

5-15-2018

Implementing Evidenced-Based Tools and Obesity Bias Training when Counseling Overweight and Obese Truck Drivers

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IMPLEMENTING EVIDENCED-BASED TOOLS AND OBESITY
BIAS TRAINING WHEN COUNSELING OVERWEIGHT
AND OBESE TRUCK DRIVERS

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A doctoral project submitted in partial fulfillment
of the requirements for the

Doctor of Nursing Practice

School of Nursing
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The Graduate College

University of Nevada, Las Vegas
May 2018

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March 12, 2018

This doctoral project prepared by

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entitled

Implementing Evidenced-Based Tools and Obesity Bias Training When Counseling
Overweight and Obese Truck Drivers

is approved in partial fulfillment of the requirements for the degree of

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Abstract

Many Americans are either overweight or obese, but commercial truck drivers are at an even higher risk by nature of their occupation. The 2010 Survey of U.S. Long-Haul Truck Drivers found that 22.8% were overweight, 68.9% were obese, and 17.4% were considered morbidly obese. The concern is that obesity is a gateway to multiple medical disorders, to include obstructive sleep apnea, cancer, diabetes, and cardiac disease. Despite growing concerns of obesity, healthcare providers face problems when counseling and discussing the issue with patients. The failure of healthcare providers to discuss obesity or the impending issue with patients (i.e., truck drivers) can lead to negative consequences, and the lack of weight management counseling and discussions can lead to poor health-related outcomes.

The purposes of the doctoral in nursing practice (DNP) project were to 1) determine healthcare providers' attitudes, beliefs, and perceived self-efficacy when counseling overweight and obese truck drivers and 2) preliminarily evaluate whether an evidence-based obesity counseling tool could improve healthcare providers' perceived self-efficacy when counseling overweight and obese truck drivers. To accomplish this practice intervention DNP project, healthcare providers at PepsiCo clinics from around the country were recruited to voluntarily participate.

Prochaska and DiClemente's Transtheoretical Model (or Stages of Change) was used to support the theoretical framework for the DNP project. The Transtheoretical Model represents change as an ongoing process that involves a series of six stages over time: pre-contemplation, contemplation, preparation, action, maintenance, and termination. This model was used to support the development and implementation of the intervention.

Participants' self-efficacy in counseling obese and overweight truck drivers was assessed in the pre- and post-webinar-based practice intervention using the Attitudes Toward Obese Persons Scale (ATOP), Beliefs About Obese Persons Scale (BAOP), and healthcare provider General Self-Efficacy Scale (GSES). The ATOP scale had twenty questions that measured attitudes regarding obesity, and the BAOP scale had eight questions designed to measure beliefs regarding obesity (Gujral, Tea, & Sheridan, 2011). The greater the score on the ATOP and BAOP scales, the more favorable the attitudes and beliefs held by a healthcare provider regarding an obese truck driver. The GSES was used to query the healthcare provider regarding one's competence with difficult patient situations, such as counseling a truck driver on obesity.

The setting for this project was select on-site wellness clinics across the country that were associated with the Pepsi Beverages Company and managed by the Johns Hopkins Division of Occupational and Environmental Medicine, a large non-profit teaching hospital. Healthcare providers from this setting were recruited to participate in the study. The participants completed identical pre- and post-webinar-based practice intervention surveys that included the ATOP, BAOP, and GSES questionnaires. All data were collected anonymously through online questionnaires using the Qualtrics website. The DNP student distributed the survey web link to all participants via email. The dissertation chair and DNP student analyzed the statistical data using IBM SPSS Statistics for Windows, version 23. The first data analysis phase occurred immediately after the pre-intervention data were collected. The purpose of this phase was to analyze the data for descriptive statistics to inform the development of the intervention.

The intervention was a webinar-based practice intervention that used evidenced-based tools to help healthcare providers when counseling obese truck drivers. The webinar presentation was based on three evidence-based tools used for obesity counseling: the Maine Youth

Overweight Collaborative program, the Five A's framework on obesity counseling, and the U.S. Department of Health and Human Services obesity counseling algorithm. The 60-minute webinar consisted of a 45-minute presentation followed by a 15-minute question and answer session.

Healthcare providers who participated in the pre-webinar survey questionnaires and webinar-based practice interventions received a second survey questionnaire link identical to the first for completion. The second data analysis phase occurred after the post-intervention data were collected. The purpose of this phase was to compare the pre- and post-intervention data. The pre- and post-intervention data were first coded to the instrument instructions and then inputted into SPSS. Then, frequency and descriptive statistics (mean and standard deviation) were conducted to evaluate for trends between the pre- and post-intervention data. Although the goal was to conduct independent t-tests, the sample sizes were too small.

The project identified improved healthcare provider attitudes toward obese patients and beliefs that obesity was not under an obese person's control. Further, post-intervention surveys identified an improvement in healthcare provider self-efficacy when counseling obese patients (i.e., truck drivers) with the use of evidenced-based tools, including specific, measurable, achievable, realistic, and time-bound (i.e., SMART) goals. Improving the communication between providers and truck drivers theoretically should result in more honest and effective conversations about weight management. This could ultimately result in improved weight management in overweight and obese truck drivers, leading to improved health.

Keywords: obesity, healthcare providers' attitudes and obesity, healthcare providers' attitudes toward obesity, overweight truck drivers, obese truck drivers.

Acknowledgements

I would like to extend a special thank you to my committee chair, Dr. Michael Johnson. His vision, experience, knowledge, gracious support, and endless hours and patience in guiding me through this project were very much appreciated. It is our responsibility as nurses, leaders, and communicators to encourage other nurses in a similar manner with grace and professionalism as he has displayed.

I would also like to thank my committee members: Dr. Alona Agnosta, former member; Dr. Jessica Knurick; and new member, Dr. James Navalta, all of whom have provided valuable insight and direction in the project. A huge thank you to my editor, Sarah Lyons, as her editing skills have made this final project a reality. I also extend much gratitude to my family for their love and support—even in my most challenging hours—as well as to my colleagues, mentors, and department administration at Johns Hopkins Medicine, who have provided valuable insight, direction, and guidance in this project.

Finally, I'd like to extend a special dedication to my mentor and colleague, Dr. Susan VanBeuge. She has been—and should be—a role model for all nurses, no matter what initials or title they carry. If not for her prodding, I would have neither thought to push myself into the unfamiliar territory of a doctoral program nor thought it possible.

Dedication

This project is dedicated to those healthcare providers and patients who have touched my life. I hope that the work invested in this document can help to spark change in some way. We must unite and brainstorm solutions so that discussions regarding obesity are easier and less stigmatizing for all.

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Chapter I

Introduction

In the United States (U.S.), we live in a convenience society, abounding with holidays and occasions that revolve around food. No longer must we be hunters and gatherers to obtain our meals, but much of what we eat now is processed and full of saturated fat, carbohydrates, and sodium. Furthermore, as drive-thru windows allow customers to grab a bag of food while seated in their car, minimal exercise or exertion in calories is expended in this food-gathering and exchange effort. It is easy to forget the simple equation that weight gain is related to the number of calories ingested versus the number of calories generated in the form of exercise.

Many Americans are either overweight or obese, but commercial truck drivers are at an even higher risk by nature of their occupation (Hege, Apostolopoulos, Perko, Sonmez, & Strack, 2016). The 2010 Survey of U.S. Long-Haul Truck Drivers found that 22.8% were overweight, 68.9% were obese, and 17.4% were considered morbidly obese (Sieber et al., 2014). The concern is that obesity is a gateway to multiple medical disorders, to include obstructive sleep apnea, cancer, diabetes, and cardiac disease.

Despite growing concerns of obesity, healthcare providers face problems when counseling and discussing the issue with patients. The literature is rich in data when it comes to discussing obesity and the associated challenges with patients, but social stigma and the personal comfort level of each healthcare provider can either facilitate a conversation or create a barrier during the patient encounter. The failure of healthcare providers to discuss obesity or the impending issue with patients can lead to negative consequences, and the lack of weight management counseling and discussions can lead to poor health-related outcomes.

Problem Statement

Healthcare providers are uncomfortable discussing issues of obesity with their patients, specifically truck drivers. Thus, healthcare providers often fail to counsel or inconsistently counsel patients about obesity.

Significance of the Project

This DNP project was significant because informing a patient that he/she is overweight or obese is a difficult conversation, and many healthcare providers are not comfortable with these discussions. As observed with Johns Hopkins' healthcare providers within the Pepsi Beverages Company Employee Wellness Center clinics, the potential benefits of the project included the following: a) consistent counseling for overweight and obese patients on weight loss to improve their health status; b) improved communication between healthcare providers and patients; and c) improved comfort level of healthcare providers when counseling patients on obesity, resulting in the delivery of forthright, honest, and effective information for patients.

The overall impact of the project was the improvement of healthcare provider practice by helping providers a) understand their personal attitudes and beliefs toward obese patients (e.g., truck drivers) and b) comfortably and consistently counsel patients on obesity when faced with the situation (e.g., during a truck driver Department of Transportation examination).

Purpose Statement

The purposes of the doctor in nursing practice (DNP) project were to 1) determine healthcare providers' attitudes, beliefs, and perceived self-efficacy when counseling overweight and obese truck drivers, and 2) preliminarily evaluate whether an evidence-based obesity counseling tool could improve healthcare providers' perceived self-efficacy when counseling overweight and obese truck drivers.

Chapter II

Review of the Literature

The literature review was conducted based on an extensive internet search using nursing Cumulative Index of Nursing and Allied Health Literature, medical (i.e., PUBMED, MEDLINE), Cochrane, Agency for Healthcare Research and Quality, and Google Scholar databases. An initial search was conducted using key words such as *obesity counseling, obesity training, weight control counseling, health care provider bias in obesity, nurse training in obesity, nurse practitioner counseling obese patient, healthy patient, overweight patient, obese truck driver, overweight truck driver, and counseling overweight truck driver*. The combined searches returned over 20,000 documents in the literature alone; however, many of these searches were irrelevant and needed to be refined for specificity. The literature was chosen based on the following: a) relevant to the study (i.e., discussed healthcare provider and patient counseling interventions specific to obesity), b) published in the English language, and c) limited to the last 16 years to show the trend and enormity of the problem of obesity.

Obesity in America. Many Americans live a sedentary lifestyle, coupled with poor food choices and limited exercise opportunities. This lifestyle places many individuals at high risk for developing obesity and associated chronic medical conditions. This issue has been a topic of concern since 1979, when U.S. government officials recognized obesity as one of many health-related issues in its report, *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*, in *Healthy People 2010 Understanding and Improving Health* (United States Department of Health and Human Services, 2000). The U.S. Secretary of Health and Human Services, Donna Shalala, had challenged healthcare providers to take the necessary steps to educate their patients on healthful attitudes concerning obesity. After almost 30 years

following the onset of this initiative, we are still missing the mark. Currently, the U.S. is on a steady trend toward increased obesity issues counter to the goal of obesity reduction.

Based on the National Health and Nutrition Examination Survey (Fryar, Carroll, & Ogden, 2014), obesity is defined as a body mass index (BMI) greater than or equal to 30.0, and extreme obesity involves a BMI of greater than or equal to 40.0. BMI is a measurement calculated by weight in kilograms divided by height in meters squared (kg/m^2), and it is commonly used to classify overweight (BMI 25.0–29.9 kg/m^2), obese (BMI ≥ 30.0 kg/m^2), and extremely obese (BMI ≥ 40.0 kg/m^2) patients (Hutfless et al., 2014). Studies show that approximately 33.9% of Americans 20 years and older are overweight. Additionally, 35.1% of Americans are obese and 6.4% are extremely obese (Fryar et al., 2014). As of this year, every state in the nation now has an obesity rate of 20% or greater (Giannini, 2017).

