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# An Integrative Health Approach for Geriatrics With Neurocognitive Disorders Living in a Care Facility

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## Running head: INTEGRATIVE HEALTH APPROACH FOR GERIATRICS

An Integrative Health Approach for Geriatrics

With Neurocognitive Disorders Living in a Care Facility

DNP Project Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Nursing Practice

> St. Catherine University St. Paul, Minnesota

Brianna Marie Kvanli

May 2020

## ST CATHERINE UNIVERISTY ST. PAUL, MINNESOTA

This is to certify that I have examined this Doctor of Nursing Practice DNP project manuscript written by

Brianna Kvanli

and have found that it is complete and satisfactory in all respects, and that any and all revisions required by the final examining committee have been made.

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May 3, 2020

## DEPARTMENT OF NURSING

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#### Abstract

Integrative health (IH) has been shown in the literature to decrease resistance to cares and behaviors and improve apathy levels, patient-staff relationships, and quality of life in patients with neurocognitive disorders (NCD), formerly known as dementia, yet there continues to be a lack of implementation of these modalities. Coinciding with this, many CNAs working in care facilities are faced with decreases in job satisfaction due to disconnect they experience with these patients. This project was designed for CNAs to pilot a soothing touch protocol to a Midwestern care facility's residents to improve CNA's job satisfaction; increase connectivity, peace, and closeness; and promote a higher quality of life in this vulnerable population. The Plan-Do-Study-Act (PDSA) model was used for implementing this piloted change. This project demonstrated that stakeholder support along with face-to-face experiential education of this complementary intentional soothing touch protocol led to a successful implementation with 100% of CNAs stating they would continue to implement the protocol into their cares after the completion of this project.

Integrative health focuses on incorporating both allopathic and complementary and alternative (CAM) treatment options to provide the most optimal health and healing environments for patients. However, IH also encompasses a model focused on healing, wellness, and prevention that travels beyond simply adding CAM modalities into conventional treatment plans. To provide IH-focused care, one must focus more on the philosophy of openness to a wide variety of healing styles to match each patient's world-view. The exchange of human warmth through physical contact or soothing touch, one IH modality, allows the health care employee to be present, aware, and disseminate empathetic attention to the recipient to promote relaxation, intention, closeness, reassurance, and improved relationships (Pedrazza et al., 2018). This project discusses how soothing touch was piloted as a care option offered to residents by CNAs in a long-term care (LTC) facility.

#### **Background, Significance, and Problem Statement**

Many providers and health care employees in LTC facilities deliver care based on a model of allopathic medicine and, along with unavailability, do not consider CAM as being congruent with western medicine. Limiting care to allopathic medicine can unfortunately cause an array of side effects or lead to polypharmacy, which is particularly worrisome in LTC facilities where new environments, routines, and schedules as well as altered kidney, gastrointestinal, or liver function makes pharmacotherapy less desirable. Patients in care facilities long for essential intentional touch due to isolation or separation from loved ones, age, detachment, chronic pain, long-lasting social deprivation, and/or severe or terminal illnesses (Pedrazza et al., 2018). Thankfully, research findings have demonstrated the benefits of IH modalities, such as improved quality of life, for many elderly residents in LTC facilities, particularly for those with dementia, which, according to the most recent 5<sup>th</sup> edition of DSM is

now called NCD (Legere, McNeill, Schindel Martin, Acorn, & An, 2017; Seitz et al., 2012). In a LTC facility in a midwestern state, the site of this DNP project, the problem was that IH care options were not available for patients with NCD. At this particular site, based on a scale designed to measure cognition, over half (51.4%) of the patients residing there scored less than 13 on this Brief Interview for Mental Status (BIMS) scale, suggesting moderate to severely impaired cognition and indicating the need for holistic care options to treat each patient's mind, body, and soul (LTC facility data, 2020). Therefore, because there was a need to expand services beyond allopathic medicine routes in care facilities, IH options are timely, evidence-based, and worth introducing to these organizations.

#### **Project Purpose**

This DNP project was designed to introduce soothing touch, an essential, powerful tool in nonverbal communication, as a care option for individuals residing in this LTC facility. Even though IH care options have been demonstrated in the literature as being beneficial to this particular patient population, many care facilities continue to limit cares to allopathic modalities only. Because patients with cognitive disorders are shown to respond positively to various IH approaches, this project was designed to introduce one complementary care option, soothing touch, into practice. Soothing touch was selected from a menu of choices and by piloting this complementary therapy into daily care; lessons learned inform and motivate future actions. The population of interest in this study was limited to certified nursing assistants (CNAs). The ultimate goal of this project was to create a workflow process that supports the addition of other evidence-based IH modalities (e.g. music, guided imagery, muscle relaxation) into available care options for use by this and other facilities.

