognition during staff meetings and campaign celebrations.

• Different units in the LTC facility might be singled out for negative as well as positive recognition.

*Develop the place strategy.* This section includes the place strategy. The target audience will be encouraged and supported to use NPIs as alternatives to PIs at their workplace, which is a LTC facility in Los Angeles. Nurses will be encouraged to do this on a daily basis. This social marketing plan does not include any tangible goods for the target audience.

It is suggested that facility administrators hold an initial celebration to kick off the campaign. Physicians and NPs, who work at the facility, need to be invited and encouraged to attend this event. Initial information will be distributed at this celebration. After the initial campaign kick-off, workshops will be held to teach nurses about evidenced-based practice, the ethics of using NPIs versus PIs, and how to use NPIs effectively. The kick-off celebration and teaching sessions will take place in the LTC facility education room. Finally, this social marketing plan does not include any groups or individuals to be targeted in the distribution channel.

*Promotion: Decide on messages, messengers, creative strategies, and communication channels.* The following points demonstrate the key messages in my campaign that I used to target my audience:

• Anti-psychotic drugs are conclusively linked with negative health outcomes, including stroke, heart failure, and premature death when administered to elderly people for off-label purposes.
In the range of recent studies, several NPIs have been demonstrated to be efficacious in managing behavioral disturbances among elders. These treatments remain effective in the short- and long-term and endure as completely safe.

The use of NPIs endures as an ethical way to provide care and improve residents’ life satisfaction and nurses’ job satisfaction through increased nurse autonomy, patient autonomy, improved health outcomes, and improved nurse-resident relationships.

This LTC facility can become a state and national leader in these effective alternatives to anti-psychotic drugs.

Administrators at the LTC facility will deliver the messages and serve as the sponsor of the SMC. A DNP student will help facilitate the campaign.

Furthermore, an acronym, *CREATE*, will be used as the tag line for the campaign.

- **C- all** resident by preferred name.
- **R- eason** identification for behavior disturbance.
- **E- vacuate** from increased environmental stimuli.
- **A- void** medications as the first resort.
- **T- reat** the resident with a non-pharmacological intervention.
- **E- xhibit** a caring, calming presence.

The acronym will be connected with the words “culture of safety” (i.e., “*CREATE* a Culture of Safety” in SMC language). The following points depict where this message will show:
CREATE will be placed as the screen saver on all computers used by nursing staff.

- Posters with the full acronym will be placed in the facility in areas where nurses will see it frequently.
- One or more banners with the acronym can be created to use during the kick-off and other mid- and end-of-campaign celebrations and meetings, such as the NPI education sessions.

**STEP 8: Develop a Plan for Monitoring and Evaluation**

The primary reason for monitoring and evaluating the campaign is to know whether the campaign is successful. The purpose of evaluation is to track the degree to which the off-label use of PIs is reduced over time at the LTC facility and to track the degree to which NPIs are adopted as alternatives.

The evaluation will be conducted for use by LTC facility administrators. LTC facility administrators will gather data, and the target audience of nurses see the results of the evaluation at the end of each evaluation period (i.e., at 6 months and 12 months after the campaign begins).

**Measurements.** The following points depict inputs, outputs, and impact measurements:

1. Percentage of time that LTC nurses use NPIs as a first choice, when appropriate, rather than PIs to manage residents’ behavioral disturbances (76-99% at 6 months, 100% at 12 months).

2. The effectiveness of NPIs in managing residents’ behavioral disturbances (51-75% at 6 months; greater or equal to 76% at 12 months).
3. LTC nurses’ knowledge about why and how to use NPIs effectively (90%).

4. LTC nurses’ belief that the continued use of PIs to treat residents’ behavioral disturbances is fundamentally unethical when there are safe alternatives (100%).

5. National benchmark data regarding the facility’s use of PIs (10% below the benchmark).

6. National benchmark data regarding the frequency of behavioral disturbances exhibited by residents at the facility (10% below the benchmark).

The following points demonstrate the techniques and methodologies that I will use to conduct each of these measurements:

1. Nursing staff will respond to a self-report survey regarding the percentage of time they used NPIs as an initial approach to managing residents’ behavioral disturbances, when appropriate, as opposed to PIs.

2. Nursing staff will respond to a self-report survey regarding the percentage of time NPIs were effective in managing residents’ behavioral disturbances when the NPIs were used as an initial approach.

3. Nursing staff will complete a pre-test and post-test about the dangers of PIs, the correct use and effectiveness of NPIs, and the ethical support for using NPIs.

4. State/CMS (2015b) survey data reports will be used to evaluate the facility against the national benchmark for use of PIs and residents’ behavioral disturbances.

The following points demonstrate when I will take the measurements:
• The self-report measurements will be taken at 6-months and 12-months after the full campaign begins (i.e., after all nurses have been fully oriented to the use of NPIs).

• The post-test will be given after all educational sessions are completed (See Appendix G).

• The first State/CMS (2015b) survey report showing data for the period at least 6-months after the full campaign began will be evaluated for the facility’s benchmark data. These survey reports are and will be closely evaluated on an ongoing basis.

Cost. The cost of collecting this information will be negligible.

Consolidate change. Step 8 coincides with Step seven of Kotter’s (2012) change process: consolidate change. Monitoring the degree to which the SMC is successful will allow administrators to sustain the acceleration of change by carefully tracking if the plan is working, and if not, why not. This step involves consistently evaluating the routines to ensure that they are effective and efficient (Laura, Laraine, Marie & Walter, 2007).

Change leaders will utilize short-term successes to accelerate the process by building on the things that went right and identifying those that need improvement (Kotter, 2012). The use of increasing credibility helps to change policies, structures, and systems that remain not in line with the vision. In addition, to consolidate the change in behavior towards LTC nurses using NPIs, weaknesses, such as a need for further training for the nurses, and challenges, such as embracing the proposed change, will be progressively identified and addressed.
Change process: Step eight also coincides with the final step, Step eight of Kotter’s (2012) change process: institutionalize the new approaches. By setting realistic budgets and acquiring funds, administrators can begin the process of actually changing the culture of a single LTC facility, and later disseminate the information to other LTC administrators. Consequently, a leadership development succession plan can be developed to ensure the new behaviors are precisely implemented permanently and successfully. Thus, the administrators should implement Kotter’s (2012) 8-step process for leading change again until satisfactory, effective, and efficient changes are achieved (Melanie, 2013). Change leaders must incorporate the core values of the change vision into the organizational culture to make a lasting change. The change should remain visible in every aspect of the organization. Leaders need to develop channels that facilitate leadership development and succession to achieve this objective (Kotter, 2012).

STEP 9: Establish Budgets and Find Funding Sources

The biggest cost associated with the SMC is the augmented product cost of paying nurses for time involved with NPI educational sessions. Furthermore, this SMC has no identifiable costs for price-related strategies. This SMC has no identifiable costs for place-related strategies. Costs include the printing of banners, posters, and educational materials. Evaluation-related costs involve administrative and staff time and printing costs of surveys. Finally, the burden of costs is the responsibility of the LTC facility. However, it is believed that the potential benefits of a successful campaign far outweigh the minor costs to the facility in staff time and printing. The reimbursement stakes remain high related to the focus of this campaign.
**STEP 10: Complete an Implementation Plan**

Table 1 depicts the sample implementation that I will use for this campaign.

Table 1

**Sample Implementation Plan**

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet with LTC facility administrators to explain campaign</td>
<td>DNP Student</td>
<td>February/March 2016</td>
</tr>
<tr>
<td>Determine Start Date</td>
<td>Nursing Director/DNP Student</td>
<td>March 2016</td>
</tr>
<tr>
<td>Purchase Materials</td>
<td>LTC Administration</td>
<td>March 2016</td>
</tr>
<tr>
<td>Kick-off Celebration</td>
<td>LTC Administration/DNP Student</td>
<td>April 2016</td>
</tr>
<tr>
<td>Advertise the Campaign (Place Posters on Walls, Flyer handout, Screen Savers on Computers)</td>
<td>Nursing Director/Marketing Staff</td>
<td>April 2016</td>
</tr>
<tr>
<td>Administer Pre Test in regard to NPIs</td>
<td>Education Nurse/DNP Student</td>
<td>April 2016</td>
</tr>
<tr>
<td>Conduct educational sessions for NPI use with all nurses at the facility, Outline Provided: Sensory Interventions Psychological Therapies (See Appendix E)</td>
<td>Education Nurse /DNP Student</td>
<td>April 2016</td>
</tr>
<tr>
<td>Conduct educational sessions for NPI use with all nurses at the facility, Outline Provided: Active Therapy/Structured Activities Environmental Therapies (See Appendix E)</td>
<td>Educational Nurse/DNP Student</td>
<td>May 2016</td>
</tr>
<tr>
<td>Conduct educational sessions for NPI use with all nurses at the facility, Outline Provided: Complementary or Alternative Medicine Therapies Delivery of Care Patient Education (See Appendix E)</td>
<td>Education Nurse/DNP Student</td>
<td>May 2016</td>
</tr>
<tr>
<td>Administer Post Test</td>
<td>Education Nurse/DNP Student</td>
<td>May 2016</td>
</tr>
<tr>
<td>Provide Additional Education Sessions, if needed</td>
<td>Education Nurse/DNP Student</td>
<td>May 2016</td>
</tr>
</tbody>
</table>
Table 1 (continued).