Obesity is draining American pocketbooks insidiously through obvious and unintended consequences in the form of rising healthcare costs. Estimates citing the costs of obesity in the U.S. healthcare system vary across the literature, ranging from 117 billion dollars each year (Boardley, Sherman, Ambrosetti, & Lewis, 2007) to 2 trillion dollars in 2005 or \$6,700 per person (Martin, Church, Bonnell, Ben-Joseph, & Borgstadt, 2009). These costs are affecting the bottom line for Americans in the form of the gross domestic product, and costs include care related to complications and disease comorbidities, such as heart disease, cancers, and joint destruction and repair.

In addition to a financial cost, obesity also comes with social stigma. The literature reports that obese individuals are routinely discriminated against and can experience economic hardship and social isolation (Morrison, Roddy, & Ryan, 2009). Many studies have been conducted to determine if one's environment places the individual at additional risk for

becoming obese, otherwise known as “obesogenic.” Mackenbach et al. (2014) found minimal evidence for an association between characteristics of the environment and one’s weight status. Therefore, Mackenbach et al. (2014) did not agree that the physical environment influenced obesity.

Obesity in Truck Drivers. Obesity has been described as a defiant public health problem, resistant to interventions designed to prevent it (Pronk & Narayan, 2016). Social influences, including family, cultural beliefs, workplace environment, and community design, can interplay on an individual’s body weight (Pronk & Narayan, 2016), and many of these influences exist in the lifestyle of a commercial truck driver. Members of this community are at high risk for obesity and associated chronic health problems because of the conditions of their occupation. They are often away from home for extended periods of time, lacking control over which foods they can access (e.g., fresh fruit and vegetables) and having little opportunity to exercise. While a study published by Whitfield-Jacobson, Prawitz, and Lukaszuk (2007) found that truck drivers want to have healthy options to eat while traveling on the road versus the stereotypical “truck stop greasy spoon” food, this desire may not be as great as the individual’s free will to overeat, make poor food choices, or forgo exercise. Further, while some truck drivers have medical conditions prone to causing obesity, the risk of such conditions becomes apparent when considering an analysis of data from 1997–2002 of occupations in the United States. The truck driving community (i.e., motor vehicle operators) was identified as the occupation with the highest overall prevalence of obesity among all its members (Gu et al., 2014).

The lifestyle experienced by truck drivers exacerbates obesity issues. First, truck drivers work long days, averaging 11 or more hours daily. Many drivers are paid by the mile, which means they stay out on the road longer. Hege et al. (2016) found that longer work hours increase

the odds of developing obesity among truck drivers because of poor nutrition and lack of proper exercise. Furthermore, truck drivers face challenges with maintaining and managing delivery schedules, which results in erratic eating patterns and decreased opportunities or willingness to exercise. In addition to varied and/or extended work hours, truck drivers are often under time constraints to deliver a load or arrive at a location to pick up a load to receive payment. This is referred to as hours of service and equates to money in a truck driver's pocket. Because of the hours of service time constraints, there is typically little time for self-care in the form of proper eating or exercising. Truck drivers can easily consume upwards of 3,000 calories per day of fatty and salty foods, which has resulted in this profession being identified as obesogenic (Olson et al., 2016). Finally, less obvious factors can also contribute to obesity. For instance, truck drivers are often subject to small and cramped sleeping quarters, which may result in disrupted sleep patterns. A truck driver may also be under unusual stress to make a delivery, and social contact with family and friends may be limited—all taking a toll on the individual's health (Olson et al., 2016). Hege et al. (2016) cite that truck driving is classified as one of the riskiest occupations, and the role creates some unintended consequences, including the potential to develop an unhealthy lifestyle, obesity, and chronic health conditions.

Healthcare Provider Obesity Attitudes. There is much negativity surrounding obesity. Schwartz, Vartanian, Nosek, and Brownell (2006) cite that some individuals would rather give up a year of life or suffer divorce rather than become obese and felt that obesity was attributed to being bad or lazy. The literature also indicates that some healthcare providers harbor negative attitudes and beliefs about obesity, which may be especially evident when initiating discussions or counseling patients on obesity. Schwartz et al. (2006) found negative stigma against obese patients, which can detract from the relationship between healthcare providers and patients.

Budd, Mariotti, Graff, and Falkenstein (2011) discuss that while obese patients and truck drivers continue to receive optimal care, healthcare provider attitudes have changed little and remain negative toward obese patients. Many healthcare providers find it difficult to start the conversation of obesity with their patients because of these negative attitudes, and they may struggle with the sensitive subject of obesity while trying to stay focused and timely. Gujral, Tea, and Sheridan (2011) conducted a study on nurse's attitudes toward obese and overweight patients, and their findings suggest that annual bariatric sensitivity training could be helpful in the workplace to improve attitudes toward obese patients. Siegelman, Woods, Bisan, and Heron (2016) also discuss these persistent issues in healthcare delivery and designed a study to address obesity bias among healthcare providers by soliciting providers' feelings and attitudes toward obese patients. A similar tool could be useful and applied in the DNP project.

Many tools exist for healthcare providers to determine their attitudes toward obese individuals. A few of these tools used to evaluate bias include the Attitudes Toward Obese Persons Scale (ATOP), Beliefs About Obese Persons Scale (BAOP; Gujral et al., 2011), and the Implicit Association Test (Siegelman et al., 2016). These tools can help providers develop a better personal understanding of their tolerance levels toward obese patients, which can be the first step in a working relationship.

Healthcare providers should take time (e.g., team or annual employer meetings) to understand their personal attitudes toward obesity as well as determine the following when caring for an obese patient: personal perceptions of obesity, personal attitudes and beliefs, and strategies that can be used to counsel patients in time-limited encounters. Since providers who express low reward and negative attitudes toward obesity are less likely to counsel obese patients, there is much work to be done to change healthcare providers' perspectives of obesity.

Healthcare Provider Obesity Counseling. A review of the literature from the U.S. Preventative Services Task Force recommends that clinicians screen all adults for obesity and offer intensive counseling and behavioral interventions to promote sustained weight loss for obese adults (LeBlanc, O'Connor, Whitlock, Patnode, & Kapka, 2011). Pertinent findings indicate that counseling measures with a focus on behavior modification were important for successful weight loss in the adult, and that with or without medication (e.g., weight loss specific), primary care-based obesity behavioral interventions yielded clinically meaningful weight loss (LeBlanc et al., 2011). The direction is that healthcare providers should be counseling their patients on obesity when identified during the patient visit.

The actions of healthcare providers, such as reinforcing positive food choices (e.g., coaching), exercise, and weight goals as well as leveraging support groups and interactive tools, can help patients on their journey toward success. Unfortunately, healthcare providers are not counseling overweight and obese patients adequately, often due to a lack of time and funding. Education and pertinent discussion about obesity can require multiple encounters and repetitive interactions between patient and provider, and limited face time and resources (e.g., access to free Internet weight loss tools), compounded with burgeoning communication issues with obese patients, may prevent adequate support. Even with sufficient time and resources, determining the type and frequency of obesity counseling for a patient is not always a simple task. A healthcare provider must consider the patient's age, physical deficits, personality, learning capabilities, and willingness/readiness to receive new information. Considering the comorbidities associated with obesity, such as cancer, heart disease and diabetes, it is critical that weight loss counseling occurs for these patients.

Despite the obstacles presented by time and resources, healthcare providers can leverage other means to ensure critical support is provided to obese patients. The Lifestyle, Exercise, and Nutrition study, conducted by Harrigan et al. (2016), identified that phone counseling was an effective alternative to a face-to-face visit with a healthcare provider. Other options include referrals to weight management programs directed by registered dietitians and behavioral specialists. Both options offer alternatives to those providers limited by resources and time.

Significance to Advanced Nursing Practice. The American Association of Nurse Practitioners articulate that nurse practitioners are in a distinct leadership role to assist in this coordination of care for optimal patient outcomes. The American Association of Nurse Practitioners (n.d.) suggests the following regarding coordinated care and team approaches, which should be considered when discussing the issue of obesity counseling:

Healthcare teams consist of patients and their healthcare providers; the healthcare team does not belong to a single provider; healthcare teams are dynamic, with the needs of the patient directing who best can meet their needs at any given point of time; and flexible frameworks are required for innovation and creation of emerging models to provide high quality care.

Since the implementation of the Patient Protection and Affordable Care Act, nurse practitioners have had an opportunity to implement leadership skills as team leaders. They have led this effort by coordinating safe and highly effective patient care in physician and nurse practitioner-based offices. However, the obesity issue is steadily worsening, and there is no evidence that we have made a dent in its prognosis. We must collectively come together in the medical community to solve this patient challenge.

Obesity is a significant public health problem that nurse practitioners are well positioned to assist as team leaders and/or members collectively for the patient's overall benefit. Spending even a few minutes to discuss weight loss or acknowledge an obese patient's condition can have a significant impact (Sciamanna, Tate, Lang, & Wing, 2000). Unfortunately, discussions of physical activity and nutrition are not always a priority during a patient encounter, and patients report that these topics are typically discussed for less than 1 to 2 minutes (Ahn, Smith, & Ory, 2012). While physicians often cannot provide sufficient support, a nurse practitioner has more time to spend with his/her patients. Therefore, the time is now for doctoral-prepared nurse practitioners to lead the patient's healthcare team to help slow and reverse the obesity epidemic. We must be making the diagnosis of obesity, and we must understand how we feel and what we believe about obese patients. Through this DNP project and by forging a new path of understanding for obese patients such as truck drivers, the hope is that we can improve care across the spectrum for all obese patients.

Needs Assessment and Description of the Project

Obesity in our society has been discussed in the literature for over 30 years and has been an equal concern for the U.S. government because of its rising costs and demands for fiscal healthcare dollars. The need for this DNP project was identified because the obesity epidemic continues to grow and spiral out of control. Some healthcare providers are uncomfortable with obese patients, and these attitudes and behaviors regarding obesity can affect how a healthcare provider manages the care of a patient. There is also an ongoing issue with healthcare providers and their inability to properly counsel an obese or overweight patient. A review of pertinent literature was conducted to help identify public sources of local demographic information, if

negative attitudes existed among healthcare providers regarding obesity, and if there was an appropriate amount of time spent during the patient encounter regarding the subject.

First, a needs assessment was conducted to determine (1) if the population of focus (i.e., healthcare providers for obese truck drivers) would be a feasible project and offer sufficient data and (2) if the population affected by obesity was overweight or had the potential to benefit from the project. Next, key stakeholders were identified and selected as partners, an organizational assessment was conducted to identify the readiness and willingness for change, a project team selection was conducted, a cost-benefit analysis was performed, and the scope of the project was defined.

An internet review of southern Nevada regional data revealed that obesity is widespread in the southern Nevada community. The *Southern Nevada Community Health Improvement Plan* identified obesity as a high priority chronic disease and established a goal to reduce obesity in southern Nevada by increasing physical activity and promoting healthy diets (Southern Nevada Health District, 2016). Statistics reveal that, in 2012, approximately 21.7% of Clark County residents did not get recreational exercise, and obesity rates were high among adolescents and non-Hispanic Black residents (Southern Nevada Health District, 2016). The information in the local report suggests that tailored interventions are needed to address health disparities, which is an underlying premise for changing healthcare provider attitudes (Southern Nevada Health District, 2016).