#### **Application of Conceptual Model to Practice Site**

In the following discussion, the theoretical framework for this project is described, as well as how it guided development of this practice change. Connor and Howett (2009) developed a holistic nursing conceptual model called Intentional Comfort Touch, which examined how purposeful touch can be integrated into cares to promote peace, intimacy, and feelings of connectedness and ease suffering in a variety of diverse settings and in at-risk populations. According to Connor and Howett (2009), comfort touch positively benefits both the patient and nurse, however staff at the project site experienced a disconnect between patients and CNAs. A number of CNAs appeared to be more engaged with task-oriented, mechanical routines and less focused on holistic, individualized, relationship-based cares.

Staff turnover is a common issue within care facilities, and this practice site struggles with this issue as well. Connor and Howett (2009) demonstrated a correlation between soothing touch and professional satisfaction. More specifically, when compared to non-intentional or procedure-centered touch, Connor and Howett (2009) stated that the patient-centered, subjective intentional touch concept was shown to deepen professional satisfaction, which in turn could reduce burnout. When examining this issue from a patient's perspective, soothing touch offers the recipient (patient) a level of caring and safety in a relaxed atmosphere by promoting trust, self-acceptance, reassurance, and enhancing coping abilities (Connor & Howett, 2009). Furthermore, intentional touch does not include touch that is instrumental, objective, technical, procedure-centered, or task-oriented (Connor & Howett, 2009). Instead, it is emotional-oriented with attention specifically paid to quality of life by finding intimacy and understanding as well as promoting a quality of presence, individual attention, closeness, and reassurance (Connor & Howett, 2009; Pedrazza et al., 2018).

In anticipation of introducing this new care model to CNAs, initially there were concerns about how individuals would react to changes in their work routines. Oftentimes, intentional touch gets overlooked by health care workers due to high workloads, stress levels, focus on efficiency, increased acuity, and a higher priority to focus on a patient's physical needs versus his or her psychological needs, leading to a disengaged nurse-patient relationship (Connor & Howett, 2009). However, being present with compassionate, empathetic attention during touch empowered nurses to create humane relationships with the patients and improved a nurse's sense of well-being, job satisfaction, and meaning; all positive outcomes that could benefit this care facility (Stöckigt et al., 2019).

Once again, the conceptual model of Intentional Comfort Touch has been shown to benefit both the nurse and patient (Connor & Howett, 2009). Connor and Howett (2009) stated, "human touch may well be one of the most central aspects of healing that occurs between a nurse and a patient" (p. 127). Ultimately, having an increased awareness of this conceptual model can encourage nurses and other health care employees to implement intentional comfort or soothing touch into their routines at this site to promote an increase in job satisfaction and improve physiological outcomes for patients.

#### **Review of Literature and PICO**

The initial search strategy for a review of literature was based on the following evidencebased practice PICO question, which remained unchanged following the review of literature, and is stated as follows: For CNAs who serve elderly residents with neurocognitive disorders in LTC, what is the effect of assessing barriers and providing education and training on integrative health, specifically soothing touch, compared to current practice on awareness, knowledge, accessibility, and usability to implement an IH therapy into care routines? In the extensive and analytical search for this DNP project regarding an IH approach in a long-term care facility, multiple search terms, synonym terms, and filters/limiters were used. The key search terms included integrative health, integrative medicine, long-term care, elderly, philosophy, education, massage, hand massage, touch, and adult. CINAHL was the primary search engine used. From there, filters/limiters were added to the search; these included: published from 2010-2020, research article, and all adults. After an extensive literature review, predominately qualitative designs were used regarding this DNP project and were therefore appraised using the Evidence Based Practice Toolkit by St. Catherine University (2017), adapted from the Johns Hopkins Nursing Evidence-Based Practice Models and Guidelines Toolkit.

As mentioned previously, IH focuses on incorporating both allopathic and CAM treatment options to provide the most optimal health and healing environments for patients (Halm & Katseres, 2015). As the aging population cohort grows, the complexity of their chronic conditions can continue to grow exponentially. Legere et al. (2017) stated the global prevalence of NCD affects about 35.6 million people and more astonishing is that this number is expected to double in the next 20 years. About 80% of this NCD population exhibits changes in mood, delusions, agitation, apathy, sexual disinhibition, wandering, repetitive questioning, and calling out (Legere et al., 2017). Unfortunately, these behaviors can cause caregiver strain or burnout (Legere et al., 2017). In order to control behaviors in a facility, providers and health care staff often resort to physical restraints or antipsychotics, which can lead to increased risks of cardiovascular accidents and mortality, instead of considering the unmet needs or stressors the patient is experiencing (Legere et al., 2017; Seitz et al., 2012). By incorporating the full spectrum of healing, using IH modalities can drastically improve the quality of life of many elderly residents as IH has been shown to improve some NCD symptoms and other debilitating illnesses; ultimately decreasing the need for antipsychotic medications (Pedrazza et al., 2018). For example, complementary and alternative methods to improve a patient's quality of life include physical exercise, massage therapy, music, biofeedback, aromatherapy, support groups, nutritional advice, meditation, guided imagery, energy healing, hypnotherapy, qigong, and homeopathy (Kakai, 2013). The benefits of IH can include improvements in anxiety, chronic pain, depression, staff-patient relationships, behaviors and resistance to cares, comfort and relaxation, sleep, blood pressure and heart rate, physiological indicators, feelings of connectedness, being cured, global sense of wellbeing and healing, and personal transformations (Kakai, 2013; McFeeters, Pront, Cuthbertson, & King, 2016; Stöckigt et al., 2019).