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officially begin campaign</td>
<td>LTC Administrators/ Education Nurse/DNP Student</td>
<td>June 2016</td>
</tr>
<tr>
<td>Informal 3 Month Follow Up Discussions with Nursing Staff</td>
<td>DNP Student/Nursing Director</td>
<td>September 2016</td>
</tr>
<tr>
<td>6 Month Evaluation</td>
<td>DNP Student</td>
<td>December 2016</td>
</tr>
<tr>
<td>12 Month Evaluation</td>
<td>DNP Student</td>
<td>June 2017</td>
</tr>
<tr>
<td>Report Survey Progress to CMS</td>
<td>Supervisor</td>
<td>December 2016/June 2017</td>
</tr>
<tr>
<td>Conduct educational sessions for NPI use with all nurses at the facility, Outline Provided: Complementary or Alternative Medicine Therapies Delivery of Care Patient Education (See Appendix E)</td>
<td>Educational Nurse/DNP Student</td>
<td>May 2016</td>
</tr>
<tr>
<td>Administer Post Test Conduct educational sessions for NPI use with all nurses at the facility, Outline Provided: Complementary or Alternative Medicine Therapies Delivery of Care Patient Education (See Appendix E)</td>
<td>Education Nurse/DNP Student Educational Nurse/DNP Student</td>
<td>May 2016</td>
</tr>
<tr>
<td>Provide Additional Education Sessions, if needed</td>
<td>Education Nurse/DNP Student</td>
<td>May 2016</td>
</tr>
<tr>
<td>Administer Post Test</td>
<td>Education Nurse/DNP Student</td>
<td>May 2016</td>
</tr>
</tbody>
</table>

Ethics

This quality improvement project does not involve human subjects for the research. All recommended NPIs in the campaign stand as safe, evidence-based, and have clear implementation guidelines in an effort to maintain the quality and safety of the project. An Institutional Review Board (IRB) exemption letter was obtained for the project (see Appendix C). A survey questionnaire was developed to distribute to the LTC
administration on their feedback in regards the implementation of the SMC and from the presentation implemented by the DNP student (see Appendix F). Data collected for measuring the success of the SMC will be managed and maintained by LTC administrators in accordance with their usual quality improvement project practices.

Project Evaluation

This project was evaluated by capstone committee members prior to the final defense. LTC administrators’ satisfaction with the social marketing plan was measured via survey. The LTC administration agreed to implement the plan as a campaign, which represents another evaluation element for the project.

Assumptions

This capstone project was predicated on the assumption that nursing staff are at risk of using PIs as their first choice to treat LTC residents with behavioral disturbances. I assumed the nursing staff and nursing administrators want to implement the recommended best practice guidelines at the LTC facility for improvement of the overall well-being of the LTC residents.

Resource Requirements

Resources utilized were found at The University of Southern Mississippi, Cook Library, the Internet, and books.

Doctor of Nursing Practice Essentials

The Doctor of Nursing Practice (DNP) degree represents an advanced degree designed around rigorous standards and the latest research into medical education. This report summarizes the eight essentials of the DNP education process as outlined by the
American Association of College of Nursing (AACN, 2006), and applies each of them to the capstone project.

**DNP Essential One: Scientific Underpinnings for Practice**

The first DNP essential represents the *scientific underpinnings*, which emphasizes the importance of a strong background in, and a firm grasp of, essential scientific concepts, facts, and relationships (American Association of Colleges of Nursing [AACN], 2006). Advanced practice nurses (APNs) must translate scientific truths into their practice at every step, and should work to help the public understand the importance of research findings and new data. This capstone project, focusing on NPIs, emulates this essential theme by using evidence-based research to inform the problem statement, methodology, and the analysis of results. Additionally, the capstone project focused on the implementation of AHRQ (2014) recommended NPIs for behavioral disturbances.

**DNP Essential II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking**

The second DNP essential is *organizational and systems leadership*, which requires APNs not only to treat individual patients, but also to work toward broader health improvements of entire populations and communities (AACN, 2006). APNs with the DNP educated nurses must act as community leaders in the realm of healthcare practice and must consider the complexities of political, economic, cultural, and organizational perspectives, as they work toward improved health outcomes. The capstone project remains heavily influenced by this essential theme, as it considers factors, such as cost, benefit to the LTC residents, prevention, and benefits to the healthcare environment, as it explores the efficacy of NPIs.
DNP Essentials III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice

The third DNP essential is *clinical scholarship and analytical methods* and addresses the value of traditional fact-finding research, but also the value of synthesizing, connecting, and utilizing new facts to justify and articulate innovative paradigms (AACN, 2006). Furthermore, the application of research to nursing practice represents the highest traditions of scholarly leadership. This capstone project not only utilizes data collected through research, it also seeks to reframe that data in ways that will endure as beneficial to patients, LTC residents, health-care professionals, and the nation as a whole. Incorporating Kotter’s (2012) 8-Step Change Model as the theoretical framework facilitates implementing the steps to change.

DNP Essentials IV: Information Systems or Technology and Patient Care Technology for the Improvement and Transformation of Health Care

The fourth DNP essential is *information systems/technology* and focuses on the use of emerging technology including medical machinery, the Internet, and analytic software to better serve patient populations and conduct research and experiments (AACN, 2006). Aside from using simple forms of information technology to research the relevant issues, this capstone project aimed to develop a SMC that can be distributed to LTC facilities in order to determine the efficacy of NPIs, as well as determining nurses’ knowledge of these interventions. A literature review was completed to locate EBP research to change nurse’s behaviors toward making the most ethical intervention.
DNP Essentials V: Healthcare Policy for Advocacy in Healthcare

The fifth essential is *health care policy for advocacy* and emphasizes the need for a thorough understanding of national, state, and local health care policy for DNP graduates. Understanding the political and economic elements of modern healthcare remains of the utmost importance, since DNP nurses will likely play an active role in influencing it (AACN, 2006). This capstone project acknowledges this by describing the political and economic incentives at play in LTC facilities. The costs associated with PIs and the benefits associated with NPIs represent central factors that I studied in this project. The outcomes of the SMC may influence other LTC facilities to implement the recommended best practice guidelines.

DNP Essentials VI: Inter-professional Collaboration for Improving Patient and Population Health Outcomes

The sixth DNP essential is *interprofessional collaboration*, which consist of the result of recent shifts in attitude about the importance of cooperation between different segments of the professional health care population (AACN, 2006). DNP nurses remain at the forefront of this movement, and must work closely with a wide variety of team members to foster an atmosphere of collaboration and patient-centeredness. This capstone project fosters collaboration by inviting research and expertise on NPIs into the mainstream of LTC facilities. Using information from a wide variety of disciplines, the project seeks a collaborative effort between physicians, nurses, providers, and payers to investigate and possibly acknowledge the effectiveness of NPIs.
DNP Essentials VII: Clinical Prevention and Population Health for Improving the Nation’s Health

The seventh DNP essential is *clinical prevention and population health*, which reflects recent research, indicating that prevention represents the most cost-effective area in which to invest and promote health in various populations (AACN, 2006). This capstone project acknowledges the importance of population-based studies because it clearly defines the populations that it seeks to address (nurses who provide care to LTC residents in an effort to improve care for the population of LTC residents). It also embraces the wisdom of prevention by supporting NPIs, which have been hypothesized to be superior to PIs in their ability to reduce overall behavioral disturbances by treating the *cause* of the disturbance rather than its particular manifestation. This project was based on the assumption that integrating EBP into the LTC facility will effectively decrease behavioral disturbances among the elderly.

DNP Essentials VIII: Advanced Nursing Practice

The eighth DNP essential is ‘advanced nursing practice,’ which refers to the need for specialization among APNs in the modern healthcare environment. With the size and complexity of the U.S. healthcare system comes increased demand for specialists across the spectrum of healthcare research and practice (AACN, 2006). APNs must be prepared to accept the difficult challenge of embarking on a career in one specific field of health care. This capstone project reflects this essential by supporting the DNP students’ expertise in psychiatric-mental health nursing at the advanced practice level. By applying a narrow research focus to this specialization area, real improvements and contributions to this increasingly important field can be achieved. Additionally, implementing NPIs
could lead to decreased behavioral disturbances among the elderly while educating the staff.
III. RESULTS

The purpose of this capstone project was to develop a social marketing plan that can be implemented to decrease LTC nurses use of unnecessary PIs to address residents’ behavioral disturbances and to increase their use of NPIs. When the use of antipsychotic drugs declines, the use of NPIs should increase since these interventions are shown to be highly effective. The SMC was presented to the administrators at one LTC facility in St. Tammany Parish, Los Angeles to determine their willingness to implement the plan.

The discussion in this section focuses on determining the evaluation of LTC Administrator and the Director of Nursing (DON) on the implementation of a social marketing plan to decrease long term care nurses’ use of unnecessary PIs to address residents’ behavioral disturbances. The evaluation is based on their responses on the presentation evaluation administrators’ survey form (See Appendix F). Both the LTC Administrator and the Director of Nursing (DON) have high praise and highly accepted the quality of content, factors for the implementation of NPIs (proposed), benefits of the use of NPIs, and ease of understanding of the social marketing plan.

In terms of the quality of content, both the LTC Administrator and the Director of Nursing (DON) strongly agreed to the following statements:

- The content provided information that can be used to address behavioral disturbances in a LTC facility.
- The content was innovative.
- The social marketing plan presented is a viable method to decrease nurses’ use of unnecessary PIs to address residents’ behavioral disturbances.
• The content supported the use of the NPIs to deal with behavioral disturbances.

In terms of the factors for the implementation of NPIs (proposed), both the LTC Administrator and the Director of Nursing (DON) strongly agreed to the following statements:

• NPIs are a safer way (vs. PIs) to address behavioral disturbances in LTC facilities.
• NPIs are effective in dealing with behavioral disturbances in LTC facilities.
• Information on the proper implementation of NPI techniques was discussed during the presentation.
• The LTC facility is well-staffed so nurses will have time to do the NPIs.
• The LTC facility is staffed with caring nurses who are willing to accept change to provide the best overall care for the LTC residents.
• The administrators are willing to implement the social marketing campaign because we believe in the value of the campaign.
• The nursing service administrators at the LTC facility are able to commit resources and have thus agreed to implement the proposed social marketing plan as a campaign.

In terms of the benefits of the use of NPIs, both the LTC Administrator and the Director of Nursing (DON) strongly agreed to the following statements:
• Use of NPIs will result in increased job satisfaction through increased nurse autonomy.

• Use of NPIs will result in increased job satisfaction for nurses by safely reducing behavioral disturbances.

• Use of NPIs will result in improved nurse-patient interactions.

• Application of NPI techniques to address behavioral disturbances will result in increased overall satisfaction for both nurses and patients.

• Use of NPIs will result in improving the overall quality of resident care in the LTC.

In terms of the ease of understanding of the social marketing plan, both the LTC Administrator and the Director of Nursing (DON) strongly agreed to the following statements:

• The medium used was appropriate for the presentation.

• There was smooth transition between ideas.

• The data presented was concise but provided sufficient information.

• There were enough visual aids in the presentation (Charts, graphs, figures, etc.) to enhance understanding.

• The speaker displayed sufficient knowledge about the topic.

• The speaker had suitable responses to questions.