Population Identification

Driving a truck as an occupation puts an individual at a higher risk for developing obesity; however, most truck drivers may neither be aware that they are at higher risk for obesity nor realize the common health risks associated with obesity, such as diabetes or sleep apnea.

While many truck drivers feel they achieve plenty of exercise or have ample opportunity to eat a healthy meal, others do not. Simply climbing in and out of a truck all day or hitching a trailer to a cab is insufficient exercise to burn an adequate amount of calories. Whitfield-Jacobson et al. (2007) note that long-haul truckers eat poorly and lead sedentary lifestyles, leaving drivers at a greater risk for developing medical problems than the general population.

The organization analyzed for this project was a for-profit global food manufacturing and distribution entity with wellness center facilities across the U.S. The employee wellness center facilities are comparable to primary care clinics specified within a community.

Project Sponsor and Key Stakeholders

The project sponsor was a non-profit healthcare university that partners via contractual agreement with the organization to build and staff employee wellness center clinics across the country. The wellness center clinics census can vary in size based on the number of employees at each plant location, which often exceeds 200 personnel (not including spouses or children, who are not seen routinely in the wellness center clinics). The university and organization have enjoyed a successful contract relationship for over 13 years, with thousands of patients served, medical conditions identified, and lives changed or improved because of this partnership. Furthermore, there were multiple opportunities for healthcare providers to interact with overweight or obese patients.

There were both internal and external key stakeholders who had an interest in the outcome of the project. Individual external university stakeholders that partnered with the student included the DNP committee chair and committee members, who were responsible for guiding and mentoring the DNP student through the project process. Individual internal university stakeholders included the DNP student employer university Division Medical

Director, the Assistant Medical Director, the Assistant Director, regional managers, and site-specific program coordinators (i.e., healthcare providers). Collectively, these key university individuals wanted to ensure the quality of care that was being provided. The external stakeholders included the patient(s) and the organization whose employees comprise the patients seen in the wellness center clinics. The health and wellness of these employees directly related to absenteeism: a topic of concern for many employers. Obesity, as previously discussed, gives rise to other chronic illnesses, and it is these illnesses that can keep an individual from performing their job and increase the costs of insurance programs for employers. These external stakeholders have a vested financial interest in gaining an edge on this obesity crisis.

Finally, the patient, is the most significant and key stakeholder. The patient is the one deserving of a quality experience when he/she has an encounter with a healthcare provider. It is the duty of every healthcare provider who encounters an overweight or obese patient to make and take the time to provide adequate counseling. If this is not possible, the healthcare provider should refer the patient to a specialist or program suited for in-depth training and counseling in accordance with *Healthy People 2020* goals.

Organizational Assessment

An organizational assessment was conducted to ensure that the project mission and goals aligned with the university and organization. This was completed by administrative discussions and DNP project proposal presentation. Caring for an obese patient through effective counseling is one avenue to improve chronic disease progression, and working with healthcare providers within the university and organization would help to determine successful training techniques as well as gaps and opportunities for improvement. Identification of gaps provided areas for growth

among healthcare providers. Ultimately this equates to improved quality of care and quality of life for the obese patient.

Assessment of Available Resources

The costs to implement this project were estimated at \$1,540 (see Appendix I). The project manager's time was considered at no cost since it was part of a graduate school function. A major portion of the costs associated with training the healthcare providers during the webinar was donated by the internal university stakeholder. This was an educational opportunity for those who volunteered; therefore, the university administration chose to absorb the cost of training. The webinar training was incorporated with other required meetings (i.e., monthly conference calls), which kept costs at a minimum to the non-profit university and DNP student.

Team

The team for the project included the DNP student, the DNP project committee chair and DNP committee, the statistician, the medical director, the assistant medical director, the assistant director, the west coast regional manager, and the program coordinators (i.e., healthcare providers). Each person on the team would have a separate but distinct role in the process, with some roles more significant than others. Each participant's role is outlined as follows:

- The DNP student developed, implemented, and evaluated the project and process.
- The DNP project committee chair guided, assisted, and mentored the DNP student through the proposal and defense process and IRB submittal and review.
- The DNP committee oversaw the DNP project review and mentored the project to final defense.
- The statistician was responsible for general statistics-related questions and data analysis review as needed for the DNP project.

- The medical director and assistant medical director gave approvals and co-sponsored the project.
- The assistant director: 1) oversaw negotiations with legal and IRB from the university aspect to ensure a timely process for the application of the project; 2) oversaw the day-to-day operations of the clinics; and 3) was be a resource for information gathering from the university perspective as well as a facilitator for implementing the project at other locations.
- The West coast regional manager was a mentor, advisor, and facilitator, responsible for assisting in timeline details, providing feedback from data collection, assisting in the review of data collected to ensure accuracy of findings, and advocating for the DNP student and for planned systems change.
- Program coordinators (i.e., healthcare providers) who chose to voluntarily participate are responsible for following through on implementation of practice change.

Scope of the Project

The scope of the project focused on the attitudes, beliefs, and perceived self-efficacy of the healthcare provider to counsel patients on obesity. Wilson et al. (2010), working with the Robert Wood Johnson Foundation, identified that weight loss counseling messages were influenced by the healthcare provider, and multiple methods such as phone and group counseling techniques showed improved patient compliance in weight reduction. A needs assessment was conducted with the university assistant director and regional managers, which resulted in verbalized findings that healthcare providers were uncomfortable discussing obesity with their patients. This highlighted a need for improved patient education (e.g., counseling) and the identification of obesity in a specific patient population (e.g., truck drivers).

The DNP project surveyed healthcare providers using a combination of tools that addressed attitudes and beliefs about obesity and self-efficacy. Using the ATOP Scale, BAOP Scale, and an adapted self-efficacy tool (see Appendix C), the DNP student compared pre/post-survey responses following a 60-minute webinar. Survey data was gathered using Qualtrics and evaluated and bias scales of the healthcare providers were analyzed with statistical information tabulated. Cumulative findings are presented in chapter 5: the DNP project summary of implementation and results.

Mission, Goal, and Objective Statements

Project Mission. The mission of the project was to improve communication and counseling between healthcare providers and obese truck drivers. Even with public outcry, the obesity issue continues to grow with chronic disease costs skyrocketing. Therefore, healthcare providers must take the necessary actions to become comfortable discussing and counseling truck drivers on obesity. The long-term goal of the project was to improve the health and quality of life for these patients, yet healthcare providers continue to avoid obesity conversations and counseling with their patients (Budd et al., 2009). If one is to gain control over this issue as identified in *Healthy People 2020*, then a new approach must be sought.

Project Goal. The goal of the project was to improve the self-perceived effectiveness among a sample of healthcare providers with evidenced-based tools and to provide obesity bias training based on ATOP, BAOP and GSES pre- and post-webinar results.

Project Objectives Statements

Objective 1. Determine healthcare providers' attitudes, beliefs, and perceived self-efficacy when counseling overweight and obese truck drivers.

Objective 2. Examine the short-term outcomes of a webinar-based practice intervention using evidence-based obesity counseling tools on the self-efficacy of healthcare providers to counsel overweight and obese truck drivers.

Chapter III

Theoretical Underpinnings of the Project

Change Theory. Prochaska and DiClemente's Transtheoretical Model (or Stages of Change) was used to support the theoretical framework for the DNP project (see Figure 1, Appendix A). The Transtheoretical Model represents change as an ongoing process that involves a series of six stages over time (see Figure 2, Appendix A; Prochaska, DiClemente, & Norcross, 1992; Prochaska, Redding, & Evers, 2008). Depending on the timing of the processes and stages, this approach can lead to efficient self-change (Prochaska et al., 1992). In terms of application, it has been especially useful in addressing addictions, such as tobacco, drugs, and food consumption leading to obesity (Prochaska et al., 1992; Prochaska et al., 2008).

While Prochaska and DiClemente's model originated to help curb addictive behaviors, it has only been used recently with obesity issues (McKee, Bannon, Kerins, & FitzGerald, 2007). In addition to supporting patients, one can apply similar logic to curbing negative attitudes and behaviors of healthcare providers. The Transtheoretical Model will be applied in the DNP project as it relates to healthcare providers, specifically in terms of changing personal attitudes, beliefs, and self-efficacy related to obesity bias, bariatric sensitivity, and obesity counseling.

Sensitivity and understanding of personal bias can affect the quality of counseling. This model was applied during the provider's training to support self-improvement. This theoretical foundation was important and ensured proper implementation of the DNP project.

Stages of Change. The Transtheoretical Model has been suggested as a starting point for intentional behavior change that incorporates process-oriented variables (Sarkin, Johnson, Prochaska, & Prochaska, 2001) and results in the promotion and/or enhancement of individualized behavioral change (McKee et al., 2007). There are six stages of change in the

theory: pre-contemplation, contemplation, preparation, action, maintenance and, termination (Prochaska et al., 2008).

The pre-contemplation stage is when an individual has no intention to change a behavior in the near future (e.g., no action in next 6 months) and is unaware or unwilling to make a change (Prochaska et al., 2008). For example, the healthcare provider may neither be willing to change a current behavior or attitude nor perceive an issue with his or her counseling practices. The provider may not be routinely assessing the BMI of a patient and fail to evaluate a potential overweight or obesity diagnosis. Additionally, the healthcare providers may feel that the care he or she provides is adequate. However, if one was to survey the healthcare provider's patient base, gaps in care may be identified as they relate to the issue of obesity counseling.

The contemplation stage is when the individual is conscious of his or her actions, conducts self-evaluation, and considers serious change. (e.g., planning for change within the next 6 months; Prochaska et al., 2008). The individual may consider addressing a problem or change a behavior or attitude. In terms of healthcare, the provider may be challenged to determine better uses for time during a patient's visit. For instance, counseling on medical conditions (e.g., obesity) may be prioritized based on the amount of time already spent with the patient and the number of patients the provider has scheduled for that day. Additionally, the healthcare provider may begin to understand his or her own feelings toward obesity. If needed, this self-reflection may help the provider consider a change in attitude. If one feels strongly about a cause (e.g., weight loss prevents acute and chronic diseases), that individual will try to consider and counsel others in a more effective fashion. This realization will begin to take root in the preparation stage.

As McKee et al. (2007) discuss, the preparation stage of change is both cognitive and behavioral. Prochaska et al. (2008) describe this phase as combining intention and behavioral criteria with impending changes within the next month. When an individual enters the preparation phase, change can be expected to occur soon with a plan of action ready for implementation (McKee et al., 2007; Prochaska et al., 2008). For instance, the healthcare provider must know and understand obesity and its progression to counsel the patient appropriately, and the counseling challenges faced by the provider may be more focused on the behavioral changes that the patient must make. If all components of the theory are progressing, the activity in the preparation phase should be realized in the action phase.

The action stage occurs when the individual modifies his or her behavior, experiences, or environment to overcome an attitude or problem (Prochaska et al., 2008). Ideally, this modification is the result of planning conducted within the previous 6 months (Prochaska et al., 2008). During this stage, the healthcare provider may identify and overcome personal obesity bias as well as learn new obesity counseling techniques.