There are differences between soothing touch and massage therapy. A board-certified massage therapist, in contrast to soothing touch, provides massage therapy. Soothing touch is defined as intentional, rhythmic, soft physical touch aimed to enhance wellbeing and promote relaxation and can be provided by CNA/PCAs, family members, nurses, providers, ect. (Stöckigt et al., 2019; Wellings, 2015). Because of the costs associated with hiring a massage therapist, massages cannot always be offered to the patients; however, soothing touch is inexpensive, patient-centered, sustainable, and feasible. Oftentimes, if, as it may not occur frequently, CNAs are applying lotion, it is applied to the arms and legs only, forgetting the patient's sensual hands. Therefore, this project is focused on intentionally applying soothing touch to the patient's hands. This comforting method can serve as means to communicate empathy, concern, and compassion on a deeper and more personal level (Braithwaite, 2017). The soothing touch protocol for this DNP project (see Appendix C) was created following a modified manual or "M" technique, which encompasses performing massage strokes using a set, very slow speed applying the patient-set 3/10 pressure that never changes (see Appendix C) (Buckle et al., 2008). This "M"

technique developed by Buckle (2008) can be even be used on fragile skin, an issue often problematic at the end of life and in the geriatric population and can assist in symptom relief to reduce anxiety, build confidence, and promote relaxation in the recipient (Wellings, 2015).

Regarding best practice techniques, an Integrative Health Program at a nearby care facility was examined as this program specifically focuses on how to provide education to staff on how to incorporate CAM treatment options into daily routines. At this location, "comfort touch" education is presented to the staff during orientation as well as at annual and skills training classes offered at the facility. Staff here are educated on the technique using in-person, hands-on demonstrations and are encouraged to use comfort touch if a patient is reporting stress, pain, or trouble sleeping, among others. It was reported that staff witnessed patients relax within seconds and it reduced overall call light usage by patients: all information I, the project manager, presented to the CNAs participating in this project.

In summary, potential benefits of this patient care improvement project to society and to the field of nursing include educating CNAs of one intentional integrative care model that focuses on individualized care, healing, and wellness; particularly in the elderly population with NCD. If successful and feasible, CNAs will be able to continue to offer this soothing touch integrative therapy in the future.

#### **Ethical Considerations**

This DNP Project was a Quality Improvement (QI) initiative and the population of interest was limited to CNAs employed at a long-term care facility located in the Midwest and this activity, per policy at the practice site, was within the scope of practice for CNAs (see Memorandum to File). The LTC residents are a vulnerable population because of their age and medical comorbidities. In order to address ethical considerations, approval for implementation of this project from St. Catherine University's Institutional Review Board (IRB) was received prior to starting. In constructing this DNP project, the Plan-Do-Study-Act (PDSA) was used to guide change. This method focuses on setting an aim, testing a small-scale change, evaluating how it worked, and refining the change in order to implement it to a larger scale (Institute for Healthcare Improvement, n.d.). To achieve project goals, the PDSA method was utilized as described below.

#### **Project Implementation**

#### PDSA Cycle 1: Usability and Acceptability Cycle

Cycle 1 was designed to address initial receptiveness, concerns, and barriers about the project intervention, including usability and acceptability into current CNA practice. By distributing an anonymous Pre-Implementation/Pre-Educational Survey (Appendix A), CNA knowledge about the benefits of massage therapy or soothing touch as an adjunct to usual care and obstacles to introducing IH to collect baseline information was identified. This also assessed CNA attitudes and receptivity to offering hand massages as a component of their care provided.

Once the Pre-Implementation/Pre-Educational Surveys (Appendix A) were completed, the resources needed for instituting a soothing touch protocol such as CNA training needs and time allotment for this intervention were explored. Finally, along with the CNA assistance and involvement, their current workflow was mapped out and strategies in how the protocol could be delivered to patients were discussed. Based on survey feedback, the workflow diagram was shared with key stakeholders and CNAs in the organization to assess buy-in.

Next, intervention specifics were identified related to this patient population. For example, whether this option would be received and accepted by the residents; what type of resources were needed, for example, what lotions were appropriate for frail skin; and how soothing touch could be introduced into care routines. Lastly in Cycle 1, an educational session (Appendix B) incorporating learning needs identified by CNAs was started.

#### PDSA Cycle 2: Education and Implementing Intervention into Daily Cares

The second phase of this PDSA design was Cycle 2, and during this stage, individual face-to-face educational demonstration presentations were provided to the participating CNAs on delivering the soothing touch to the residents followed by a Post-Educational Survey (Appendix D) and implementation of soothing touch into routines.

To start this process, a protocol was developed and formulated based off of a specific hand massage technique, the "M" technique, and the massage therapist's expertise (Appendix C). Next, data from Cycle 1 was gathered and evaluated and this information was used to finish planning the educational session (Appendix B). Along with key stakeholder' input, it was determined that the best time to make this education available to all, including newly hired individuals was during shift changes.