Some specific comments of the LTC Administrator and the Director of Nursing (DON) on the implementation of a social marketing plan used to decrease long term care nurses’ use of unnecessary PIs and to address residents’ behavioral disturbances are that
nursing staff will soon implement the use of NPIs and in the participation in the program, the proposed program will be beneficial to their respective facility, and the use of NPIs to reduce antipsychotic medication is a great idea in order to produce a high success treatment rate. They provided encouragement to continue to build different NPIs.

The survey results come from a 90-minute meeting with two administrators at the LTC facility, during the month of February/March, 2016. These administrators included the LTC Administrator and the Director of Nursing (DON). The results of the meeting with the nursing service administrators at the LTC facility, with the presentation about the social marketing plan, and its implementation as a campaign, resulted to 100% participants satisfied with their knowledge about how to successfully develop and implement a SMC to change staff behaviors for the better. In the meeting, they showed enthusiasm for the implementation of the social marketing plan, and some recognition of the dangers of anti-psychotic drugs. By answering “Strongly Agree” to the survey question, the nursing service administrators at the LTC facility have agreed to implement the proposed social marketing plan as a campaign. Some questions regarding the time and costs that would be consumed during the course of the suggested SMC were asked and answered, as outlined in Table I “Sample Implementation Plan,” which provides data on the timeline and cost of the campaign. Specifically, the administrators were concerned with how nurses’ shifts and hours would be affected by training and implementing NPIs more frequently.

The LTC facility administrators remain motivated to improve the quality of care at their facility and made a suggestion to publicly announce the campaign in the local media and online to help promote this facility as a progressive leader in compassionate
and evidence-based care. They were enthusiastic about the potential increase in residents who might seek admission because of positive media attention and mentioned an ongoing plan to expand the facility with the addition of more rooms in the near future. The main goal of the SMC involved nurses in the LTC facility maintaining a reduction in the use of anti-psychotic drugs to manage residents’ behavioral disturbances and decreasing the level of behavioral disturbances that occur among LTC residents.

The LTC administrator was cautious about the idea of increasing staffing in the facility to give nurses more time with patients, although the DON was enthusiastic about this proposition. However, the two administrators shared useful ideas about alternative methods for decreasing nurses’ workloads and giving them more time with patients. These ideas included reorganization of the room assignments to a more permanent system, in which nurses are assigned to patients rather than rooms; the implementation of electronic charting on mobile devices to help nurses complete their charting work, while still present in a resident’s room; and educating staff during their assigned shift, which would limit overtime costs. This would be identified as a challenge of this project, while accounting for the various costs associated with change in the development of a detailed social marketing plan for implementation. Additional nurse training on NPIs will take time; however, the LTC administrators discussed educating staff during their assigned shift, which would limit overtime costs. Other challenges, included narrowing down the topic of this capstone project that could be implemented, finding a LTC facility with residents who display behavioral disturbances, and the ability to encourage willingness from administers for the implementation of this SMC.
IV. SUMMARY

Limitations

The biggest limitation of this project is that the project was not carried out so the success of the campaign was not actually measured. Even though there are expected outcomes and objectives already existing that could be used to determine the campaign’s success, it was still important to carry out the project before success is determined. Another limitation was my own lack of familiarity with developing an SMC. The fact that I have never attempted to change behaviors concerning any form of social marketing, and I had to educate myself while developing the marketing campaign, remained a challenge during this project. Finally, I was not equipped to calculate the costs of paying nurses for the time they will devote to attending education sessions to learn about NPIs. This cost calculation was left to administrators to do when they decide how much time to allocate to the education sessions.

Implications for DNP Practice

This quality improvement plan had important implications for DNP practice. This project, once implemented, will be able to determine that the social marketing plan used to decrease long term care nurses’ use of unnecessary PIs to address residents’ behavioral disturbances will be beneficial to the treatment facilities. This project, once implemented, will be able to determine whether staff are successfully using NPIs as an alternative to PIs in treating residents’ behavior. RNs and LPNs in LTC facilities are responsible for providing the necessary treatment of the residents with behavior disturbances and often are instrumental in affecting whether or not PIs are ordered and used. The LTC Administrator and the Director of Nursing (DON) surveyed in this study will encourage
staff nurses to continue to build different NPIs into their healthcare interventions rather than using or asking for PIs as an initial treatment.

Most importantly, this plan required administrative guidance from nursing administrators and could not be implemented without the cooperation and enthusiasm of LTC administration staff. Scheduling of nursing staff must remain efficient to facilitate the campaign and must remain well organized by LTC administrative staff. A recent report on successful QI projects asserted that, “although QI studies focus primarily on solving problems in one’s own setting, they frequently lead to generalizable knowledge about new practices and systems of care” (Oermann, Turner, & Carman, 2014, p. 58).

This capstone project complements existing research that shows a dependence on PIs, as primary treatments for behavioral disturbances among the elderly population. DNP students and practitioners will represent the carriers of this important message, as they represent the highest levels of Advanced Practice nursing, and thus will influence policies at LTC facilities. Psychiatric mental health nurse practitioners (PMHNPs) are prescribers of treatment for behavior disturbances among residents in LTC. Thus, their practices can be critical in impacting the use of NPIs in the LTC facility. DNP programs equip advanced practitioners with skills to enable them to translate evidence into practice. DNP educated psychiatric mental health nurse practitioners can serve in key consultant roles within LTC facilities to improve practice, such as what has been done with this capstone project. Lastly, the DNP essentials are a guide to the implementation of the NPIs.
Implications for Research

This campaign and its results also have important implications for research. One research study on quality improvement sought to determine which organizational characteristics were associated with successful and lasting QI. The researcher concluded that organizational cultures and policies must shift at the highest level to ensure that a QI effort will make significant progress (Glasgow, 2013). This result was strongly supported by the results of this project. The LTC facility administrators were cautious about the increasing staffing in the facility in order to give nurses more time with patients; however, the options were raised to educate nursing staff during their assigned shifts, which would limit overtime costs. Future research must build on the work of analyzing organizational structures to find the exact aspects of a facility’s organizational context that must be addressed in order to inspire lasting change. The concept of the NPIs has to be taken seriously as it NPIs are more effective and enhances the efficacy of care as opposed to the PI s that have many side effects (Boutron, Ravaud, & Moher, 2011).

This campaign can contribute to research on the effectiveness of NPIs. The LTC facility that will implement a project such as this one can be examined among researchers. Interviewing or surveying nursing staff who have implemented the use of NPIs to determine how long the interventions work and which interventions work best with specific behavior disturbances is essential. It will also remain important to determine the effects, if any exist, on the frequency and severity of behavioral disturbances, once the use of PIs has measurably reduced. The use of NPIs in treating behavioral disturbances among LTC residents will represent an ongoing research project for the DNP prepared nurse. For example, do the nurses perceive the reduction in PI use as
burden or a positive change? The job satisfaction of the nurses at the LTC facility must be measured on an ongoing basis to determine how the quality improvement plan affected their stress-levels, time spent with residents, and overall satisfaction.

These results have important implications for DNP practice, research, and education. Concerning future implications, this research can lead to new evidence-based guidelines to increase the use of NPI’s, possibly being able to provide new researched based NPIs that can be utilized. The results can help construct more effective SMCs while justifying how NPIs can be used effectively to treat the target behavior (Greenwood, 2012).

Implications for Education

The results of this SMC provide a route to long-term improvement concerning behavioral disturbances, since the increased use of NPIs allows nurses to spend more time actively assisting their residents, which could provide a meaningful nurse-patient relationship. If these results are continued and shared with other LTC facilities in Los Angeles, this can provide evidence to support use of NPIs in other states.

The over-use of PIs demonstrates that a shift must occur in how nurses are educated and prepared for clinical practice. While this QI program attempts to address the problem at the facility-level, lasting change will require educational reform. This can be achieved by including instruction about black-box warnings in undergraduate nursing programs, particularly concerning the use of typical and atypical antipsychotic drugs in elderly populations and teaching the use of proper NPI use.
The quality improvement program has engaged LTC administrators by the prospect of positive publicity and increased revenues while nursing staff show a desire to spend more time with their patients and to decrease unnecessary use of medications.

Benefits

The SMC will be important to the nursing profession as the level of knowledge and experience of nursing staff have a significant impact on the success or failure of the use of PIs and NPIs in LTC facilities. This capstone project has raised the awareness of LTC nursing staff and administrators at one LTC facility about the dangers of PIs and the benefits of NPIs. Even though the LTC administrators were already aware of some NPIs, they were not utilizing all of the evidence-based NPIs, only limiting themselves to a few, such as exercise, music, and art therapy.

Increased knowledge on the use of the NPIs that results from the campaign will help ensure that the best procedures will be implementation by LTC nursing staff. When this happens, the efficacy of care will increase significantly so that the objectives of the project are achieved (Greenwood, 2012).

I learned a great deal about searching for and translating evidence-based strategies into practice while completed this project. I intend to disseminate key points of this project through my consulting role with LTC facilities, interactions with other advance practice nurses and physicians, and through formal presentations and publications. In 5 to 10 years, I see myself becoming an expert in evidence-based treatment of behavior disturbances among elders as well as in my leadership role as a consultant in this area of EBP.
Challenges

The challenges of this project were accounting for the various costs associated with change, while developing a detailed social marketing plan for implementation. Additional nurse training on NPIs will take time; however, the LTC administrators discussed educating staff during their assigned shift, which would limit costs.

Conclusions

Conclusive evidence remains available, demonstrating that both major classes of antipsychotic drugs, typical and atypical, are known to increase mortality in elderly persons, who take them for off-label uses related to dementia and or behavioral disturbances. While the federal government has issued black box warnings and has encouraged the healthcare practitioners to reduce the off-label use of these drugs among the elderly population, this capstone developed an SMC in a further effort to reduce the use of PIs use in one LTC facility. Simply seeking to reduce or discontinue an intervention remains insufficient without replacing it with an appropriate and effective intervention, since behavioral disturbances remain difficult for residents and staff, and must be treated in a safe manner. For this reason, the SMC was designed also to increase the use of patient-centered NPIs for the management of behavioral disturbances. NPIs remains safe, and several studies have demonstrated the efficacy of select NPIs. The replacement of PIs with NPIs in LTC facilities will benefit residents’ overall health and well-being.