Following the action stage, the maintenance phase involves the cultivation and continuation of change (e.g., consistent obesity counseling for truck drivers, decreased negative attitudes toward obese patients). During this stage, the individual may be working actively to prevent relapse to an earlier stage or maximize the gains made during the action stage (Prochaska et al., 2008). Therefore, this phase can last 6 months to approximately five years.

The final phase of the Transtheoretical Model is the termination stage, where there is maximum self-efficacy of the individual and zero deviation from goals (Prochaska et al., 2008). A healthcare provider may not be tempted to avoid counseling a patient on obesity. Likewise, the actions of the provider may encourage the patient to take the necessary steps to lose weight and

exercise regularly. Ideally, if every provider and patient committed to change, obesity rates would fall, and the *Healthy People 2020* objectives would be met.

Process of Change. Prochaska et al. (2008) describe ten processes of change that are frequently integrated during and as the stages of change are occurring. These processes include the following:

- consciousness raising (e.g., applying interventions that increase awareness of an issue),
- dramatic relief (e.g., giving a personal testimony on a subject),
- self-reevaluation (e.g., clarifying values – how one sees themselves),
- environmental reevaluation (e.g., identifying how the presence or absence of personal behavior affects social behavior, such as smoking in a crowd),
- self-liberation (e.g., believing that change is possible, New Year’s resolutions),
- social liberation (e.g., increasing social opportunities and alternatives),
- counter-conditioning (e.g., learning new healthier behaviors to substitute for old unhealthy behaviors),
- stimulus control (e.g., removing cues for unhealthy habits and adding new prompts for healthier ones),
- contingency management (e.g., identifying consequences for certain actions, incentives),
and
- helping relationships (e.g., cultivating ideals that support healthy behavior changes – trust, openness, acceptance, and support; Prochaska et al., 2008).

The Transtheoretical Model also had a set of critical assumptions that were considered when using this model as a framework. Besides the stages and processes of change, these assumptions included the following:

- No single theory can account for all complexities of behavior change.
- Behavior change is a process that occurs over time through a non-linear sequence of stages.
- Stages are both stable and open to change.
- Major grouping of “at-risk” individuals are not necessarily ready for action and thus will not do well with traditional action-oriented programs.
- Specific processes and principles of change should be emphasized at specific stages to maximize efficacy (Prochaska et al., 2008).

The Transtheoretical Model offered the best theoretical framework approach for the DNP project. As healthcare providers become aware of their attitudes and beliefs toward obese individuals, Prochaska and DiClemente’s Transtheoretical Model offers a framework for change. Therefore, self-efficacy tasks that addressed the pros and cons of obesity bias and integrated stages and processes of change were components of the DNP project.

Chapter IV

DNP Project Plan Practice Intervention

Setting. The setting for the project was select on-site wellness clinics across the country that were associated with the Pepsi Beverages Company and managed by the Johns Hopkins Division of Occupational and Environmental Medicine, a large non-profit teaching hospital. The regional managers of the Division of Occupational and Environmental Medicine operate as administrative liaisons, thereby working in conjunction with healthcare providers at these clinics. The clinics provide services to employees through the employee health and wellness center locations across the country, and employees can be seen in the clinic for most routine episodic illnesses and preventative care. The staffing of these clinics depends upon the plant employee census. Most clinics are run by a healthcare provider with a medical assistant; however, some are managed by a sole provider. Depending on the location, these providers can see an average of 75 to 150 or more patients weekly.

The purpose of the DNP project was presented to healthcare providers managing the employee wellness clinics, and all 40 providers at these clinics—to include nurse practitioners, physicians, and physician assistants—were invited to voluntarily participate in this project. Their role was critical as they typically participate in other health agendas at their clinics, including wellness committees, safety meetings, and lunch and learn employee health awareness events. These healthcare providers were educated on the purposes of the project: 1) to determine healthcare providers' attitudes, beliefs, and perceived self-efficacy when counseling overweight and obese truck drivers and 2) to examine the short-term outcomes of a webinar-based practice intervention using evidence-based obesity counseling tools on the self-efficacy of healthcare providers to counsel overweight and obese truck drivers.

The healthcare providers are responsible for conducting commercial driver's license medical examinations for truck drivers associated with the company. These medical examinations qualify the truck driver to operate a commercial motor vehicle (CMV) with either a class A license, which has a weight rating of 26,001 lbs, or a class B license, similar to class A but with the exception that the towed unit is 10,000 lbs or less (Federal Motor Safety Carrier Administration, n.d.). These medical examinations are important for identifying medical conditions that could suddenly incapacitate a truck driver and cause an accident. An example of an incapacitating condition includes obstructive sleep apnea, which can cause a truck driver to fall asleep while operating the CMV. A review of the statistical accident data available from the U.S. Department of Transportation (2013) revealed that there were over 32,000 deaths related to CMV accidents in 2011, and the reported costs associated with fatalities, injuries, and property damage in that year reached 87 billion dollars. Therefore, it is critical that healthcare providers counsel truck drivers on obesity and the potential negative health consequences.

Population of Interest. The population of interest included healthcare providers throughout the U.S. that are within the Johns Hopkins Division of Occupational and Environmental Medicine and are contracted with the Pepsi Beverages Company. The healthcare providers consisted of doctoral-prepared nurse practitioners, doctoral-prepared student nurse practitioners, nurse practitioners, physician assistants, and physicians. The project intervention determined healthcare providers' attitudes and beliefs toward obese patients and comfort level with counseling patients on obesity with the use of a webinar-based practice intervention that used evidenced-based tools. A specific focus was placed on truck drivers as the patient in the project.

Measures. The healthcare provider’s comfort level with obesity discussions was assessed using three evidence-based tools: 1) ATOP scale, 2) BAOP scale, and 3) an adapted version of the GSES, labeled the Healthcare Provider Self-Efficacy Scale (see Appendix C for the complete instruments). The ATOP scale had 20 questions that measured attitudes regarding obesity, and the BAOP scale had eight questions designed to measure beliefs regarding obesity (Gujral et al., 2011). The greater the score on the ATOP and BAOP scales, the more favorable the attitudes and beliefs held by a healthcare provider regarding an obese truck driver. The GSES was adapted to evaluate the healthcare provider’s self-efficacy beliefs pre- and post-webinar-based practice intervention with the use of evidence-based tools for obesity counseling of truck drivers. The GSES was used to query healthcare providers regarding their competence with difficult patient situations, such as counseling a truck driver about obesity. Further, psycho-social barriers exist in some healthcare providers when caring for obese patients. The GSES tool used in this project for the healthcare provider helped to validate self-management skills (Flolo, Andersen, Nielsen, & Natvig, 2014). Adapting the GSES was accomplished using Bandura’s principles for constructing self-efficacy scales (Bandura, 2006). Flolo et al. (2014) support that the GSES can be crucial when surveying healthcare providers to determine the impact of care provided.

Sample and Participant Selection. All healthcare providers associated with the Johns Hopkins Division of Occupational and Environmental Medicine who were working at a Pepsi Beverages Company employee clinic were recruited to voluntarily participate in the DNP project. Multiple emails were sent that explained the DNP project, and a preliminary “get ready” presentation and individual phone call requests to providers to participate occurred. These healthcare providers include doctoral-prepared student nurse practitioners, doctoral-prepared nurse practitioners, nurse practitioners, physician assistants, and physicians; however, providers

that conducted CMV examinations on truck drivers were specifically targeted and vigorously recruited for voluntary participation.

Procedure. The DNP student and chair obtained approval from the University of Nevada, Las Vegas and the Johns Hopkins Division of Occupational and Environmental Medicine institution review boards (IRB) to conduct the project (see Figure 3, Appendix H). After IRB approval was received, the DNP project manager distributed an informational recruitment email with a link to the DNP project pre-intervention survey to all participants. This link allowed anonymous responses for collection and analysis by Qualtrics website. The participating healthcare providers were then asked to complete three questionnaires (i.e., ATOP, BAOP, and GSES) within the survey. Providers who agreed to volunteer for the project were asked to generate a unique online identifier (i.e., birth month and favorite color), which was used to access pre/post-webinar survey scale questionnaires online and ensured anonymity. Participating providers included their unique identifier among responses to the online pre/post-survey scale questions. Following survey completion, the pre-intervention data was evaluated using descriptive analysis and then used to guide and tailor the development of the webinar-based practice intervention that used evidenced-based tools.

The intervention consisted of a 60-minute webinar, which included a 45-minute webinar (i.e., Power Point presentation) and a 15-minute question and answer session. The webinar-based practice intervention was developed using three evidence-based tools: the Five A's framework (Schlair, Moore, McMacken, & Jay, 2012), the Maine Youth Overweight Collaborative – Brief Negotiation encounter tool (University of New England, n.d.; Harvard College, 2017), and the obesity counseling algorithm (U.S. Department of Health and Human Services, Public Health Service, 2014).

Five A's Framework. One of the interventions for the DNP project was based on the Schlair et al. (2012) Five A's framework on obesity counseling. This model has been recognized by the Centers for Medicare and Medicaid Services and the U.S. Preventative Services Task Force as a reliable tool, and both organizations advocate for its use in obesity counseling. The Five A's of the framework include:

- 1) assessing (e.g., body mass index, comorbidities, family history, psychiatric history, depression/anxiety, medications, previous weight loss attempts, dietary behaviors, exercise, stage of change, social history, and interpersonal barriers to weight change),
- 2) advising (e.g., body weight loss specifics 5–10% over 6 months, patient weight loss goals, suggestions to diet changes/physical activity changes, treatment options for psychosocial co-morbidities, information about treatment options—to include medication pros/cons, surgery pros/cons, addressing patient concerns, and answering questions about treatment options),
- 3) agreeing (e.g., clarify patient's preferences about behavior change options that were discussed, give written exercise and diet prescription based on the goals, ensure goals are SMART [i.e., specific, measurable, achievable, realistic, and time bound], and revisit and revise goals at subsequent visits),
- 4) assisting (e.g., address barriers to change, help patient reflect on support systems, prescribe medications, or provide referral for bariatric surgery), and
- 5) arranging (e.g., referrals to weight management clinic, community resources, and commercial programs as well as use of social support systems, including family members, for future visits; Schlair et al., 2012).

The webinar-based practice intervention described, in detail, the application of the Five A's evidenced-based tool as an option of intensive behavioral counseling for obese patients. Further, the application of this evidenced-based tool has proven beneficial, specifically if the healthcare provider conducting the counseling had been properly trained on its use.

Maine Youth Overweight Collaborative. The Maine Youth Overweight Collaborative – Brief Negotiation encounter tool (University of New England, n.d.; Harvard College, 2017; see Appendix B) was introduced in the webinar. This tool was developed by the Maine chapter of the American Academy of Pediatrics, specifically for physicians to use with overweight youth (Harvard College, 2017), and it is used by healthcare providers to help support their practices and improve quality of care for children and youth. Furthermore, the tool is free for public use, is reproducible, and can assist providers in developing planning strategies for obesity discussions with patients.

The Brief Negotiation encounter tool was adapted in the DNP project and used as a framework for counseling obese truck drivers. During the webinar-based practice intervention, this evidenced-based tool was reviewed, section by section, to ensure understanding, and discussion highlighted the following areas:

- 1) opening the encounter (i.e., asking open-ended questions, sharing body mass index, and identifying weight and risk factors);
- 2) negotiating the agenda (i.e., discussing ways to achieve a healthy weight by giving examples and asking for patient input);
- 3) assessing readiness, importance, or confidence;
- 4) exploring ambivalence (i.e., discussing the pros and cons on the issue and summarizing ambivalence);

- 5) tailoring the intervention (i.e., not ready, unsure, ready); and
- 6) closing the encounter (i.e., summarizing, showing appreciation, offering advice and expressing confidence in success, confirming the next steps, and arranging for a follow-up).