Education was delivered on three separate dates in a face-to-face, one-on-one format. Each educational session was followed by a hands-on demonstration of the soothing touch protocol to the CNAs. Only the CNAs who attended the face-to-face sessions were able to participate in the project. A Post-Educational Survey was developed to follow the educational session and soothing touch demonstration to assess and measure skills, knowledge, and attitudes regarding implementing soothing touch (Appendix D). Following successful completion of the Post-Educational Survey, CNAs were asked to select one resident per shift, implement the soothing touch protocol to him or her, and continue this each shift for two weeks total. CNAs were instructed to keep track of how many times they utilized the soothing tough protocol in the two-week period. Informational manuals on the soothing touch protocol were placed at all four of the nurses' stations for CNA review (Appendix C). During the two-week implementation phase, I, the project manager, was available on site twice per week to review the workflow diagram and soothing touch protocol with the CNAs if needed, answer any questions, and obtain feedback.

#### PDSA Cycle 3: Satisfaction of CNAs

Cycle 3 was designed to focus on evaluation and post-implementation satisfaction via questionnaire format to assess barriers, acceptability, feasibly, and sustainability. At the end of the two-week implementation of soothing touch, CNAs completed the questionnaire and evaluated their experience (Appendix E). The questionnaire also assessed whether systembarriers prevented CNAs from offering therapies to the residents and determined whether the suggested intervention was both feasible and sustainable from a system perspective. If warranted, CNAs were provided with any further education and feedback regarding implementation of soothing touch during cares in the future in this LTC or other facilities.

#### Discussion

In total, 10 CNAs (n = 10) completed the Pre-Implementation/Pre-Educational Surveys, attended the face-to-face educational session with the soothing touch demonstration, and completed the Post-Educational Survey. At the completion of the two-week soothing touch implementation, the Satisfaction and Usability Questionnaire was collected by six CNAs, representing a 60% completion rate.

#### **Knowledge and Attitudes**

First, the Pre-Implementation/Pre-Educational Survey was compared to the Post-Educational Survey. Project participants completed the Pre-Survey distributed prior to the educational session and the Post-Survey after the education. Following this part, responses to Questions 1-10 in both surveys were evaluated as these questions remained unchanged between the Pre- and Post- Surveys (see Table 1 below). These questions assessed knowledge and attitudes towards massage therapy and respondents were instructed to rate each on a 1-7 scale, with 1 representing absolutely disagree and 7 representing absolutely agree. The average scores for each question in the Pre-Survey was calculated and compared to the Post-Survey average scores to assess receptivity to the education. After these comparisons, 90% of Questions 1-10 showed an increase in positive, agreement scores after the education and soothing touch demonstration was completed. This suggests that the experiential education provided as successful means for delivering this education and also provided the CNAs with a more positive and influential CNA mindset regarding their role in patient healing. This was positively reflected in Question 2, which read, "Therapeutic touch improves healing." This Question's average score positively increased by 9% (from 6 to 6.7) between Pre- and Post-Survey scores. *Table 1: Pre-Educational and Post-Educational/Pre-Implementation Survey Findings* 

Questions*	Pre-Survey Average	Post-Survey Average	Percentage Change
Q1	6.2	6.6	5%
Q2	6	6.7	9%
Q3	4.5	5.4	13%
Q4	5.2	5.3	2%
Q5	5.9	6.9	15%
Q6	5.4	6	9%
Q7	7	6.8	-3%
Q8	5.7	6.7	15%
Q9	6.6	6.6	0%
Q10	6.5	6.8	4%

1. CNA's knowledge and use of hands-on touch can impact a patient's healing.

- 2. Therapeutic touch improves healing.
- 3. The CNA's role is to provide bathing and toileting, not address healing and growth of patients.
- 4. Massage therapy often makes patients "feel" better temporarily but does not lead to improvement in long-term outcomes for patients.
- 5. Lubrication should be used to promote comfort during soothing touch.
- 6. Massage therapy can reduce the need for restraint and medication interventions in patients with dementia.
- 7. A strong relationship between patient and CNA is an extremely valuable therapeutic intervention that leads to improved outcomes.
- 8. This long-term facility could use more non-medication-related methods to help patients heal and improve their quality of life.
- 9. A hand-massage program would be beneficial to patients.
- 10. A hand-massage program would have a positive impact on patient anxiety, depression, and behavioral disturbances

Moving forward, Question 5 read, "Lubrication should be used to promote comfort

during soothing touch." Initially, the average response to Question 5 was 5.9 but after the

soothing touch protocol, which included lubrication, was applied to the CNAs hands as a demonstration during the educational session, this average score increased by 15%. This increase also came with CNA comments such as "I feel like I could fall asleep", "this is so relaxing", and "that feels so nice": all increasing motivation in project participation. Lastly, it is important to note Question 6's scores increased from an average of 5.4 to an average of 6 (9% increase). This Question stated, "Massage therapy can reduce the need for restraints and medication interventions in patients with dementia", showing an increase in the CNA's awareness to alternative means of promoting comfort in patient's diagnosed with dementia and ultimately contributing to less polypharmacy.