The quality improvement program has engaged LTC administrators by employing the prospect of positive publicity and increased revenues, while nursing staff show a desire to spend more time with their patients and to decrease unnecessary use of
medications. Both the LTC Administrator and the Director of Nursing (DON) surveyed for this study have high praise and highly accepted the quality of content, factors for the implementation of NPIs (proposed), benefits of the use of NPIs, and ease of understanding of the social marketing plan to decrease long term care nurses’ use of unnecessary PIs to address residents’ behavioral disturbances. They shared that the program was beneficial to their respective facilities. They encourage continuing in building different NPIs. These results have important implications for DNP practice, research, and education. Concerning future implications, this research can lead to new evidence-based guidelines to increase the use of NPI’s, possibly being able to provide new researched based NPIs that can be utilized. The results can be used to construct effective SMCs while justifying how NPIs can effectively treat the target behavior.
APPENDIXES
## APPENDIX A

### LITERATURE REVIEW TABLE

Risks of Pharmacological Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>McHenry, 2006.</td>
<td>2006</td>
<td>The systematic review</td>
<td>N/A</td>
<td>A total of 53 abstracts and titles were reviewed. 37 of these studies are directly used to compile this review.</td>
<td>The integrity of medicine is endangered by a branch that receives money from ailment, distorts the process of scientific inquiry by marketing strategy, public relations campaigns, and has great authority. Manufacturers increase the market for these medicines, inventing non-existent forms of the disease, and then attract people to SSRI therapy, showing customers a well-planned advertising to prevent their distrust of the drug.</td>
</tr>
<tr>
<td>Gibson &amp; Ferrinni, 2012</td>
<td>2012</td>
<td>A meta-analysis</td>
<td>A description of how to identify patients with personality disorders, drawing up strategies and plans of care, illustrative example for explaining how certain types of regulation of behavior can be used in practice.</td>
<td>A total reviewed 57 articles.</td>
<td>If the patient's behavior is difficult, it is very useful on practice to test the ailing for personality disorder to assign the appropriate treatment accurately.</td>
</tr>
<tr>
<td>Tschoner, Engl, Laimer, Kaser, Rettenbacher, Fleischenhacker, Patsch, &amp; Ebenbichler, 2007</td>
<td>2007</td>
<td>A systematic review</td>
<td>Explanation of the causes of weight gain in patients who use antipsychotic drugs, therapies to combat this disease, statistical data about body weight of patients taking antipsychotics and results of manipulations for weight loss.</td>
<td>The information was combined by searching MEDLINE. 113 sources were reviewed.</td>
<td>The increase of body weight is a very common adverse reaction to the antipsychotic medicines. Therefore, the treatment of patients with mental health problems should include diet, physical exercises, and medicaments for weight loss.</td>
</tr>
<tr>
<td>Citation</td>
<td>Year</td>
<td>Design</td>
<td>Framework</td>
<td>Sample</td>
<td>Findings/Significance</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
<td>------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tan, Wang, Wang, Tan, Tan, Meng, Wang, &amp; Yu, 2015</td>
<td>2015</td>
<td>The systematic review and meta-analysis.</td>
<td>Have been conducted 23 relevant RCTs, data about the reception result of various substances for the treatment of neuropsychiatric disorders.</td>
<td>For the creation of this work was used the information from the PubMed, EMBASE, the Cochrane Controlled Trials. A total reviewed 38 studies.</td>
<td>Great advances in the treatment of psychiatric symptoms and cognitive functions were observed, applying aripiprazole and risperidone after tests, which are combined in the statistics.</td>
</tr>
<tr>
<td>Perkins, 2012</td>
<td>2012</td>
<td>A systematic review</td>
<td>Description of behavioral reactions of patients that pose a threat before and after use of antipsychotics, randomized research results.</td>
<td>The data used in the review were obtained from the 63 sources.</td>
<td>It is necessary to identify the exact cause of the symptoms of dementia and it may help to choose the optimal treatment options. Antipsychotics are appropriate in the treatment of only those patients who pose a threat to themselves or others.</td>
</tr>
<tr>
<td>Huybrechts, Gerhard, Crystal, Olsson, Avorn, Levin, Lucas, &amp; Schneeweiss, 2012</td>
<td>2012</td>
<td>A cohort study</td>
<td>Monitoring the response to a variety of antipsychotic drugs in patients in nursing homes, the identification of dangerous methods of treatment.</td>
<td>It was used 45 sources. The used data were taken in Medicaid, Medicare, the Minimum Data Set, and the National Death Index.</td>
<td>Antipsychotic drugs cannot be used without an absolute necessity, because the risk of death in the use of these drugs is much higher, and only increases with higher doses. Haloperidol is the most dangerous antipsychotic medication and least dangerous - quetiapine.</td>
</tr>
<tr>
<td>Walters, 2009</td>
<td>2009</td>
<td>A cohort study</td>
<td>Descriptions of situations in which is beneficial the use of the Cox model, the method of data analysis and method for predicting the best treatment for patients.</td>
<td>It has been used 5 sources.</td>
<td>Cox model includes a statistical analysis of the impact of drugs on the survivors, who were threatened with death. It predicts further reaction to medication and helps to choose the best drugs for patient.</td>
</tr>
<tr>
<td>Lonergan, Luxenberg, Colford, &amp; Birks, 2012</td>
<td>2012</td>
<td>A review</td>
<td>Information on the use of haloperidol by patients with dementia was collected and analyzing with the help of statistical methods.</td>
<td>3 sources found with ALOIS were used.</td>
<td>Haloperidol is a useful medication to deal with aggression. The purpose of this drug for patients with dementia should be individualized. Haloperidol should not be used regularly because there may be an adverse effect.</td>
</tr>
<tr>
<td>Seitz, Gill, Hermann, Brisbin, Rapoport, Rines, Wilson, LeClair, &amp; Conn, 2013</td>
<td>2013</td>
<td>A systematic review</td>
<td>Identification of medicinal treatments for NPS in LTC, the calculation of the effectiveness and safety of medicines for patients.</td>
<td>We used the data found using MEDLINE, EMBASE.</td>
<td>There are only few evidences to support the positive results of the use of neuroleptics. The little efficacy of</td>
</tr>
</tbody>
</table>
these drugs and their potential negative results of use show that it is important to create a safe and effective drug for patients with dementia.