Obesity Counseling Algorithm. The U.S. Department of Health and Human Services (2014) obesity counseling algorithm (see Appendix D) was developed to help describe a pathway for healthcare providers to address counseling obese patients. Healthcare providers were given an algorithm on the “how to” during the patient encounter, which could be used to address opportunities for counseling in the following ways:

- identifying overweight/obesity and accompanying risk factors;
- initiating treatment for both the weight, risk factors, and chronic diseases;
- considering weight, waist circumference, and the presence of chronic disease conditions;
and
- discussing risk factors when assessing a patient for treatment of obesity.

Data Collection and Analysis. There were two data collection and analysis periods completed during the DNP project (pre- and post-intervention). All data were collected anonymously through an online questionnaire using Qualtrics. The questionnaire was composed of the ATOP, BAOP, and GSES instruments. The DNP student distributed the survey web link to all participants via email. The dissertation chair and DNP student analyzed the statistical data using IBM SPSS Statistics for Windows, version 23.

The first data analysis phase occurred immediately after the pre-intervention data were collected. The purpose of this phase was to analyze the data for descriptive statistics to inform the development of the intervention. This phase was already described earlier in the paper. The

second data analysis phase occurred after the post-intervention data were collected. The purpose of this phase was to compare the pre- and post-intervention data. The pre- and post-intervention data were first coded to the instrument instructions and then inputted into SPSS. Then, frequency and descriptive statistics (mean and standard deviation) were conducted to evaluate for trends between the pre- and post-intervention data. Although the goal was to conduct independent *t*-tests, the sample sizes were too small.

Evaluation Plan. To evaluate the overall DNP project impact and effectiveness, the project should result in 1) increased understanding of personal attitudes and beliefs about caring for obese patients (i.e., truck drivers) and 2) an evident improvement in the self-efficacy by the healthcare provider, as evidenced in increased consistent use of evidence-based tools when counseling overweight and obese truck drivers.

Timeline. The timeline (see Appendices F and G) for the DNP project began at the start of the 2017 spring semester (i.e., January 2017) with the development of the DNP project proposal to the sponsoring facility. The anticipated duration of the DNP project from beginning to end was approximately 15 months (see Appendix F). The DNP student, in conjunction with the DNP committee chair and DNP committee, defended the DNP project proposal on April 5, 2017. The final DNP project defense will occur in March 2018 at the University of Nevada, Las Vegas campus.

Institution Review Board Approval. The IRB request for approval was completed by the DNP student and committee chair with final submission in June 2017. The DNP proposed project received IRB approval mid-June 2017 from the sponsoring university. Additionally, the request for approval from the Johns Hopkins Medicine Division of Occupational and

Environmental Medicine department was submitted shortly thereafter and approval gained in August 2017 to conduct the DNP project as proposed and accepted by the DNP committee.

Chapter V

Summary of the Project

The project commenced in August 2017. A presentation to Johns Hopkins University (JHU) administration occurred to introduce the DNP project, a webinar-based practice intervention with evidence-based tools. The DNP student announced the project during monthly healthcare provider conference calls to generate interest and then followed up with the providers via email. Then, the DNP student invited all providers within the Johns Hopkins Occupational Medicine PepsiCo manufacturing plants across the U.S. to participate in the project. There were 40 total healthcare providers; however, only 35 were eligible to participate in the project. The five providers who were ineligible were either new employees who had not yet been qualified to examine commercial truck drivers or did not conduct truck driver exams at their clinic location.

In total, 26 providers volunteered to participate in the DNP project. The DNP student emailed the Qualtrics questionnaire web link to each of those providers. The participants also electronically signed the informed consent form via Qualtrics. Of the 26 providers who volunteered, only 22 completed the survey. The participants completed identical pre- and post-webinar-based practice intervention surveys that included the ATOP, BAOP and GSES questionnaires. All data were collected anonymously through online questionnaires. The dissertation chair and DNP student analyzed the statistical data using IBM SPSS Statistics for Windows, version 23. The intervention was a webinar-based practice intervention that used evidenced-based tools to help healthcare providers when counseling obese truck drivers. These tools included the Maine Youth Overweight Collaborative program, the Five A's framework on obesity counseling, and the U.S. Department of Health and Human Services obesity counseling

algorithm. The 60-minute webinar-based practice intervention consisted of a 45-minute presentation followed by a 15-minute question and answer session.

The project identified improved healthcare provider attitudes toward obese patients and beliefs that obesity was not under an obese person's control. Further, post-intervention surveys identified an improvement in healthcare provider self-efficacy when counseling obese patients (i.e., truck drivers) with the use of evidenced-based tools, including specific, measurable, achievable, realistic and time-bound (i.e., SMART) goals. Improving the communication between providers and truck drivers theoretically should result in more honest and effective conversations about weight management. This could ultimately result in improved weight management in overweight and obese truck drivers, leading to improved health.

Process and Monitoring

The evidenced-based instruments used in the pre- and post-webinar surveys evaluated healthcare provider bias toward obesity. These scales included: ATOP, BAOP (Gujral et al., 2011), and an adapted version of the GSES (Bandura, 2006). Twenty-two healthcare providers completed the pre-webinar survey (i.e., ATOP, BAOP, and GSES) using a Likert scale to make their responses. These responses were tabulated by the Qualtrics Survey Software made available through the University of Nevada, Las Vegas. The pre-webinar responses were analyzed, and the webinar was developed based on this analysis.

The DNP student noted from analysis that, in the pre-webinar ATOP, most healthcare providers had accepting, favorable, and more positive attitudes toward obese persons. The BAOP pre-webinar survey returned similar findings that obesity was not under the obese person's control. The DNP student considered it was possible that the healthcare provider's own personal weight and BMI status could have affected their survey responses as well as the number of

overweight, obese, or severely obese patients they provided care for daily in their clinics. Prochaska and DiClemente's Transtheoretical Model of Change was considered again to best implement the webinar tools in the most efficient manner.

The webinar was developed based on pre-webinar responses and the U.S. Preventative Services Task Force findings that best matched healthcare providers to patient screening, intensive counseling, and behavioral interventions for obesity (LeBlanc et al., 2011). Additionally, the manufacturing corporation implemented healthcare changes in 2018. Some of the wellness changes included a new online application and special health programs that were dedicated to those employees who had indicators of pre-obesity, obesity, and metabolic syndrome. Employees who met certain criteria (i.e., BMI >24, elevated blood sugar or cholesterol) were eligible to participate in a program called "Omada." The DNP student project manager used these 2018 health program changes to further encourage healthcare providers to participate in the webinar and implement DNP project materials in employee clinics. A total of eight additional healthcare providers participated and gained information from the webinars presented across the country.

The intervention consisted of a 60-minute webinar, which included a 45-minute webinar (i.e., PowerPoint presentation) and a 15-minute question and answer session. Three webinars were conducted simultaneously during the week of November 15, 2017, to all regions of the U.S. The webinar was presented at the end of the monthly provider conference call to those study volunteers who had completed the pre-webinar survey as well as to anyone else who wanted to participate. Across the country, there were a total of eight additional participants in the webinar-only portion of the study. Most of the healthcare providers actively participated in discussion

afterwards as noted by phone calls with questions. The additional eight webinar-only participants were not included in the study findings.

The webinar was developed and presented three evidence-based tools: the Five A's framework, recognized by the Centers for Medicare and Medicaid Services and the U.S. Preventative Services Task Force as a reliable tool (Schlair et al., 2012); the Maine Youth Overweight Collaborative – Brief Negotiation encounter tool, developed by the Maine chapter of the American Academy of Pediatrics and adapted for adults for this project (University of New England, n.d.); and the Obesity Counseling Algorithm, which helps describe a pathway for healthcare providers to address counseling obese patients (U.S. Department of Health and Human Services, Public Health Service, 2014). The webinar was presented at three separate sessions to different regions across the country. There were minimal questions immediately after the webinars; however, approximately four individual providers reached out with questions regarding the use of the Brief Negotiation encounter tool and the tools in general. The questions surrounded the way to present information, the number of questions that needed to be asked during each patient encounter, and if one tool was superior to the other. Clarity was provided for each tool and its use to the healthcare provider.

In late November 2017, a post-webinar questionnaire survey was distributed via email. The post survey consisted of 44 questions that evaluated the healthcare provider's personal bias post-webinar regarding obese individuals. The survey also questioned how effective the healthcare provider felt he/she was in his/her interaction with the patient as it related to obesity management. A total of 11 healthcare providers completed the post-webinar survey. Multiple attempts were made by the DNP student manager to encourage healthcare provider volunteers to complete the post surveys (i.e., multiple emails, phone calls, handwritten notes). Later, it would

be noted that individual clinic issues and healthcare providers that had volunteered for the project were not able to complete the survey due to family illness and other personal obligations, which removed them from the clinic. Thank-You cards with \$10 gift card vouchers (i.e., Starbucks, Chipotle, Bed, Bath & Beyond, Barnes & Noble, Regal Theatres) were sent to all 22 participants, whether the participant completed the post-webinar survey or not. It was postulated that this monetary incentive could spur the healthcare provider to complete the survey.

The project implementation, monitoring, and supervision among the 22 clinics across the U.S. was completed remotely by email, phone, and internet communications. Healthcare providers were supported with responses to evidenced-based tool questions by the DNP student, who had actively used the tools prior to the project implementation. Using Prochaska and DiClemente's stages of change theory to support the project, healthcare providers were able to move through stages of change and acceptance of the evidence-based practice counseling tools as self-efficacy increased.

Threats and Barriers

The greatest risk and threats to the DNP project included the following: 1) lack of healthcare provider volunteer participation in the scaled surveys, 2) lack of healthcare provider follow-up with post-webinar surveys, 3) convenience sample, and 4) time of year (i.e., near holidays) when surveys were conducted. Because of poor post-webinar follow-through by participants, statistical analysis had to be reconfigured and paired *t*-test analysis could not be conducted as the sample size was too small. Although this was a pilot study, this small sample size and convenience sample limited generalization of the findings. Further repeat testing should be conducted on larger samples of willing participants who commit to completing the entire study.

A barrier to completing the post-webinar surveys was identified with the potential closure of 10 clinics across the nation in late November 2017. This was an unanticipated event and occurred abruptly. It was entirely plausible that poor post-webinar responses were affected by this event. Further, healthcare providers that had scheduled time off and did not attend the webinar, were unavailable for the webinar (i.e., scheduled patient visits), or were sick on the days of the webinar could have also affected the poor post-webinar survey results.

Results

In total, 22 providers completed the pre-webinar questionnaire and 11 providers completed the post-webinar questionnaire. The questionnaire was composed of three instruments (ATOP, BAOP, and GSES). As a reminder, the ATOP assessed attitudes toward obese persons, the BAOP assessed beliefs toward obese persons, and the GSES assessed perceived self-efficacy in counseling obese persons. To ensure anonymity, the DNP student did not collect demographic information from the providers. The results of each instrument will be presented in this section.