#### **Feasibility of Implementation**

In the Pre- and Post-Surveys, questions 11-16 (in the Pre-Survey) and 11-14 (in the Post-Survey) differed. Regarding the Pre-Survey, questions 11-16 reflected specifically on implementation of hands-on touch by CNAs. For example, Question 11 read, "CNAs have sufficient knowledge about using hands-on touch" (average score 5.8), Question 12 read, "CNAs understand the rational for using hands-on touch" (average score 6.1), Question 13 read, "CNAs should be expected to offer massage therapy to patients on a daily basis" (average score 5.5), Question 14 read, "Hand massage is a helpful care option for patients with neurocognitive disorders (dementia)" (average score 5.9), and Question 15 read, "I have sufficient time in my work day to offer hand massages in the care of patients" (average score 5.3). These survey questions served as a useful tool in creating the workflow process and identifying the needs in the CNA's soothing touch education.

In order to understand what needed to happen for CNAs to integrate hand massages into daily cares, one question (Question 16) was asked about specific strategies or support needed prior to project implementation. Of the 80% that completed Question 16, the ability to offer hand massages per CNA feedback required: organizational support according to 25%, workflow process identified by 12.5%, organizational support and resources by 12.5%, resources by 12.5%, training by 12.5%, and all (training, resources, workflow process, and organization support) by 25%. In summary of Question 11-16 responses in the Pre-Survey, CNAs felt they needed organizational support, of which I engaged stakeholders to help further support this pilot; education on how and when to apply hands-on touch to the patients; and they needed a feasible workflow plan for implementation: all of which I incorporated into their educational session.

#### CNA Feedback on Safety, Confidence, and Preparedness for Implementation

Again, the Post-Survey followed each one-on-one, face-to-face experiential education session with demonstration provided by myself, the project manager, offered on three separate occasions at the site. As mentioned in a prior paragraph, Questions 1-10 from the Pre-Survey were re-asked and re-evaluated in the Post-Survey following the education and those results were discussed above. However, Questions 11-14 were different in the Post-Survey and these were asked to evaluate safety, confidence, and preparedness. Regarding these specifics in the Post-Educational Survey, all scores regarding confidence in delivering soothing touch and feelings of preparedness to deliver this method safely and effectively scored between 6.3-7 on average. In total, each CNA ranged in providing between 4-9 hand massages to the residents over the 2-week implementation period. This range appeared lower than expected but I speculate this was due to many working part-time, possible time constraints, or for other unknown reasons.

During this implementation period, many of the CNA's came up to me reporting, "the patient told me about her family and childhood memories, which she has never done before", "I feel closer to him (the patient) now", "she (the patient) told me I was her favorite worker here",

"they all really enjoy it", "she (the patient) said she felt more relaxed and appreciated me." This feedback, again, indicated that the experiential educational delivery method was successful in motivating the CNAs prior to piloting soothing touch to the residents and should be used in piloting future IH interventions.

#### **Sustainability**

As mentioned previously, I was able to collect 60% of all Usefulness and Acceptability Post-Implementation of Soothing Touch Questionnaires. In these questionnaires, 100% of the participants stated they would continue to implement soothing touch into their cares, particularly in the residents with anxiety, stress, high emotions ("sad, mad, or upset"), during morning cares, during a 1:1 staff patient ratio, and "anytime (he or she) can". Two-thirds of CNAs reported they were fully satisfied with implementing soothing touch into their daily care options. However, 16% reported the satisfaction varies depending on the patient as some may refuse and 16% reported he or she was neutrally satisfied in incorporating soothing touch into daily routines but would still try to do so in the future. Of the CNA participants, 100% stated their training was sufficient, that soothing touch to the hands was an effective way to calm residents, and that it was a manageable task if time permits. One CNA reported it was a "great new option to have" regarding utilization in the future. In this particular facility, 83% of the CNAs reported the intervention was feasible with its population of residents with 16% reporting a neutral response to this.

Regarding what resources were needed if full-scale implementation was to occur in other facilities/units, a few said more time allowed for these cares, one stated it could be written or scheduled into morning care routines, and one said increased availability of lotion for lubrication. The responses on system barriers preventing the implementation of soothing touch

were: time, "none, it was easy to do", deciding what resident to provide the soothing touch to, "none, it's easy to do during morning cares when you're already putting lotion on, just add in the massage", "none", and "there were no barriers only that at night the residents never wanted to be woken up" (this particular CNA worked overnight shifts). Only one participating CNA was interested in any additional CAM options but he or she left his or her answer vague in stating, "Yes, anything the residents would enjoy!"