### Non-Pharmacological Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohen-Mansfield, Jansen, Resnick, &amp; Norris, 2012a</td>
<td>2012a</td>
<td>A systematic review</td>
<td>A survey of doctors, psychologists, and nurses about their latest patient, data collection, and comparison.</td>
<td>84 sources have been viewed to write this review.</td>
<td>The data obtained in the survey results indicate that the treatment of patients by different specialists has varied evaluation and that the staff needs to interact with the treatment of patients with dementia.</td>
</tr>
<tr>
<td>Hshieh, Yue, Oh, Puelle, Dowal, Travison, T &amp; Inouye, 2015</td>
<td>2015</td>
<td>A meta-analysis</td>
<td>Two physician reviewers helped in the creation of this analysis, considering 14 interventional investigations.</td>
<td>This work was created with the help of 52 sources found on PubMed, Google Scholar, ScienceDirect, and the Cochrane Database.</td>
<td>Multi-component non-pharmacological treatments bring positive results in the treatment of patients, reducing the symptoms of delirium, which is a common disease with a high probability of death.</td>
</tr>
<tr>
<td>Cohen-Mansfield &amp; Jansen, 2008b</td>
<td>2008b</td>
<td>A systematic review</td>
<td>Data collection in six nursing homes, communicating with the staff, and the analysis of the information received.</td>
<td>68 sources found in PubMed been processed.</td>
<td>There are many barriers for non-drug treatment for patients with dementia. Knowing about these barriers contributes to avoiding such situations, and it helps to carry out non-pharmacological treatment more effective.</td>
</tr>
</tbody>
</table>
## Non-Pharmacological Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis, Tarrier, &amp; Drake, 2005</td>
<td>2005</td>
<td>A systematic review</td>
<td>Description of different methods of treating schizophrenia, an explanation of statistical studies.</td>
<td>24 sources were used for writing this review.</td>
<td>There are many different types of treatment for schizophrenia. It can be medicated and non-medicated. Much better effect can be achieved with medication treatment, because the result can be predicted, as opposed to treatment without pharmacological intervention.</td>
</tr>
<tr>
<td>Montgomery &amp; Dennis, 2004</td>
<td>2004</td>
<td>A systematic review</td>
<td>Description of condition of the patients with insomnia before and after drug-free treatment.</td>
<td>14 sources were used in writing this work.</td>
<td>Sleep problems are seen in many elderly people. Often, they are caused by side effects of medications that are taking by patients with insomnia. The study proved that bright light therapy and exercise contribute to a significant improvement of sleep.</td>
</tr>
<tr>
<td>O'Neil, Freeman, Christensen, Telerant, Addleman, &amp; Kansagara, 2011</td>
<td>2011</td>
<td>Systematic review of RCTs</td>
<td>NA</td>
<td>28 good quality systematic reviews</td>
<td>Several non-pharm approaches were effective compared to each other and drugs. Others were not effective.</td>
</tr>
<tr>
<td>Gitlin, Kales, Lyketos, &amp; Althouse, 2012</td>
<td>2012</td>
<td>Qualitative review</td>
<td>NA</td>
<td>Documented case of ‘Mr. A’</td>
<td>The symptoms that occur in the behavior of an ill patient are the most common cause of disability that makes them crucial. Unfortunately, most patients are not diagnosed accurately at the initial stage of the disease, due to which it deteriorates. The data suggest that non-pharmacological approach can significantly alter condition of the ill and bring the calm to nurses, rid of the symptoms of the disease and to make much better quality of life. But however, access to the non-pharmacological treatment is currently stopped but it could be one of the components of the future treatment.</td>
</tr>
</tbody>
</table>
### Non-Pharmacological Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livingston, Kelly, Lewis-Holmes, Baio, Morris, Patel, &amp; Katona, 2014</td>
<td>2014</td>
<td>The systemic review</td>
<td>NA</td>
<td>Examined 33 investigations related to the topic, assessed their factuality, objectivity and effectiveness. A systematic review of the treatment of agitation without drugs accommodates randomized controlled trials and 14 documents with evidence of the reliability of treatment for sensory interventions.</td>
<td>The quantity of ailing with dementia is growing every day. Although the main symptom of dementia is a mental retardation, it is a common symptom of anxiety. The sick patient with dementia is showing symptoms of the disease every month, given that 30% of ailing live at home. Most patients who are diagnosed with dementia continue to be concerned about 6 months. Agitation in this disease represents a bad quality of life. Since symptoms deliver a lot of devastation, the misery, and the quite high costs, the state pays financial assistance to caregivers of patients.</td>
</tr>
</tbody>
</table>
## Ethical Issues in Pharmacological Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esposito, 2005</td>
<td>2005</td>
<td>A systematic review</td>
<td>Review of ways to alter the brain and the effects of such interference.</td>
<td>10 sources were used in the work.</td>
<td>The effects of pharmacological improve mood and cognition are rather ambiguous. It can completely change the personality, delete some fragments of memory, be safe, but it could increase the intellectual capacity, performance, and stability of patient.</td>
</tr>
<tr>
<td>Douglas, James, &amp; Ballard, 2004</td>
<td>2004</td>
<td>The systematic review</td>
<td>NA</td>
<td>A total reviewed 59 articles and other sources.</td>
<td>The work (Bird et al, 2002) attracted attention to the theme about the most usual interventions for various symptoms of dementia are not necessarily special pills but just the work of nurses in the homes of the aged, and there is need to change their attitude to aged people for which they work. Treatments without drugs for dementia patients should be used first to avoid possible negative effects of medical methods. In addition, non-pharmacological therapy, help to preserve the individuality of the patient. But for this you need to know the range of interests, values of life, to develop a treatment plan.</td>
</tr>
<tr>
<td>Desai &amp; Grossberg, 2001</td>
<td>2001</td>
<td>A systematic review</td>
<td>Description of identification of psychological abnormalities in patients with dementia and treatments.</td>
<td>176 scientific papers were used.</td>
<td>Various reasons can lead to complex behavior of patients with dementia. It is necessary to identify the exact cause. A proper understanding of the behavioral syndromes in dementia can greatly increase the effectiveness of pharmacological intervention.</td>
</tr>
</tbody>
</table>
## Ethical Issues in Pharmacological Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>McHenry, 2006</td>
<td>2006</td>
<td>The systematic review.</td>
<td>N/A</td>
<td>A total of 53 abstracts and titles were reviewed. 37 of these studies are directly used to compile this review.</td>
<td>The integrity of medicine is endangered by a branch that receives money from ailment, distorts the process of scientific inquiry by marketing strategy, public relations campaigns, and has great authority. Manufacturers increase the market for these medicines, inventing non-existent forms of the disease, and then attract people to SSRI therapy, showing customers a well-planned advertising to prevent their distrust of the drug.</td>
</tr>
<tr>
<td>Bruckenthal &amp; D’Arcy, 2007</td>
<td>2007</td>
<td>A systematic review</td>
<td>Identify the situations in which the treatment of the disease cannot be carried out and the results demonstrate the reception of painkillers drugs.</td>
<td>Used 16 sources.</td>
<td>Often older people have chronic diseases and treatment cannot to be realized because the surgery at older age can be dangerous. Therefore, it is necessary to assess the causes of pain and to use painkillers.</td>
</tr>
<tr>
<td>Desai &amp; Grossberg, 2001</td>
<td>2001</td>
<td>A systematic review</td>
<td>Description of identification of psychological abnormalities in patients with dementia and treatments.</td>
<td>176 scientific papers were used.</td>
<td>Various reasons can lead to complex behavior of patients with dementia. It is necessary to identify the exact cause. A proper understanding of the behavioral syndromes in dementia can greatly increase the effectiveness of pharmacological intervention.</td>
</tr>
</tbody>
</table>
### Ethical Issues in Pharmacological Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gilbert &amp; Simon, 2009</td>
<td>2009</td>
<td>A systematic review</td>
<td>Description of various mental disorders and biochemical methods for their treatment.</td>
<td>Data were obtained from 11 sources.</td>
<td>There are various biochemical treatments of pedophilia and other deviant states. Studies have found the cause of these states - a violation in the metabolism of serotonin.</td>
</tr>
<tr>
<td>Roberts &amp; Jain, 2011</td>
<td>2011</td>
<td>A systematic review</td>
<td>Description of ethical issues faced by psychiatrists in the work, the results of the use of psychopharmacology.</td>
<td>29 sources used.</td>
<td>It is necessary to carry out diagnostic testing person and learn about the patient's wishes before you assign psychopharmacological agent to treatment was ethically correct.</td>
</tr>
<tr>
<td>Latha &amp; Phil, 2010</td>
<td>2010</td>
<td>A systematic review</td>
<td>Explanation of criteria for the use of covert medicines and review of the observed performances.</td>
<td>52 scientific works, which have been found on the PubMed and BMJ were used.</td>
<td>It is necessary to clarify to the medical stuff all appropriateness and the criteria for the use of covert drugs in order to avoid deterioration of the patients.</td>
</tr>
<tr>
<td>Ibuka, Chapman, Maeyers, Meng, &amp; Galvani, 2010</td>
<td>2010</td>
<td>A systematic review</td>
<td>1290 people were surveyed on the Internet, their responses were analyzed.</td>
<td>38 sources were used.</td>
<td>Possible risk of the disease and ways to avoid it may be dynamic in time, and in addition have different demographic characteristics and geographic places.</td>
</tr>
<tr>
<td>Ludwig &amp; Burke, 2014</td>
<td>2014</td>
<td>A systematic review</td>
<td>Overview of the different ways to build a trusting relationship with the patient.</td>
<td>4 scientific articles were used.</td>
<td>The trust between the patient and doctor can help make a more accurate diagnosis and more efficiently fight the disease. Also it is useful to maintain a relationship with the entire family of the patient, but it is necessary to keep confidential.</td>
</tr>
<tr>
<td>Lomas &amp; Santry, 2010</td>
<td>2010</td>
<td>A systematic review</td>
<td>Seeing the work of nurses with different patients, the subsequent diagnosis of the health status of patients.</td>
<td>6 sources were used.</td>
<td>Many nurses are incompetent in the use of drugs. They have no knowledge about dosages and contraindications. It is necessary to carry out extensive testing of medical personnel.</td>
</tr>
</tbody>
</table>
### Ethical Issues in Pharmacological Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gibson &amp; Ferrini, 2012</td>
<td>2012</td>
<td>A meta-analysis</td>
<td>A description of how to identify patients with personality disorders, drawing up strategies and plans of care, illustrative example for explaining how certain types of regulation of behavior can be used in practice.</td>
<td>A total reviewed 57 articles.</td>
<td>If the patient's behavior is difficult, it is very useful on practice to test the ailing for personality disorder to accurately assign the appropriate treatment.</td>
</tr>
</tbody>
</table>

### Nursing Knowledge in Regard to Non-Pharmacological Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eliopoulos, 2015</td>
<td>2015</td>
<td>A systematic review</td>
<td>Review of the state of complex patients in the absence of nurses, analysis of statistical data</td>
<td>32 sources, including PsychInfo and PubMed.</td>
<td>In many nursing homes is just a few medical staff to look after patients all the time puts them at risk. Lack of nurses around the patient may result in deteriorating health. It is necessary to increase the number of nurses in nursing homes.</td>
</tr>
<tr>
<td>Cohen-Mansfield &amp; Jansen, 2008a</td>
<td>2008a</td>
<td>Descriptive study</td>
<td>Evaluation of the treatment by physicians in nursing homes, review their reports, and treatment approaches.</td>
<td>It was used 57 articles and research papers.</td>
<td>In spite of regulations prohibiting the use of psychotropic drugs in nursing homes, they are still used for people with dementia. Doctors are convinced that using non-pharmacological treatment of the same amount, the data is not confirmed.</td>
</tr>
<tr>
<td>Cohen-Mansfield, Jansen, &amp; Norris, 2012b</td>
<td>2012b</td>
<td>A systematic review</td>
<td>A survey of doctors, psychologists and nurses about their latest patient, data collection and comparison.</td>
<td>84 sources have been viewed to write this review.</td>
<td>The data obtained in the survey results indicate that the treatment of patients by different specialists has varied evaluation and that the staff needs to interact with the treatment of patients with dementia.</td>
</tr>
</tbody>
</table>
## Evidence-Based Guidelines

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisiana Department of Health and Hospitals (DHH), 2015</td>
<td>2015</td>
<td>Public Education Advisory</td>
<td>NA</td>
<td>NA</td>
<td>Four modules from the CMS Hand In Hand Toolkit were integrating into the dementia training program for Los Angeles state workers.</td>
</tr>
<tr>
<td>National for Health Care Management (NIHCM), 2009</td>
<td>2009</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Proposed that NPIs are useful in treating behavioral disturbances.</td>
</tr>
<tr>
<td>Agency for Healthcare Research and Quality (AHRQ), 2014</td>
<td>2014</td>
<td>Systemic review protocol</td>
<td>NA</td>
<td>NA</td>
<td>The following categories and types of NPIs were compiled from the AHRQ.</td>
</tr>
<tr>
<td>American Geriatrics Society (AGS), 2015</td>
<td>2015</td>
<td>Clinical Practice Guidelines</td>
<td>NA</td>
<td>NA</td>
<td>The guideline recognizes the importance of education targeted to HCPs about the NPI of delirium.</td>
</tr>
<tr>
<td>Joint Commission Accreditation of Healthcare Organizations (JCAHO), 2015</td>
<td>2015</td>
<td>Standard Protocols</td>
<td>NA</td>
<td>NA</td>
<td>The Joint Commission found that elderly patients in LTC facilities encountered adverse events from chemical restraints such as memory impairment, functional decline, agitation and withdrawal.</td>
</tr>
<tr>
<td>Citation</td>
<td>Year</td>
<td>Design</td>
<td>Framework</td>
<td>Sample</td>
<td>Findings/Significance</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Brawley, Rejeski, &amp; King, 2003</td>
<td>2003</td>
<td>A systematic review</td>
<td>Overview of the different conditions for physical activity of older people and examples of individual adjustments to the program.</td>
<td>A total 14 sources were reviewed.</td>
<td>Physical activity in the lives of older people is extremely important for the promotion of health. But often accompanied by very different problems - moral barriers or physical disabilities. Exercise programs need to be developed for individual use with the needs of older adults.</td>
</tr>
<tr>
<td>Eijk, Avorn, Porsius, &amp; de Boer, 2001</td>
<td>2001</td>
<td>A randomized controlled trial</td>
<td>Collecting data on the results of the use of different types of antidepressants and analysis of the information.</td>
<td>45 sources were used, including information from BMJ.</td>
<td>Highly anticholinergic antidepressants in the treatment of older people are more dangerous to health. It is necessary to reduce such appointments for therapy.</td>
</tr>
<tr>
<td>Aras, 2011</td>
<td>2011</td>
<td>A literature review</td>
<td>Overview of participation of marketing strategies in health care and the results of such practice.</td>
<td>It was used 23 sources, found via Cinahl, Medline and ERIC.</td>
<td>Social marketing is important for public health. It can attract the attention of consumers for high-quality medicines and helps identify the needs of people. It helps to develop the health sector.</td>
</tr>
<tr>
<td>Evans, 2006</td>
<td>2006</td>
<td>A systematic review</td>
<td>Assessing the impact of social marketing projects on healthcare.</td>
<td>20 sources were found via PMC and PubMed.</td>
<td>Social marketing can benefit in the health sector through the dissemination of information to the audience, and the collection of data on the evaluation of the products.</td>
</tr>
<tr>
<td>Evans &amp; McCormack, 2008</td>
<td>2008</td>
<td>A systematic review</td>
<td>Review of methods to influence the audience by marketing strategies in the field of health.</td>
<td>A total reviewed 41 works founded via PubMed, AHRP and BMJ.</td>
<td>Social marketing can change the attitude of consumers to the product. It is widespread in the field of health. First necessary to analyze the market, to make branding. On the basis of the information received to adjust the methods of influence. It is necessary to accurately determine the strategy for effective interaction with the public, and the result will be achieved.</td>
</tr>
</tbody>
</table>
## Recommended Best Practices