The ATOP instrument was comprised of 20 items, and each item included a Likert scale response. The Likert scale ranged from -3 to +3 (strongly disagree to strongly agree). The results for the pre- and post-webinar questionnaire items were similar. There was no apparent change between the pre- and post-webinar ATOP scores. The responses on both questionnaires showed that providers had neutral or positive attitudes toward obese persons. The final ATOP score was calculated per instrument instructions and ranged from 0 to 120 with a greater score indicating a more positive attitude. The pre-webinar ATOP indicated a final calculated attitude toward obese persons with a mean of 73.73 and a standard deviation of +/- 13.57. The post-webinar ATOP had only slight improvements with a mean of 75.91 and a standard deviation of +/- 10.24. See Table 1 for the complete ATOP results.

The BAOP instrument was also comprised of eight items and had the same Likert scale responses as the ATOP. Similar to the ATOP results, there was no apparent change between the pre- and post-webinar BAOP scores. The responses on both the pre- and post-webinar questionnaires showed that providers had neutral or positive beliefs toward obese persons. The final BAOP score was calculated per instrument instructions and ranged from 0 to 48. The greater the score, the stronger the belief held by the individual that obesity was not under the obese person's control. The pre-webinar BAOP survey results indicated a mean of 19.36 with a standard deviation of +/- 6.64 versus a post-webinar BAOP mean of 18.91 and standard deviation of +/- 9.43.

The GSES instrument was comprised of 10 items and had a Likert scale ranging from 0 to 100 (low to high perceived self-efficacy). The majority of pre-webinar GSES item scores hovered between 80 and 85. There was a noticeable increase in most of the GSES item scores in the post-webinar results. Further, the GSES final score was calculated per instrument instructions and ranged from 0 to 1000 with the greater scores indicating a higher level of healthcare self-efficacy when caring for and counseling an obese patient. There is noted improvement between the pre-webinar final calculated GSES mean of 837.27 and standard deviation of +/- 106.78 compared to the post-webinar final calculated GSES mean of 865.45 and standard deviation of +/- 92.99.

Discussion

Obesity is prevalent in America. Fruh et al. (2016) report that obesity has hit epidemic proportions, rising 66% in the past decade alone, and is equivocal to racial discrimination. Negative healthcare provider beliefs and attitudes toward obese patients add to the problem and further stigmatize these individuals. In 2013, the American Medical Association voted to classify

obesity as a disease (Rossi, 2013). Many healthcare providers continue to display negative attitudes toward obese individuals rather than acceptance of a disease process that needs to be treated. Viewing obesity as an individual shortcoming, lack of will-power, or lack of motivation further segregates this population of patients, especially truck drivers. Budd, Mariotti, Graff, and Falkenstein (2009) cite nine studies from the literature where social and obesity bias was a prevalent and shared attitude among healthcare providers. Of the nine studies reviewed by Budd et al. (2009), only one was neutral to obesity bias; the others cited some form of negative obesity attitude. Sadly, the obesity problem continues to grow, public awareness campaign efforts continue to miss established goals, health risks are on the rise, and healthcare providers continue to have negative attitudes and behaviors toward obese persons (Budd et al., 2009).

Obesity in truck drivers is complex and can require intense behavioral training and targeted nutritional counseling. Truck drivers have limited access to exercise and can be significantly affected by food deserts. The “American diet and industrialization of food” can validate why some individuals, especially truck drivers, are affected by obesity (Rossi, 2013).

The importance of this DNP project was to understand why a healthcare provider approached the care of a patient with a certain attitude. The pre-webinar survey results indicated that the providers participating in the study had a generally accepting attitude toward obese persons. Overall, the anonymous respondents held a general high regard for the person who was either overweight or obese in the pre-webinar survey. Table 1 provides data regarding the ATOP Scale survey. Further, respondents rejected negative attitudes toward overweight and obese persons, as evidenced in the low Likert scores where negative observations were the response to reply in both the pre- and post-webinar surveys.

The ATOP survey was composed of 21 questions that evaluated personality characteristics of an obese person. The questions included level of happiness, self-consciousness, tidiness, and satisfaction with self of an obese or overweight person. The questions also queried respondent feelings and personality characteristics regarding overweight persons and obesity. For example, questions asked if the worst thing to happen would be to become obese, or if most non-obese persons or most people feel uncomfortable associating with obese persons. Respondents based their answer on a Likert scale ranging from -3 (strongly disagreeing) to +3 (strongly agreeing). The pre-webinar results indicated a total score of 73.73 with a standard deviation of 13.57, and post-webinar results indicated a total score of 75.91 with a standard deviation of 10.24. These findings were comparable, indicating healthcare providers had a significant tolerance level in the attitudes displayed toward overweight or obese persons.

A review of the ATOP survey instrument instructions indicated that the higher the score an individual reported, the more positive the attitude they harbored toward obese or overweight persons. The final score was calculated per instrument instructions and ranged from 0 to 120. The greater the score indicated more positive attitudes by healthcare providers. The ATOP score provides healthcare providers with an understanding of the attitudes they hold toward obese individuals, and it is a great biofeedback tool to guide self-improvement with patient care. The ATOP can help to identify if the healthcare provider holds certain attitudes or bias against obese or overweight individuals and if the provider should seek further training to improve on these attitudes.

The BAOP survey consisted of eight questions to which healthcare providers responded based on how they believe obesity affects an individual. For example, whether obesity is an addiction, or if it is caused by a lack of will power, or if obese persons have biological problems

causing their obesity. Respondents, again, based their answers on a Likert scale ranging from -3 (strongly disagreeing) to +3 (strongly agreeing). The final score was calculated per instrument instructions, and the possible total score ranged from 0 to 48. The greater the score indicated a stronger belief that obesity was not under the obese or overweight person's control.

The pre- and post-webinar results indicated a total score of 19.36 with a standard deviation of 6.64 and 18.91 with a standard deviation 9.43, respectively (see Table 2). There was a slight decline in the survey results post-webinar, which could be related to the number of respondents. The findings of the BAOP indicated that healthcare providers held more negative beliefs about overweight and obese persons in that obesity is under the control of the person and could be related to a lack of will power, poor eating habits, or a lack of exercise, in addition to examples previously cited.

The webinar discussed the importance for healthcare providers to understand their own beliefs about obesity as a disease process and how it can affect patients. Further, annual obesity bias training within organizations may be helpful to straddle this hurdle for some providers. Healthcare providers appeared to capitalize on the webinar as demonstrated with post-webinar survey responses.

Table 3 provides information and results of the healthcare GSES pre- and post-webinar. A Likert scale was used with a range of 0 (cannot do the skill at all) to 100 (highly certain can do the skill). Self-efficacy skills of healthcare providers were evaluated as respondents were asked to determine their comfort level when caring for a truck driver with obesity, if their coping skills were competent when caring for an obese patient, if they could solve problems when dealing with obese patients such as truck drivers (i.e., finding solutions for care – nutritionist, referral to specialist, use of SMART goals), and their ability to conduct an exam on an obese truck driver.

Pre-webinar responses indicated a score of 837.27 with a standard deviation 106.78, and post-webinar responses reported scores of 865.45 with a standard deviation of 92.99—a clear improvement. The final score was calculated per instrument instructions and ranged from 0 to 1000. The greater the score, the higher the level of healthcare provider self-efficacy in caring for and counseling an obese patient. These findings indicate that, through education and training, evidence-based practice tools assist healthcare providers when counselling patients such as truck drivers on obesity. The use of obesity bias training provides additional tools and training to the healthcare provider on approaches and ways to address the difficult subject of obesity with the patient in a time-limited environment.

According to Granara and Laurent (2017), weight loss counseling can be inconsistent, infrequent, and suboptimal. Obesity places a truck driver at significant risk of having a heart attack or stroke while driving a commercial motor vehicle, which could cause a significant impact on multiple bystanders. Weight loss counseling can occur in any healthcare provider setting, even in a specialist office. Any healthcare provider could dedicate a few minutes in the patient encounter to counseling a patient who arrives overweight or obese. A study was conducted by Granara and Laurent (2017) regarding the use of pharmacology and obesity as related to healthcare provider attitudes when caring for obese patients. Healthcare providers in the study (i.e., APRNs and physician assistants) had more positive impressions of pharmacology as a treatment for obesity and higher expectations for weight loss than medical doctor (MD) counterparts. This finding indicates that healthcare providers with higher expectation for weight loss and more positive impressions may be more likely to prescribe weight loss medications for obesity. Further, other studies have shown that physicians' higher self-reported knowledge as related to weight loss medication was associated with fewer negative attitudes toward obese

persons (Granara & Laurent, 2017). The study suggests that implementing a holistic approach that is patient centered and highly individualized is key to a positive patient outcome with obesity (Granara & Laurent, 2017).

Another study conducted by Dutton et al. (2012) examined the association between physician characteristics, patient characteristics, the physician-patient relationship, and the likelihood of patients receiving obesity counseling from their primary care providers. The study suggested multiple hypotheses:

- A patient with a higher BMI and multiple comorbidities would likely receive weight loss counseling.
- Those obese patients seeing a female physician would receive more weight loss counseling.
- Those obese patients who had a longer relationship with their physician would receive more counseling.

Dutton et al. (2012) discussed the barriers that healthcare providers (i.e., physicians) face that limit obesity counseling. These barriers include lack of time, lack of reimbursement, and the individual physician feeling ill-equipped to discuss the subject of obesity. However, citing studies in the literature, certain physician and patient characteristics may affect the outcomes of whether obesity counseling occurred (Dutton et al., 2012). For example:

- Patients with a higher BMI receive more physician advice for weight loss and spend more time with the physician than patients who have less severe levels of overweight and obesity.
- Patients who are younger, with less education, and with less comorbidities are less likely to receive physician counseling.

- Women are more likely than men to receive physician recommendations for weight loss.
- Physicians recommend greater amounts of weight loss for women than men as compared to weight status.
- Older physicians have demonstrated more positive attitudes toward weight loss treatment and have a greater likelihood for addressing this topic.
- Physicians with a normal BMI are more likely to discuss weight loss with obese patients than those who are overweight/obese.
- Compared to male physicians, female physicians were more likely to offer patients nutritional and physical activity counseling.
- One study indicated that female physicians spent more time discussing nutritional information while male physicians discussed cardiovascular risks.
- Male patients seeing male physicians received more nutritional and exercise counseling than a female patient seeing a female physician.

The findings of the study supported the hypothesis that patients with higher BMIs received more physician obesity counseling and advice for weight loss. Further female physicians were more likely to recommend weight loss to overweight/obese individuals and more frequent obesity counseling, and they more frequently referred patients to a weight loss program (Dutton et al., 2012).

Ferrante, Piasecki, Ohman-Strickland, and Crabtree (2009) conducted a cross-sectional study of family physicians in New Jersey that assessed primary care physician attitudes and practices when caring for extremely obese patients. The study also examined factors that influenced practice attitudes, self-reported knowledge, and demographic characteristics. Ferrante et al. (2009) not only evaluated attitudes toward managing obesity but other complex issues, such

as the availability of supplies to treat extremely obese patients (i.e., blood pressure cuffs, large speculums for pelvic exams), the challenges with doing an exam on these individuals, and strategies on how to improve care, in general, for the obese patient (e.g., nutritionist or exercise therapist on-site, referral to community specialist programs). The focus of attitudes and challenges toward managing obesity by physicians revealed:

- Dealing with obesity and weight loss is frustrating (66%).
- Treatment for obesity is often ineffective (51%).
- There is not enough reimbursement to discuss weight loss (45%).
- Physicians are pessimistic that patients could be successful in losing weight (34%).
- Patients lacked discipline to lose weight (78%).
- Patients want an easy way out (71%).
- Patients do not have time to exercise (62%).
- Patients have psychological problems (57%).
- Patients deny having poor eating habits (54%).
- Patients cannot exercise due to their weight (54%).
- Patients are not motivated to lose weight (52%).