#### Limitations

Limitations in this study included a small sample size and inability to reach all CNAs for participation, greatly in part to the current pandemic and staff turnover. Language barriers also played a part for a few of the CNAs, although this was attempted to be offset by individual faceto-face education and demonstration where questions could be answered and a slower pace could be set if needed. Time to provide the CNAs with education was a limitation as having a longer project timeline could have allowed me, the project manager, to reach more CNAs. Lastly, due to cost, the house stock lotion was used instead of a thick, moisturizing lotion such as Aquaphor or Eucerin, both of which could have provide more nourishment to frail hands. However, of note, there were no reports of adverse reactions to the house stock lotion being used. Again, future research could include a larger sample size of CNAs implementing soothing touch to the residents.

#### Recommendations

By incorporating best available evidence to guide practice change, this QI project introduced soothing touch, one IH modality, as a care option for individuals residing in a LTC facility, particularly those with NCD. The population of interest was limited to CNAs and this project, with a 2-week implementation phase, explored how alternative care options could be incorporated into daily cares and routines. It is important to note that soothing touch is not considered massage therapy, as a certified therapist provides massage therapy. By piloting this introduction of intentionally providing soothing touch to the resident's hands, CNA's awareness, knowledge, and system barriers were assessed and evaluated via survey format.

Per survey feedback, individual, face-to-face experiential education on the benefits of IH followed by a hands-on "M" technique/soothing touch protocol demonstration on each CNA participant before they implemented it to the residents was shown to be a very effective method for motivating participation and buy-in. This format was time-consuming, but it provided the CNAs with a hands-on, individually paced, physical receptivity in how this modality can benefit the LTC residents. Therefore, I would recommend individual or small groups for educational delivery. The conceptual model of Intentional Comfort Touch, which examines how intentional comfort touch can be integrated to promote comfort, intimacy, and feelings of connectedness and ease suffering in a variety of diverse settings and in at-risk populations allowed the CNAs to properly identify key patients that would benefit from this modality. This was reflected by 100% of the CNA participants stating that soothing touch to the hands was an effective way to calm their chosen residents.

Practice change requires stakeholder support, and this project demonstrated a workflow processes that incorporated the voice of all to motivate and encourage CNAs to implement this technique to assist in improving the patient's quality of life and healing. More specifically, the largest barriers to initial implementation of the soothing touch protocol were the time allotment and desire for organizational support, which were endorsed by the CNAs in Cycle 1 of the project. However, after discussing this, many CNAs found routes to mix in and incorporate this modality into their already-established morning or daily routines for patients, instead of adding it to their extensive existing care list, therefore I would recommend this workflow for future implementation. For example, if CNAs are already applying lotion, the CNAs stated it was easy and feasible to add in the < 5-minute intentional soothing touch protocol.

Intentional touch was shown in the literature to decrease staff burnout, an issue many care facilities are faced with (Connor & Howett, 2009). Thus, moving forward, by continuing to utilize the soothing touch protocol, as all CNA participants at this site stated they planned to do, or expanding it to other facilities, it is likely there could be a decrease in staff turnover if stakeholder support, positive patient feedback, and resources, such as appropriate lotion, can continue to be available for sustainability.

For future implementation, soothing touch has been reported in the literature to improve the quality of life in patients with NCD and by offering the full spectrum of IH modalities to patients, resistance to cares and behaviors can be reduced, apathy levels and patient-staff relationships can be improved, and anxiety and pain can be decreased. Today, there continues to be an increased need for providers and other health care employees to offer these, and other IH care options to this vulnerable patient population.

In piloting one IH care option, after CNAs were provided with the proper evidence-based experiential education, it was discovered that soothing touch was found by CNAs to be a feasible method for improving the overall wellbeing while promoting a calming culture to patients with NCD at this practice site. CNAs were satisfied in implementing this soothing touch into their care routines; they were provided with sufficient face-to-face, one-on-one training; and stated it was a manageable task. As mentioned previously, the majority also stated it worked the best to implement soothing touch during morning cares or when patients were feeling "anxious", "stressed", "sad", or "mad".

In moving forward in expanding this to other care facilities, I would recommend utilizing the PDSA model for piloting changes. First by assessing knowledge and attitudes and formulating a workflow diagram based off of this feedback. Then providing a tailored education session with demonstration to the participants followed by re-assessing knowledge and confidence. The next step is to implement the protocol and lastly to assess the usability and acceptability.

The CNA participants at this practice site concluded that this emotionally oriented CAM modality was easy to implement, enjoyable, and they experienced positive patient feedback and increases in connectivity. By CNAs directly evaluating their personal use of this modality, they gained first-hand exposure to its receptivity and can remain motivated to continue implementation into the future. In order for a care facility to permanently implement soothing touch or other IH options into practice, I would recommend the educational training to occur at orientation and annually thereafter along with stakeholders continuing to provide feedback and support while maintaining openness for this and other IH care options. I would also expand for this education to be provided to nurses along with the CNAs as the exchange of human warmth through intentional touch can improve all staff-patient relationships and increase levels of empathy, closeness, drive, reassurances, and trust. Ultimately, having increased awareness of an intentional touch model can encourage health care employees to implement intentional comfort or soothing touch into routine tasks to promote an increase in job satisfaction, empowerment, and self-efficacy and improve physiological outcomes for patients with NCD.