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cody, Beck, &amp; Svarstad, 2002</td>
<td>2002</td>
<td>Descriptive study</td>
<td>NA</td>
<td>NA</td>
<td>Internal barriers include organizing, social factors, technology, and physical setting. External barriers include regulatory forces, legal forces and economic forces.</td>
</tr>
<tr>
<td>Snowden, Sayto, &amp; Roy-Byrne, 2003</td>
<td>2003</td>
<td>Literature Review</td>
<td>NA</td>
<td>All extant RCT studies on the efficacy of NPIs</td>
<td>NPIs and Pi are both effective in reducing behavioral symptoms for major and minor depression. Neither class of treatment totally eliminate behavioral symptoms.</td>
</tr>
<tr>
<td>American Geriatric Society (AGS), 2003</td>
<td>2003</td>
<td>Consensus Statement</td>
<td>NA</td>
<td>NA</td>
<td>31 recommendations for changes to manner in which LTC staff interact with clients. Including education, training, family involvement, and identification and screening.</td>
</tr>
<tr>
<td>American Association of Geriatric Psychiatry (AAGP), 2003</td>
<td>2003</td>
<td>Institutional fact sheet and policy recommendations</td>
<td>NA</td>
<td>NA</td>
<td>Researchers should conduct further studies on the effectiveness of Pi vs NPIs for behavioral problems at LTC facilities. Calls for cultural shift in patient/staff relations.</td>
</tr>
<tr>
<td>U.S. Food and Drug Administration (FDA), 2005</td>
<td>2005</td>
<td>Public Health Advisory</td>
<td>NA</td>
<td>5,106 patients. 17 placebo-controlled trials on elderly patients treated with Pi for dementia.</td>
<td>1.6-1.7-fold increase in rate of mortality for patients with dementia who were given anti-psychotic medication for behavioral symptoms.</td>
</tr>
<tr>
<td>U.S. Food and Drug Administration (FDA), 2008</td>
<td>2008</td>
<td>Public Health Advisory</td>
<td>NA</td>
<td>Two observational epidemiological studies.</td>
<td>The older class of anti-psychotic drugs is at least as harmful as atypical anti-psychotics in terms of risk of mortality in use with elderly individuals.</td>
</tr>
<tr>
<td>Department of Health and Human Services (HHS), 2011</td>
<td>2011</td>
<td>Survey of Medicare recipients</td>
<td>NA</td>
<td>All Americans using Medicare in LTC facilities</td>
<td>Over 300,000 claims for anti-psych meds. More than 50% of these did not meet criteria for proper use.</td>
</tr>
<tr>
<td>American Society of Consultant Pharmacists (ASCP), 2011</td>
<td>2011</td>
<td>Institutional report</td>
<td>NA</td>
<td>Data from the Office of the Inspector General concerning use of atypical anti-psychotics in LTC homes.</td>
<td>The off-label use of psych drugs is not abnormal and may not be as much of a problem as other agencies are claiming.</td>
</tr>
</tbody>
</table>
### Recommended Best Practices

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centers for Medicare and Medicaid Services (CMS), 2012</td>
<td>2012</td>
<td>Press Release</td>
<td>NA</td>
<td>NA</td>
<td>17% of LTC clients were receiving doses of anti-psychotic drugs, which exceeded desired levels. These drugs are known to lead to death in some elderly clients.</td>
</tr>
<tr>
<td>Centers for Medicare and Medicaid Services (CMS), 2013</td>
<td>2013</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>The CMS report crystallizes what is believed to be the leading cause of inappropriate prescription of drugs</td>
</tr>
<tr>
<td>Centers for Medicare and Medicaid Services (CMS), 2014b</td>
<td>2014b</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>A recent trend update shows that use of these drugs has been steadily declining since measurements were first taken in 2011</td>
</tr>
<tr>
<td>Centers for Medicare and Medicaid Services (CMS), 2014a</td>
<td>2014a</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>The agency set new, more ambitious goals for a 25% reduction by the end of 2015, and a 30% reduction by the end of 2016</td>
</tr>
<tr>
<td>Centers for Medicare and Medicaid Services (CMS), 2015b</td>
<td>2015b</td>
<td>Government initiative.</td>
<td>NA</td>
<td>All certified LTC facilities in America</td>
<td>Use of these antipsychotic drugs in LTC facilities is decreasing each year.</td>
</tr>
<tr>
<td>Centers for Medicare and Medicaid Services (CMS), 2015a</td>
<td>2015a</td>
<td>Quality initiative.</td>
<td>NA</td>
<td>All certified American LTC facilities</td>
<td>Use of anti-psychotic drugs is falling steadily, but must be reduced further.</td>
</tr>
<tr>
<td>Nursing Home Quality Campaign (NHQC), 2015</td>
<td>2015</td>
<td>Government initiative.</td>
<td>NA</td>
<td>All 50 states and the LTC homes in each state.</td>
<td>Los Angeles has been able to reduce the use of anti-psychotics and improve training of LTC staff. But progress is slower than most other states.</td>
</tr>
</tbody>
</table>
### Recommended Best Practices

<table>
<thead>
<tr>
<th>Citation</th>
<th>Year</th>
<th>Design</th>
<th>Framework</th>
<th>Sample</th>
<th>Findings/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molinari, Carney., &amp; Duffy, 2013</td>
<td>2013</td>
<td>Resource Guide</td>
<td>NA</td>
<td>NA</td>
<td>LTC facilities were designed to accommodate the needs of the elderly, addressing the social, mental and behavioral needs of the residents, as choosing an NPI first, is imperative.</td>
</tr>
</tbody>
</table>
## APPENDIX B

### PROJECTED TIMELINE

Timeline for Project

<table>
<thead>
<tr>
<th>Required Submissions</th>
<th>Due Date</th>
<th>Estimated Date of Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic and Literature Search</td>
<td>November 2015</td>
<td>November 2015</td>
</tr>
<tr>
<td>Preliminary Proposal</td>
<td>November 2015</td>
<td>December 2015</td>
</tr>
<tr>
<td>Final Outline</td>
<td>November 2015</td>
<td>November 2015</td>
</tr>
<tr>
<td>CFTI Training</td>
<td>November 2015</td>
<td>Completed July 2014</td>
</tr>
<tr>
<td>Capstone Contract Submission/Committee</td>
<td>November 2015</td>
<td>November 2015</td>
</tr>
<tr>
<td>IRB Submission/Approval</td>
<td>December 2015</td>
<td>December 2015</td>
</tr>
<tr>
<td>Project Implementation</td>
<td>March 2016</td>
<td>February 2016</td>
</tr>
<tr>
<td>Submit Prospectus Approval Form to Graduate Degree Auditor</td>
<td>November 2015</td>
<td>November 2015</td>
</tr>
<tr>
<td>Submit Contract Graduate Reader</td>
<td>November 2015</td>
<td>November 2015</td>
</tr>
<tr>
<td>Email Title Page to the Graduate Reader</td>
<td>November 2015</td>
<td>November 2015</td>
</tr>
<tr>
<td>Submit Results of Oral Defense to Grad School</td>
<td>March 2016</td>
<td>March 2016</td>
</tr>
<tr>
<td>Submit Hardcopy of Capstone Project to Graduate Reader for Proofing</td>
<td>April 2016</td>
<td>March 2016</td>
</tr>
<tr>
<td>Final Signed Title Pages Due</td>
<td>April 2016</td>
<td>March 2016</td>
</tr>
<tr>
<td>Submit Final Copies of Capstone to the Graduate Reader</td>
<td>April 2016</td>
<td>March 2016</td>
</tr>
</tbody>
</table>
APPENDIX C

IRB EXEMPTION

THE UNIVERSITY OF
SOUTHERN MISSISSIPPI
GULF COAST

COLLEGE OF NURSING

February 28, 2016

To Whom It May Concern:

The doctoral capstone project submitted to the IRB by Katie Spikes-Bickham has been reviewed by Patsy Anderson, DNS, RN, who is a College of Nursing representative of The University of Southern Mississippi Institutional Review Board (IRB). Her project is: Development of Social Marketing Plan to Decrease Long Term Care Nurses Use of Unnecessary Pharmacological Interventions to Address Resident Behavior Disturbances. This capstone project does not use human subjects and as such does not require IRB approval.

In this doctoral project, Ms. Spikes-Bickham and her advisor Dr. Karen Rich will adhere to protection of any organizational data. If Ms. Spikes-Bickham's project changes to include human subjects, she will notify her doctoral advisor, and apply for IRB approval.

Sincerely,

Patsy Anderson, DNS, RN
USM IRB Member
College of Nursing Representative

Associate Professor
Associate Dean
College of Nursing
Gulf Coast Campus
Patsy.Anderson@usm.edu
228-865-4533
APPENDIX D

LETTER OF PERMISSION FROM LTC FACILITY

Kela Spikes-Bickham, RN, MSN
Psychiatric Mental Health Nurse
Practitioner Doctor of Nursing Practice
Student

Mrs. Kela Spikes-Bickham,

Please accept this letter as formal notice of permission to complete your capstone project at Heritage Manor of Mandeville. I know you have worked closely with our DON, Mrs. Christine Jenkins RN, to care for the beloved residents of Heritage Manor. If we can be of any assistance, please do not hesitate to ask. We look forward to working with you and wish you the best in your continuing education.