According to Ferrante et al. (2009), the higher the self-reported knowledge the physician had, the fewer the negative attitudes. The U.S. Preventative Services Task Force clinical guidelines for screening and managing obesity in adults (Moyer, 2012) recommended screening for obesity in all patients. Those patients with a BMI of 30 kg/m² or higher should receive or be referred to intense behavior therapy (IBT) interventions. The DNP project provided a similar finding in that evidenced-based practice tools and obesity counseling provide management

options for overweight and obese patients. This results in an improved self-efficacy outcome to those healthcare participants who partake in the use of these tools and counseling options with obese patients such as truck drivers.

Clinical Relevance of the Study. This DNP project is relevant to all healthcare providers with overweight or obese patients, not just truck drivers. The patients are those that have a body mass index greater than 25 kg/m². CMS and the U.S. Preventative Services Task Force recognize, recommend, and encourage screening of healthcare providers with evidenced-based tools specific to obesity (i.e., Five A's tool) in practice (LeBlanc et al., 2011; Schlair et al., 2012). As clinicians, we should take advantage and maximize this opportunity to use evidenced-based tools for obesity counseling with patients.

Limits. The project was based on a convenience sample, limited to obese patients with healthcare providers practicing exclusively within one organization. The sample was blinded and composed of volunteer healthcare providers. The DNP student was unable to determine participant gender, age range, or years of practice by participant responses.

Relationships Among Project Results to Evidence and Theory. The Transtheoretical Model offered the best theoretical framework approach for the DNP project. As healthcare providers became aware of their attitudes and beliefs toward obese individuals, it is necessary to discuss with them a framework for change. Therefore, self-efficacy tasks that addressed the pros and cons of obesity bias and integrated stages and processes of change was a component of the DNP project.

The use of the Transtheoretical Model indicated a set of critical assumptions that were considered when using the model:

- Individual behavior change is complex and subjective.

- Behavior change is a non-linear process occurring over time.
- Stages can be fluid to change.
- Some individuals are not ready for change and will not do well in action-oriented programs.
- Efforts can be maximized by identifying goals at specific stages (Prochaska et al., 2008).

This process was achieved by multiple communications with study participants. Encouraging participants in the use of tools for daily patient interactions was a priority.

Potential for Sustainability

The DNP project is sustainable in the current employee wellness clinics because it requires minimal time and resources. The evidenced-based tool documents are available in an electronic format to healthcare providers within the organization intranet portal. For patients that require intense training, extended visits can be scheduled with the healthcare provider using these tools. In high-volume clinics, initial training can be conducted, then the patient referred to a specialist (e.g., nutritionist, Omada weight loss program) for further reinforcement and support.

A project consideration would be to replicate on a larger scale, among all provider types (i.e., DNPs, APRNs, physicians, physician assistants) and all obese or overweight patients within the DNP student's employer. Further, the study could and should be replicated in the community to gain valuable information from other healthcare providers outside of the DNP student's employer. This information is necessary for healthcare providers to understand ATOP, BAOP, and GSES to meet *Healthy People 2020* objectives for obesity.

Suggestion for Further Research. Organizations should consider implementation of obesity bias training on regularly scheduled intervals for healthcare providers. Further training should include ATOP, BAOP, and GSES webinar-based practice intervention at scheduled

intervals throughout the year. Research should be considered to evaluate the effectiveness of scheduled routine trainings to measure improved ATOP, BAOP, and GSES scores when periodic trainings occur for healthcare providers on this topic and with extended use of evidenced-based tools to assist in obesity counseling while in practice.

Implication for Practice. Healthy People 2020 obesity goals are not being met, and healthcare providers have an obligation to improve efforts when counseling obese patients. This DNP project provided evidence that the application of evidence-based tools in practice can improve self-efficacy. Improved obesity counseling can improve a truck driver's understanding of the consequences of obesity as related to chronic diseases. This can start to improve the disparities that exist related to obesity care among truck drivers in various settings and geographic locations.

Utilization and Dissemination of Results

The DNP project has been submitted and accepted by the Western Institute of Nursing (WIN) as a poster presentation for the April 2018 Research Conference. This organization was chosen for multiple reasons: timing, financial support provided by the University of Nevada, Las Vegas, and because WIN supports research, practice, and educational endeavors of nurse practitioners. This is an opportunity to experience another nurse practitioner organization and network with other scholars. It provides an opportunity to meet with other DNP students, nurse practitioners, and colleagues to educate them on obesity counseling for patients—specifically truck drivers—and to provide evidenced-based tools for use in their practice.

Future goals are to submit the DNP project to organizations (e.g., American Academy of Nurse Practitioners) when calls for presenters and posters are solicited. Additionally, the Journal of Doctoral Nursing Practice, published by Springer Publishing Company, offers an opportunity

for submission. Guidelines for publication have been obtained and discussed with the project chair, to be implemented after final defense has been completed. Finally, a presentation at the JHU biennial meeting in October 2018 is planned to discuss findings and provide an obesity bias training update. There is hope by the DNP student that the evidenced-based practice intervention tools provided to those healthcare participants will continue to be used for patient care in clinics across the U.S. As clinicians, personal actions to change attitudes and beliefs toward obese patients is at the forefront of providing holistic care. Healthcare providers must be comfortable in obesity counseling to improve future disparities and outcomes of chronic disease among truck drivers and all patients.

Appendix A

Prochaska and DiClemente's Transtheoretical Model

Figure 1. Prochaska and DiClemente's Transtheoretical Model

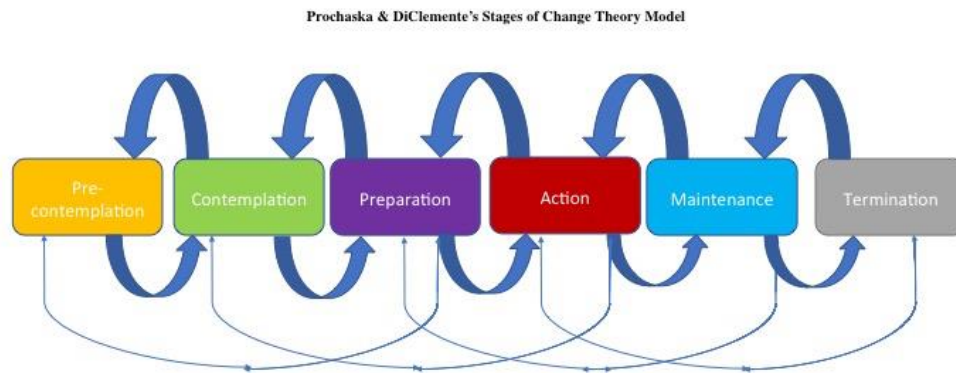
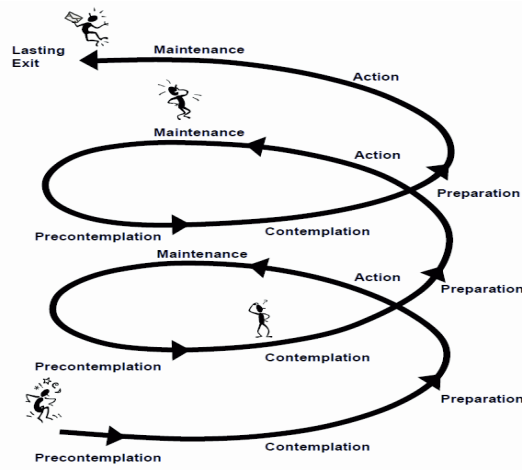


Figure 2. Stages of change theory as a spiral process continuum for individuals



Appendix B

Brief Negotiation – 10+ Minutes of Multiple Sessions Form

Brief Negotiation—10 + Minutes or Multiple Sessions

Open the Encounter

Ask Permission

- *Would you be willing to spend a few minutes discussing your health/weight?*
- *Are you interested in discussing ways to stay healthy and energized?*

Ask an Open-Ended Question - Listen - Summarize

- *What do you think /How do you feel about your health/ weight?*
- *What have you tried so far to work toward a healthier weight?*

Share BMI / Weight / Risk Factors (optional)

- *Your current weight puts you at risk for developing heart disease and diabetes.*
- *Ask for the patient's interpretation: "What do you make of this?"*
- *Add your own interpretation or advice as needed AFTER eliciting the patient's / parent's response*

Negotiate the Agenda

- *There are a number of ways to achieve a healthy weight. They include (see poster):*

Get up and Play Hard	Eat 5 helpings of fruits & vegetables a day
Cut back on TV and Video Games	Cut down on soda and juice—Drink less sugar
- *Is there one of these you'd like to discuss further today? Or perhaps you have another idea that isn't listed here.*

Assess Readiness

Importance/Confidence

On a scale from 0 to 10, how ready are you to consider [option chosen above]

- *Straight question: Why a 5?*
- *Backward question: Why a 5 and not a 3?*
- *Forward question: What would it take to move you from a 5 to a 7?*

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

Explore Ambivalence

Step 1: *Ask a pair of questions to help the patient explore the pros and cons of the issue*

- *What are the things you like about _____? AND What are the things you don't like about _____? OR*
- *What are the advantages of keeping things the same? AND What are the advantages of making a change?*

Step 2:

- *Summarize Ambivalence: Let me see if I understand what you've told me so far....*
(begin with reasons for maintaining the status quo, end with reasons for making a change)
- *Ask: Did I get it all? / Did I get it right?*

Tailor the Intervention

Stage of Readiness	Key Questions
<p style="text-align: center;">Not Ready 0 – 3</p> <ul style="list-style-type: none"> • Raise Awareness • Elicit Change Talk • Advise and Encourage 	<ul style="list-style-type: none"> • <i>Would you be interested in knowing more about reaching a healthy weight?</i> • <i>How can I help?</i> • <i>What might need to be different for you to consider a change in the future?</i>
<p style="text-align: center;">Unsure 4 – 6</p> <ul style="list-style-type: none"> • Evaluate Ambivalence • Elicit Change Talk • Build Readiness 	<ul style="list-style-type: none"> • <i>Where does that leave you now?</i> • <i>What do you see as your next steps?</i> • <i>What are you thinking / feeling at this point?</i> • <i>Where does _____ fit into your future?</i>
<p style="text-align: center;">Ready 7 – 10</p> <ul style="list-style-type: none"> • Strengthen Commitment • Elicit Change Talk • Facilitate Action Planning 	<ul style="list-style-type: none"> • <i>Why is this important to you now?</i> • <i>What are your ideas for making this work?</i> • <i>What might get in the way? How might you work around the barriers?</i> • <i>How might you reward yourself along the way?</i>

Close the Encounter

- *Summarize: Our time is almost up. Let's take a look at what you've worked through today...*
- *Show Appreciation / Acknowledge willingness to discuss change: Thank you for being willing to discuss your weight.*
- *Offer advice, emphasize choice, express confidence: I strongly encourage you to be more physically active. The choice to increase your activity, of course, is entirely yours. I am confident that if you decide to be more active you can be successful.*
- *Confirm next steps and arrange for follow up: Are you able to come back in 1 month so we can continue to work together?*

Overweight Sensitivity

"Do no harm"

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • Obesity • Ideal Weight • Personal Improvement • Focus on Weight • Diets or "Bad Foods" • Exercise | ➔ | <ul style="list-style-type: none"> • Overweight • Healthier Weight • Family Improvement • Focus on Lifestyle • Healthier Food Choices • Physical Activity |
|--|---|---|

Appendix C

Attitudes Toward Obese Persons Scale, Beliefs About Obese Persons Scale, and Healthcare

Provider Self-Efficacy Scale

Attitudes Toward Obese Persons Scale

Please mark each statement below in the far, left margin according to how much you agree or disagree with it. Please do not leave any statement blank. Use the numbers on the following scale to indicate your response. Be sure to place a minus or plus sign (- or +) beside the number that you choose to show, whether you agree or disagree.