## Appendix A: Pre-Implementation and Pre-Educational Survey

<b>Absolutely Disagree</b>	1	2	3	4	5	6	7	<b>Absolutely Agree</b>
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- 1. CNA's knowledge and use of hands-on touch can impact a patient's healing.
- 2. Therapeutic touch improves healing.
- 3. The CNA's role is to provide bathing and toileting, not address healing and growth of patients.
- 4. Massage therapy often makes patients "feel" better temporarily, but does not lead to improvement in long-term outcomes for patients.
- 5. Lubrication should be used to promote comfort during soothing touch.
- 6. Massage therapy can reduce the need for restraint and medication interventions in patients with dementia.
- 7. A strong relationship between patient and CNA is an extremely valuable therapeutic intervention that leads to improved outcomes.
- 8. This long-term facility could use more non-medication-related methods to help patient's heal and improve their quality of life.
- 9. A hand-massage program would be beneficial to patients.
- 10. A hand-massage program would have a positive impact on patient anxiety, depression, and behavioral disturbances
- 11. CNAs have sufficient knowledge about using hands-on touch as a component of their care.
- 12. CNAs understand the rationale for using hands-on touch.
- 13. CNAs should be expected to offer massage therapy to patients on a daily basis.
- 14. Hand massage is a helpful care option for patients with neurocognitive disorders (dementia).
- 15. I have sufficient time in my workday to offer hand massage in the care of patients.
- 16. My ability to offer hand massage requires (check all that apply):
  - a. Training
  - b. Resources (e.g., handouts, massage oils or lotions, extra time)
  - c. Workflow process (e.g., how will I fit this care into my schedule)
  - d. Organizational support
  - e. Other (please specify)

## **Appendix B: Educational Session Outline**

- 1. What is integrative health (IH)?
  - IH focuses on incorporating both allopathic (medication) and CAM (non-medication) treatment options to provide the most optimal health and healing environments for patients (Halm & Katseres, 2015).
  - By incorporating the full spectrum of healing, using IH modalities can drastically improve the quality of life of many elderly residents in long-term care facilities, particularly in those with neurocognitive disorders (NCD) (dementia).
  - The benefits of IH and soothing touch can include improvements in:
    - Anxiety
    - Chronic pain
    - Depression
    - Staff-patient relationships
    - Behaviors and resistance to cares
    - Comfort and relaxation
    - Sleep
    - Blood pressure and heart rate
    - Physiological indicators
    - Feelings of connectedness
    - Being cured
    - Global sense of wellbeing and healing
    - Personal transformations
- 2. What are some examples of IH?
  - Physical exercise, yoga, **massage therapy**, music, biofeedback, aromatherapy, support groups, nutritional advice, meditation, guided imagery, energy healing, hypnotherapy, qigong, and homeopathy (Kakai, 2013)
- 3. Why is IH important to me (CNA)?
  - About 80% of this NCD (dementia) population exhibits changes in mood, delusions, agitation, apathy, sexual disinhibition, wandering, repetitive questioning, and calling out (Legere et al., 2017)
  - Unfortunately, these behaviors can cause caregiver strain or burnout (Legere et al., 2017)
  - In order to control behaviors in a facility, providers and staff resort to physical restraints or often antipsychotics, that can lead to increased risks of cardiovascular accidents and mortality, instead of considering the unmet needs or stressors the patient is experiencing (Legere et al., 2017; Seitz et al., 2012)
- 4. What the difference between soothing touch and massage therapy?
  - A board-certified massage therapist must provide massage therapy
  - Soothing touch can be provided by CNA/PCAs, family members, nurses, providers, ect. (Wellings, 2015)

- Soothing touch, by means of a hand massage, is inexpensive, patient-centered, sustainable, and feasible
- A hand massage can serve as means to communicate empathy, concern, and compassion on a deeper and more personal level (Braithwaite, 2017)

5. How to perform soothing touch?

• See attached description, which will be placed at all nursing stations, and face-to-face training by the DNP project leader (Appendix C)

6. How to blend soothing touch into care routines?

- For the purposes of this doctorate project, after barriers are identified and modified in Cycle 1 and the face-to-face education is completed along with pre- and post-educational surveys, CNAs will be asked to perform soothing touch by:
  - Selecting one resident per shift
  - Provide soothing touch to their hands using the Soothing Touch Protocol
  - Continue this during every shift for two weeks total

7. How the project will play out at the end?

- After the 2-week implementation of soothing touch to the LTC residents, CNAs will take a survey regarding the usefulness and acceptability of instituting alternative and complementary therapies (Appendix E)
- CNAs will be provided with any further education and feedback regarding their implementation of soothing touch

## **Appendix C: Soothing Touch Protocol**

CNAs are to perform the following modality by selecting one resident per shift, provide soothing touch to their hands using the Soothing Touch Protocol, and continuing this during every shift for two weeks total.