Professionally,

Andy Hughes RN,
NFA Heritage Manor
of Mandeville
1820 W. Causeway App.
Mandeville, LA 70471

1820 West. Causeway Approach Mandeville, Louisiana 70471 985-626-4798 Fax 985-626-3878
# APPENDIX E

## PLAN FOR IMPLEMENTATION AND EDUCATIONAL INFORMATION ON USE OF NPIS

<table>
<thead>
<tr>
<th>NPIs</th>
<th>Educational Information</th>
<th>Estimated Timeline</th>
</tr>
</thead>
</table>
| a) Sensory interventions, such as music therapy, light therapy, pet therapy, multisensory stimulation, and hearing aids | **Music therapy**: The nurse is expected to play music (25-90 minutes) daily, usually based on the preference of the patient to distract them from any stressors, while decreasing their sensitivity, and increase their tolerance. (Gelinas, Arbour, Michaud, Robar, & Côté, 2013).  
**Light therapy**: The nurse is instructed to manipulate the patient’s surroundings to promote optimal comfort and sleep through reducing the intensity of light.  
**Pet therapy**: The nurse will arrange for about 10-20 minute dog visit in the patient’s room. The patient is invited to play around with the pet as he or she asks the handler questions (Gelinas et al., 2013). Nurses will administer this therapy to relieve of the patient from exhaustion and increase their optimism (provide emotional support) while creating relaxation and distraction from feelings of helplessness.  
**Multisensory stimulation**: The nurse is instructed to apply a rapid stimulation of the patient’s nerves through a device connected to the skin to drive some pleasant neuronal changes and enhance the quality of life and social well-being. Nurses will use it on individuals with cognitive impairment to increase and improve synaptic connections and transmission of nerve impulses.  
**Hearing aids**: The nurse will use hearing aid fittings on the patients with hearing loss to amplify the natural environment sounds and minimize the unpleasant buzzes in the ear. | 1 week |
| b) Active therapy/structured activities, such as dancing, exercise, social interaction, music therapy (playing/singing), art therapy, and outdoor walks | **Dancing**: The nurse will be expected to create a 1-hour daily dancing sessions to help patients improve movement and flexibility, and prevent fatigue.  
**Exercise**: Facilitate daily movements and positioning of the patient’s activities (perform active or passive muscle exercises, to get patients out of bed and take a seat) to minimize fatigue, and reduce muscle stiffness or injury (Gelinas et al., 2013).  
**Social interaction**: The nurse is instructed to create a chatting session (of one hour or so) for group interaction and conversations to allow patients relieve of their anxieties and develop optimism.  
**Music therapy**: The nurse is required to engage patients in active singing and have fun as the music plays.  
**Art therapy**: The nurse is instructed to pick up and use nonverbal metaphors and symbols expressed through a creative process or art to massage the patient’s inner-self.  
**Outdoor walks**: The nurse will create a 30-minute walk session three times a week to allow the patient enjoy the natural scenery outside (Cabrera et al., 2015), delay fatigue and enhance their functional mobility. | 1 week |
| c) Complementary or alternative medicine therapies, such as aroma therapy, reflexology, massage, and Reiki | **Aromatherapy**: The nurse will administer essential oils through massage, lotions, ointments, inhalation, baths, and compresses or showers that can soothe or calm the patient, enhance comfort and relaxation and relieve pain.  
**Reflexology**: The nurse will apply touch to the patient’s specific zones of the feet, hands, and/or ears to re-establish body equilibrium and enhance localization of tension.  
**Massage**: The patient’s skin and underlying tissues are stimulated by the nurse with varying degrees of to reduce pain, improve circulation, and/or produce relaxation.  
**Reiki**: The nurse will use the palm to administer universal energy by laying their hand on the specific body areas of the patient. | 2 weeks |
# PLAN FOR IMPLEMENTATION AND EDUCATIONAL INFORMATION ON USE OF NPIS

<table>
<thead>
<tr>
<th>NPIs</th>
<th>Educational Information</th>
<th>Estimated Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>d) Psychological therapies, such as validation therapy, reality orientation, reminiscence therapy, psychosocial therapy, cognitive-behavioral therapy, relaxation training, and structured support groups</td>
<td>Validation therapy: The nurse is expected to apply reciprocated communication of respect by acknowledging the beliefs, reality, and values of the patient (especially the older individuals with dementia or cognitive impairment), without marginalizing or dismissing the patient’s expressions. Reality orientation: The nurse lets the patient to understand or become aware of his or her time, personal identity, and environment. Reminiscence therapy: The caregiver will be required to talk to the patient about things from the past or written and oral life histories, using photos, familiar music, or objects as prompts. Psychosocial therapy: The nurse will be expected to incorporate case management, counseling, and motivational enhancement in the treatment (Lindberg &amp; Engström, 2011). Let the patient share their experiences with them to develop stable moods for relapse prevention and generally function better. Cognitive-behavioral therapy (CBT): The caregiver is expected to focus on the behaviors, body, mind and brain functioning of the patients to enhance their physical functioning and coping strategies through relaxation, hypnosis, imagery, distraction, and breathing techniques (Gelinas et al., 2013). Relaxation training: The nurse will direct and encourage the patient to take deep breaths to elicit their relaxation and alleviate symptoms. Structured support groups: The nurse will be expected to create a group that will be psychologically and physically present for the patient in times of need.</td>
<td>2 weeks</td>
</tr>
<tr>
<td>e) Environmental therapies, such as walled-in areas, wandering areas, natural/enhanced environments (e.g., pictures on walls), and reduced stimulation environments (e.g., quiet areas)</td>
<td>Walled-in areas: The nurse is expected to create safe walking areas where the patient can navigate safely without accessing restricted areas. Wandering areas: The nurse will be expected to modify the patient’s areas to create safe places where the patient relaxes and feels a sense of independence and control. Natural/enhanced environments: The nurse will be required to attach natural environmental features (for example, pictures on the walls) that can create more pleasant and amenable living space in the patient’s room (Gelinas et al., 2013). Reduced stimulation environments: The nurse is expected to focus on reducing the level and intensity of stressors and make the patient’s environment as functional and relaxed as possible through maintaining a comfortable temperature in the room, and minimizing noises.</td>
<td>4 to 8 weeks</td>
</tr>
<tr>
<td>f) Delivery of care, such as care consultation and patient centered care</td>
<td>Care consultation: The nurse will invite patients to discuss and understand information concerned with the process of a specific disease, and describe the concrete procedures associated with an upcoming treatment (Gelinas et al., 2013). Patient-centered care: The nurse will be expected to involve patients as well as their families in the making of decisions and the design models of care (Lindberg &amp; Engström, 2011). The care provided will respect the needs, preferences, and values of the patient.</td>
<td>2 weeks</td>
</tr>
<tr>
<td>g) <strong>Patient education</strong>, such as specific curriculum (i.e. distraction components)</td>
<td><strong>Specific curriculum</strong>: As part of the therapeutic process, the nurse will be required to develop educational programs to teach the patient or family about medications, self-care therapies, distraction components, exercise, among others.</td>
<td>4 to 8 weeks</td>
</tr>
</tbody>
</table>
APPENDIX F

PRESENTATION EVALUATION ADMINISTRATORS' SURVEY FORM

PRESENTATION EVALUATION ADMINISTRATORS' SURVEY FORM

Note: This form will be given to the speaker after the presentation for evaluation.

Name of Presenter: Kela Spikes-Bickham, DNP Student, University of Southern Mississippi

Topic Area: Proposed implementation of a social marketing plan to decrease long term care nurses' use of unnecessary pharmacological interventions to address residents' behavioral disturbances.

<table>
<thead>
<tr>
<th>Quality of Content</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The content provided information that can be used to address behavioral disturbances in a LTC facility to treat residents' behavioral disturbances.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>2. The content was innovative.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The social marketing plan presented is a viable method to decrease nurses' use of unnecessary Pts to address residents' behavioral disturbances.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>4. The content supported the use of NPIs to deal with behavioral disturbances.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

Factors for the Implementation of NPIs (Proposed)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. NPIs are a safer way (vs Pts) to address behavioral disturbances in LTC facilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>6. NPIs are effective in dealing with behavioral disturbances in LTC facilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Information on the proper implementation of NPI techniques was discussed during the presentation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>8. The LTC facility is well-staffed so nurses will have time to do the NPIs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>9. The LTC facility is staffed with caring nurses who are willing to accept change to provide the best overall care for the LTC residents.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. The administrators are willing to implement the social marketing campaign because we believe in the value of the campaign.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

If you answered "Agree" or "Strongly Agree" to Question 10, please proceed to Question 11. Otherwise, please proceed to question 12.

<table>
<thead>
<tr>
<th>Question 11: The nursing service administrators at the LTC facility are able to commit resources and have thus agreed to implement the proposed social marketing plan as a campaign.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>
### Benefits of the Use of NPIs

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Use of NPIs will result in increased job satisfaction through increased nurse autonomy.</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>13. Use of NPIs will result in increased job satisfaction for nurses by safely reducing behavioral disturbances.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>14. Use of NPIs will result in improved nurse-patient interactions.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Application of NPI techniques to address behavioral disturbances will result in increased overall satisfaction for both nurses and patients.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Use of NPIs will result in improving the overall quality of resident care in the LTC.</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

### Ease of Understanding

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17. The medium used was appropriate for the presentation.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. There was smooth transition between ideas.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. The data presented was concise but provided sufficient information.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. There were enough visual aids in the presentation (charts, graphs, figures, etc.) to enhance understanding.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. The speaker displayed sufficient knowledge about the topic.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. The speaker had suitable responses to questions.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Comments:

Residents & Staff enjoyed using the NPI.

### Suggestions for improvement:

The suggestions for improvements: We truly enjoyed this program and found it beneficial for our facility.
# PRESENTATION EVALUATION ADMINISTRATORS' SURVEY FORM

**Note:** This form will be given to the speaker after the presentation for evaluation.

Name of Presenter: Kela Spikes-Bickham, DNP Student, University of Southern Mississippi

**Topic Area:** Proposed implementation of a social marketing plan to decrease long term care nurses' use of unnecessary pharmacological interventions to address residents' behavioral disturbances.

<table>
<thead>
<tr>
<th>Quality of Content</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The content provided information that can be used to address behavioral disturbances in a LTC facility to treat residents' behavioral disturbances.</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>2. The content was innovative.</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>3. The social marketing plan presented is a viable method to decrease nurses' use of unnecessary PIs to address residents' behavioral disturbances.</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>4. The content supported the use of NPIs to deal with behavioral disturbances.</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
</tr>
</tbody>
</table>

**Factors for the Implementation of NPIs (Proposed)**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. NPIs are a safer way (vs PIs) to address behavioral disturbances in LTC facilities.</td>
<td>✔️</td>
</tr>
<tr>
<td>6. NPIs are effective in dealing with behavioral disturbances in LTC facilities.</td>
<td>✔️</td>
</tr>
<tr>
<td>7. Information on the proper implementation of NPI techniques was discussed during the presentation.</td>
<td>✔️</td>
</tr>
<tr>
<td>8. The LTC facility is well-staffed so nurses will have time to do the NPIs.</td>
<td>✔️</td>
</tr>
<tr>
<td>9. The LTC facility is staffed with caring nurses who are willing to accept change to provide the best overall care for the LTC residents.</td>
<td>✔️</td>
</tr>
<tr>
<td>10. The administrators are willing to implement the social marketing campaign because we believe in the value of the campaign.</td>
<td>✔️</td>
</tr>
</tbody>
</table>

If you answered "Agree" or "Strongly Agree" to Question 10, please proceed to Question 11. Otherwise, please proceed to question 12.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. The nursing service administrators at the LTC facility are able to commit resources and have thus agreed to implement the proposed social marketing plan as a campaign.</td>
<td>✔️</td>
</tr>
</tbody>
</table>
**Benefits of the Use of NPIs**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Use of NPIs will result in increased job satisfaction through increased nurse autonomy.</td>
<td>✓</td>
</tr>
<tr>
<td>13. Use of NPIs will result in increased job satisfaction for nurses by safely reducing behavioral disturbances.</td>
<td>✓</td>
</tr>
<tr>
<td>14. Use of NPIs will result in improved nurse-patient interactions.</td>
<td>✓</td>
</tr>
<tr>
<td>15. Application of NPI techniques to address behavioral disturbances will result in increased overall satisfaction for both nurses and patients.</td>
<td>✓</td>
</tr>
<tr>
<td>16. Use of NPIs will result in improving the overall quality of resident care in the LTC.</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Ease of Understanding**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17. The medium used was appropriate for the presentation.</td>
<td>✓</td>
</tr>
<tr>
<td>18. There was smooth transition between ideas.</td>
<td>✓</td>
</tr>
<tr>
<td>19. The data presented was concise but provided sufficient information.</td>
<td>✓</td>
</tr>
<tr>
<td>20. There were enough visual aids in the presentation (charts, graphs, figures, etc.) to enhance understanding.</td>
<td>✓</td>
</tr>
<tr>
<td>21. The speaker displayed sufficient knowledge about the topic.</td>
<td>✓</td>
</tr>
<tr>
<td>22. The speaker had suitable responses to questions.</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Comments:**

Use of NPI's to reduce Anti-psychotic medication was great idea with a high success rate. Residents and staff enjoyed participating.

**Suggestions for Improvement:**

We just to continue to build on efficient habits.
1. Which statement is incorrect regarding Pharmacological Interventions (PIs i.e. anti-psychotic drugs) in treating behavioral disturbances:
   A. PIs can be addictive
   B. Affect the whole body, giving an overall systemic effect, and results can often happen quickly
   C. PIs should always be used if the client is exhibiting the behavior for the first time
   D. PIs are given in several forms

2. There is an increased risk for mortality for elderly residents using prescribed PIs for off-label purposes.
   A. True
   B. False

3. What are symptoms of anti-psychotic drug poisoning?
   A. Sedation
   B. Tachycardia,
   C. Mild hypotension
   D. Prolongation of the QTc interval
   E. All of the above

4. Which PI has the greatest risk of mortality:
   A. Haloperidol
   B. Ziprasidone
   C. Olanzapine
   D. Quetiapine
   E. Risperidone

5. Which is not a side effect of second generation antipsychotic medication:
   A. Cardiovascular disease
   B. Diabetes mellitus
   C. Weight loss
   D. Atherogenic lipid profile
6. The nurse will apply touch to the patient’s specific zones of the feet, hands, and/or ears to re-establish body equilibrium and enhance localization of tension. Which Non-Pharmacological Intervention (NPI) is described above?
   A. Massage
   B. Reflexology
   C. Reiki
   D. Aromatherapy

7. Nursing staff authorized to administer medications for behavioral disturbances, should always consider which action as the first resort?
   A. Give sleep aide to help calm the resident behavior, if the behavior occurs at night
   B. Give any medication requested by the family
   C. Attempt to move resident to a quiet area, while communicating to de-escalate the behavior
   D. Delegate intervention to charge nurse, to give PRN IM Injection

8. Which of these is not an EBP NPI for addressing resident’s behavioral disturbances?
   A. Validation therapy
   B. Music Therapy
   C. Physical therapy
   D. Dancing

9. Multi-component NPIs are effective in dealing with lowering the incidence of behavioral disturbances by:
   A. Reducing length of stay
   B. Reducing hospital readmissions
   C. Preventing falls among LTC residents
   D. Reducing nurse-patient interaction

10. Your patient complains of a headache. You should:
    A. Give the aspirin your patient has ordered for fever > 101°
    B. Ask the patient to describe the headache, then call the physician for an order.
    C. Give Motrin even if there is no order because Motrin will help the headache.
    D. Attempt massage therapy to alleviate the resident’s discomfort.

11. What activities form the backbone of effective NPIs?
    A. Communication by staff members
    B. Coordinated care
    C. Person-centered activities
    D. All of the above.
12. As a first course of action in treating behavioral disturbances, as a rule nurses should:
   A. Administer PIIs.
   B. Apply NPI techniques.
   C. Administer other form of treatment.

13. What are the benefits of NPIs?
   A. Significantly improve the condition of the ill
   B. Bring calm to care-providers
   C. Rid the symptoms of the disease
   D. Improve quality of life.

14. Which is NOT an NPI treatment for insomnia patients:
   A. Bright light therapy
   B. Exercise
   C. Reminisce therapy

15. When applicable, what is the most important reason why NPIs should always be used as the first course of treatment when residents are confused
   A. It is wrong for nurses to endanger a resident’s well-being when a safe treatment is available to try first.
   B. NPIs are less trouble for nurses.
   C. Elderly residents do not like to take pills.
   D. A nurse might be liable for negligence if a resident falls because of taking an antipsychotic or benzodiazepine-type drug.
APPENDIX H

SELF-REPORT QUESTIONNAIRE

NURSE SELF-REPORT SURVEY REGARDING THE USE AND EFFECTIVENESS OF NON-PHARMACOLOGICAL INTERVENTIONS (NPIs)
Developed by: Kela Spikes-Bickham, DNP Student University of Southern Mississippi

Section 1
Please answer the questions below by ticking the boxes with your answers.

<table>
<thead>
<tr>
<th>1. What is your position in the Long Term Care Facility?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Registered Nurse</td>
</tr>
<tr>
<td>[ ] Licensed Practical Nurse</td>
</tr>
<tr>
<td>[ ] Nurse</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Have you attended any training programs for the use of NPIs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Yes</td>
</tr>
<tr>
<td>[ ] No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. How many behavioral disturbances do you deal with in a week?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] None</td>
</tr>
<tr>
<td>[ ] 1 to 10</td>
</tr>
<tr>
<td>[ ] 11 to 20</td>
</tr>
<tr>
<td>[ ] 21-30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. In a week, how many behavioral disturbances do you treat using NPIs as a first choice?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] None</td>
</tr>
<tr>
<td>[ ] 1 to 10</td>
</tr>
<tr>
<td>[ ] 11 to 20</td>
</tr>
<tr>
<td>[ ] 21-30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. In a week, how many behavioral disturbances do you treat using PIs as a first choice?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] None</td>
</tr>
<tr>
<td>[ ] 1 to 10</td>
</tr>
<tr>
<td>[ ] 11 to 20</td>
</tr>
<tr>
<td>[ ] 21-30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. In behavioral disturbance residents where you administered NPIs as the first course of treatment, how many behavioral disturbances were resolved?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] None</td>
</tr>
<tr>
<td>[ ] 1 to 10</td>
</tr>
<tr>
<td>[ ] 11 to 20</td>
</tr>
<tr>
<td>[ ] 21-30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. In behavioral disturbance residents where you administered NPIs as the first course of treatment, how many did you have to treat again using PIs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] None</td>
</tr>
<tr>
<td>[ ] 1 to 10</td>
</tr>
<tr>
<td>[ ] 11 to 20</td>
</tr>
<tr>
<td>[ ] 21-30</td>
</tr>
</tbody>
</table>
8. In patients where you administered PIs as the first course of treatment, how many behavioral disturbances were resolved?

- [ ] None
- [ ] 1 to 10
- [ ] 11 to 20
- [ ] 21-30

9. What percent of the time do you use NPIs as a first choice rather than PIs to manage residents' behavioral disturbances?

- [ ] 1-25%
- [ ] 26-50%
- [ ] 51-75%
- [ ] 76-99%
- [ ] 100%

10. Based on your experience, how would you rate the effectiveness of NPIs on managing residents' behavioral disturbances?

- [ ] 1-25%
- [ ] 26-50%
- [ ] 51-75%
- [ ] 76-100%

**Section 2**

Please tick the boxes according to how you agree/disagree with each statement:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is dangerous to manage behavioral disturbances with PIs due to morbidity concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When administered for behavioral disturbances, anti-psychotic drugs are linked with negative health outcomes (stroke, heart failure, weight gain, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know how to use Non-pharmacological Interventions (NPIs) to effectively manage behavioral disturbances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section 3**

Please tick the boxes according to how you agree/disagree with each statement:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe that the continued use of dangerous drugs is fundamentally unethical when there are safe alternatives.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of NPIs is an ethical way to provide care and will improve residents' life satisfaction through improved health outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


Gilbert, F., & Simon, O. (2009). *Chemical interventions and ethical side effects: From pedophilia to depression. Where are the ethical boundaries of treating mental illness by neurochemical means?* Ontario, Canada: Chemical Institute of Canada.


http://www.medicine.ox.ac.uk/bandolier/painres/download/whatis/cox_model.pdf