Soothing Touch:

- Offer hand massage TO patients and describe the benefits of soothing touch on healing (decrease pain and anxiety and improve physical, emotional, and spiritual well-being)
- Do not expect a patient to ask for a hand massage
- Can take place after group activities, for example after the daily stretching exercises at 10:00, after physical or occupational therapy; before bed; if patient requests it, and/or when/if patient is experiencing pain, depression, anxiety, or resistance to cares
- To decrease friction, perform soothing touch WITH lubricating nonprescription house stock lotion, cream, or Aquaphor for patients with fragile skin to avoid drying out
- Do NOT use topical products if patient is allergic to them
- STOP soothing touch if patient is experiencing pain, discomfort, grimacing, agitation, yells out, or is pulling away
- Do NOT perform soothing touch if patient refuses
- Only perform on INTACT, UNBROKEN skin surfaces
- Following a modified manual or "M" technique, which encompasses performing massage strokes in groups of threes' using a set VERY SLOW speed and the set 3/10 pressure that never changes (Buckle et al., 2008):
  - Use a 3/10 pressure according to what the PATIENT defines as a 3/10 amount of pressure, not what the CNA defines as 3/10 pressure
  - 1. Start by stroking the patient's forearm up and down 3 times:
    - 1<sup>st</sup> stroke establishes contact and gets the patient's attention
    - 2<sup>nd</sup> stroke enables a patient to recognize your touch
    - 3<sup>rd</sup> stroke lets the patient know what is going to happen and the patient can begin to relax
  - 2. Starting with the palm down, perform slow lateral movements from inward to outwards using both of your thumbs on the back of the patient's hand, starting at base of wrist and moving down towards the knuckles, massage each section 3 times before moving down to the next section of the back of his/her hand.
  - 3. Move towards the fingers by starting on the pinky finger knuckle, encircle 3 times, then move to the next joint in the pink finger, ending with the tip/joint of the pinky finger.
  - 4. Stroke down entire finger once knuckle circles are complete for that finger.
  - 5. Repeat knuckle and joint encircling followed by entire joint stroke to all fingers.
  - 6. Flip hand over to focus on palm of hand. Perform slow lateral movements from inward to outwards using both of your thumbs on the palm of the patient's hand, starting at base of wrist and moving down towards the knuckles, massage each

section 3 times before moving down to the next section of the back of his/her hand.

 7. Massage up the patient's forearm 3 times using continued VERY SLOW speed & pressure.

#### **Appendix D: Post-Educational Survey**

The function of the formation of the for	Absolutely Disagree 1	1 2	3	4	5	6	7	<b>Absolutely Agree</b>
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- 1. CNA's knowledge and use of hands-on touch can impact a patient's healing.
- 2. Therapeutic touch improves healing.
- 3. The CNA's role is to provide bathing and toileting, not address healing and growth of patients.
- 4. Massage therapy often makes patients "feel" better temporarily, but does not lead to improvement in long-term outcomes for patients.
- 5. Lubrication should be used to promote comfort during soothing touch.
- 6. Massage therapy can reduce the need for restraint and medication interventions in patients with dementia.
- 7. A strong relationship between patient and CNA is an extremely valuable therapeutic intervention that leads to improved outcomes.
- 8. This long-term facility could use more non-medication-related methods to help patients heal and improve their quality of life.
- 9. A hand-massage program would be beneficial to patients.
- 10. A hand-massage program would have a positive impact on patient anxiety, depression, and behavioral disturbances
- 11. I feel well prepared to administer an effective hand massage.
- 12. I feel well prepared to administer a safe hand massage.
- 13. A hand-massage program would improve my CNA practice.
- 14. I feel confident providing soothing touch to patients at this long-term care facility in the future.

## Appendix E: Usefulness and Acceptability Post-Implementation Survey (Cycle 3)

Survey CNAs about the usefulness and acceptability of instituting alternative and complementary therapies by asking:

- Number of hand massages given in the 2-week implementation period:
- How satisfied are you with implementing hand massages into your daily care options?
- Was your training sufficient to apply this skill to practice?
- Did you feel that providing soothing touch by means of hand massages was a manageable task?
- When might you use this care option in the future?
- Do you believe that hand massages are an effective way to calm residents?
- Will you continue to utilize this in the future?
- Do you believe this intervention is feasible for this facility and its population of residents?
- What resources are necessary if full-scale implementation is to occur?
- What system barriers prevented implementation of soothing touch?
- $\circ$  Are there any additional care options you would like to know more about?

Memorandum to File

To: Steve Fritzke, Executive Director

From: Brianna Kvanli, AGNP, DNP Project Manager

Date: January 8th, 2020

Subject: DNP Project Implementation

This DNP Project is a Quality Improvement (QI) initiative and the population of interest is limited to certified nursing assistants (CNA)s employed at this long-term care facility located in the St. Paul area. The practice intervention includes the introduction of hand massage into daily care options and this activity, per policy at the practice site, is within the scope of practice for CNAs. This pilot QI project intends to examine introduction of complementary and alternative care into this practice site with the intent of expanding options following this initiative.

By signing this document, you agree that it is within the institution's policy to allow CNAs to perform hand massages in this Quality Improvement initiative.

Signature: Date: 1-8-2020 Signature: bManafrancoDate: 1-8-20

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