-3 = I strongly disagree; -2 = I moderately disagree; -1 = I slightly disagree

+1 = I slightly agree; +2 = I moderately agree; +3 = I strongly agree

	1.	Obese people are as happy as non-obese people.
	2.	Most obese people feel that they are not as good as other people.
	3.	Most obese people are more self-conscious than other people.
	4.	Obese workers cannot be as successful as other workers.
	5.	Most non-obese people would not want to marry anyone who is obese.
	6.	Severely obese people are usually untidy.
	7.	Obese people are usually sociable.
	8.	Most obese people are not dissatisfied with themselves.
	9.	Obese people are just as self-confident as other people.
	10.	Most people feel uncomfortable when they associate with obese people.
	11.	Obese people are often less aggressive than non-obese people.
	12.	Most obese people have different personalities than non-obese people.

	13.	Very few obese people are ashamed of their weight.
	14.	Most obese people resent normal weight people.
	15.	Obese people are more emotional than non-obese people.
	16.	Obese people should not expect to lead normal lives.
	17.	Obese people are just as healthy as non-obese people.
	18.	Obese people are just as sexually attractive as non-obese people.
	19.	Obese people tend to have family problems.
	20.	One of the worst things that could happen to a person would be for him/her to become obese.

Scoring instructions for ATOP:

1. Multiply the response to the following items by -1 (e.g., reverse the direction of scoring):
items 2 through 6, item 10, item 12, items 14 through 16, and items 19 and 20.
2. Sum the responses to all items.

Add 60 to the value obtained in step 2. This value is the ATOP score. Greater numbers indicate more positive attitudes.

Beliefs About Obese Persons Scale

Please mark each statement below in the far-left margin, according to how much you agree or disagree with it. Please do not leave any blank. Use the numbers on the following scale to indicate your response. Be sure to place a minus or plus sign (- or +) beside the number that you choose to show whether you agree or disagree.

-3 = I strongly disagree; -2 = I moderately disagree; -1 = I slightly disagree

+1 = I slightly agree; +2 = I moderately agree; +3 = I strongly agree

	1.	Obesity often occurs when eating is used as a form of compensation for lack of love or attention.
	2.	In many cases, obesity is the result of a biological disorder.
	3.	Obesity is usually caused by overeating.
	4.	Most obese people cause their problem by not getting enough exercise
	5.	Most obese people eat more than non-obese people.
	6.	The majority of obese people have poor eating habits that lead to their obesity.
	7.	Obesity is rarely caused by a lack of willpower.
	8.	People can be addicted to food, just as others are addicted to drugs, and these people usually become obese

Scoring instructions for BAOP:

1. Multiply the response to the following items by -1 (e.g., reverse the direction of scoring):
item 1, items 3 through 6, and item 8.
2. Sum the responses to all items.

3. Add 24 to the value obtained in step 2. This value is the BAOP score. Greater numbers indicate a stronger belief that obesity is not under the obese person's control.

Healthcare Provider Self-Efficacy Scale

Please rate your degree of confidence with each statement below in the far-left margin by recording a number between a 0 to 100 using the given scale below. Please do not leave any blank.

0 = (Cannot do at all) 10 20 30 40 50 = (Moderately can do) 60 70 80 90 100 = (Highly certain can do)

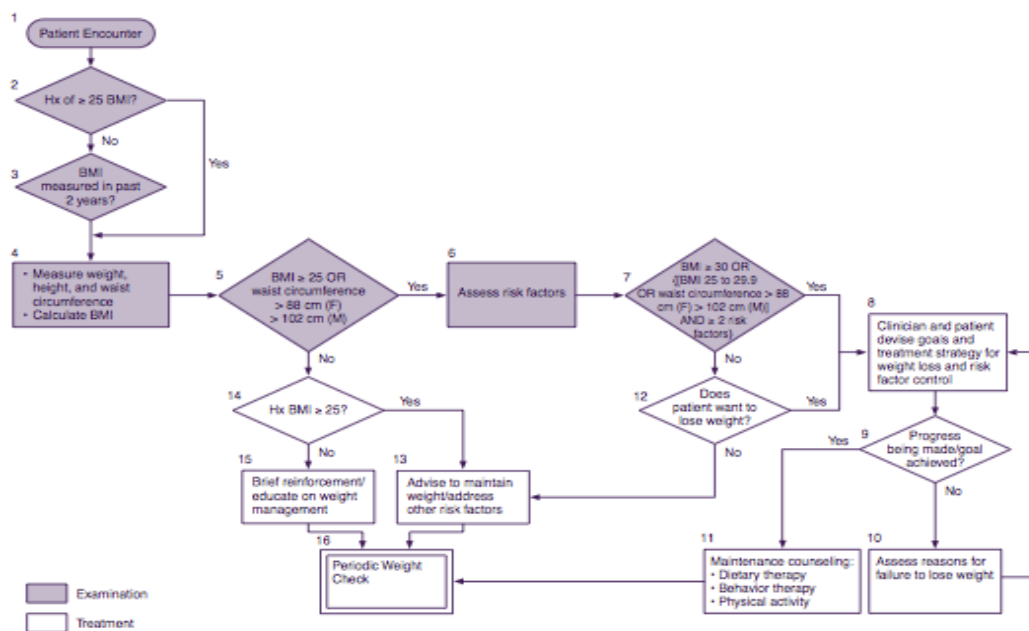
	1.	As a healthcare provider, I am comfortable solving difficult problems if I try hard enough.
	2.	I am comfortable conducting physical exams on obese truck driver patients.
	3.	It is easy for me to discuss obesity, lifestyle (e.g., exercise program), and dietary changes with my patients, especially truck drivers.
	4.	I am confident that I could assess a truck driver on obesity.
	5.	Thanks to my resourcefulness, I know how to discuss and advise my patients on the sensitive condition of obesity and its co-morbidities.
	6.	I can solve most problems if I invest the necessary effort and establish goals with the patient as a team (i.e., SMART goals that are specific, measurable, achievable, realistic and time bound).
	7.	I can remain calm when facing difficult patient situations (e.g., tense discussions about obesity) because I can rely on my coping abilities.

	8.	When confronted with an obese patient, I can assist to find several solutions (e.g., nutritionist, behavioral therapist, group therapy, medications, referral to bariatric surgeon).
	9.	If the patient is obese and needs help, I can arrange and work with the patient for a solution (e.g., refer to weight management clinic, family/social support groups, other community resources).
	10.	I can easily counsel an obese patient to lose weight, make lifestyle changes and increase their activities of daily living.

Scoring instructions for Healthcare Provider Self-Efficacy Scale (modified General Self-Efficacy Scale): The HPSES contains 10 items on a Likert-scale, ranging from 0 (cannot do at all) to 100 (highly certain can do). The sum scores ranging from 0 to 1000. High scores indicate high levels of healthcare provider self-efficacy in caring for and counseling an obese patient.

Appendix D

Figure 3. Obesity Counseling Algorithm



Healthcare providers encounter patients in the clinical setting, and opportunities exist for counseling truck drivers on:

- identifying overweight and obesity and accompanying risk factors;
- initiating treatment for both the weight, risk factors, and chronic diseases; and
- weight, waist circumference, and the presence of disease conditions or risk factors when assessing a patient for treatment of overweight and obesity.

This algorithm applies only to the assessment for overweight/obesity and subsequent decisions based on that assessment.

Source: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Heart, Lung and Blood Institute

Appendix E

Maine Youth Overweight Collaborative Disclaimer

Disclaimer Statement:

The materials featured here are for use in the pilot “Maine Youth Overweight Collaborative” program by participating clinicians in the diagnosis and management of youth at risk for being overweight and obese. The information has been gathered from a variety of sources and reflects a synthesis of current clinical consensus and expert opinion from Maine and around the nation. Please be advised that these tools collectively represent a body of work that is in progress and may be revised in the future as guidelines and standards of care evolve. These tools are not intended to replace clinical judgment, or to promote specific care recommendations for providers outside of our pilot initiative. When using the materials available on our site, we ask you to please make note of the source.

Link to Maine Youth Overweight Collaborative encounter tool:

<http://www.une.edu/mhprc/projects/maine-youth-overweight-collaborative/keep-me-healthy-tool-kit>

Appendix F

Detailed Time Line

Month/Year	Event
January 2017	Proposal to sponsoring institution; needs assessment
February 2017	Ongoing project development
March 2017	Project to chair and committee for final review
April 2017	Project proposal to University of Nevada, Las Vegas
May 2017	Application to IRB at both institutions
June 2017	Pending IRB approval
July 2017	Pending IRB approval and project development
August 2017	IRB approval
September 2017	Collection of baseline data
October 2017	Educational intervention
November 2017	Monitoring
December 2017	Monitoring
January 2018	Post data analysis and collection review; preparation of findings
February 2018	Evaluation and completion of project; preparation for defense
March 2018	Defense
April 2018	Western Institute of Nursing 2018 Research Conference poster presentation, dissemination of findings

Appendix G

Detailed Project Tasks

TASK	Week1	Week 2	Week 3	Week 4	Week 12	Week 13
Needs Assessment	x					
Project Proposal		x			x	
IRB						x
Baseline Data				x		
Education					x	x
Implementation					x	x
Monitoring					x	x

TASK	Week 14	Week 15	Week 16	Week 17	Week 20	Week 26
Monitoring	x	x	X	x	x	x
Monitoring					x	x
Post Data					x	x
Evaluation					x	x
Defense					x	x

Appendix H

DNP Project Webinar Based Practice Intervention

Figure 4. DNP Project Webinar-Based Practice Intervention

DNP Project Webinar-Based Practice Intervention
IRB -> Pre-Webinar Survey -> Webinar-Based Practice Intervention -> Post-Webinar Survey -> Analyze & Evaluate Data
<p><u>Pre-webinar survey</u> -> baseline measurement, voluntary, blinded, anonymous, healthcare provider participation. Emails sent to providers introducing DNP project and explaining purpose with request to voluntarily participate, with an anonymous identifier including month of birth and favorite color for pre- and post-webinar-based practice intervention that used evidenced based tools. The ATOP, BAOP and GSES was introduced and described in detail (Gujral, 2011; Bandura, 2006).</p>
<p><u>Intervention</u> -> a webinar-based practice intervention that used evidenced-based tools. These tools included the 5A's Framework, Maine Youth Overweight Collaborative encounter tool & obesity counseling algorithm desk reference tool, and bariatric sensitivity training. (Schlair et al., 2012; University of New England, n.d.; and U.S. Department of Health & Human Services, 2014).</p>
<p><u>Post-webinar survey</u> -> post measurement, voluntary, blinded, anonymous, healthcare provider participation. Emails sent to those providers who agreed to participate after DNP project webinar-based practice intervention was attended. A post-webinar survey was emailed that was identical to the pre-webinar survey. Using the same anonymous identifier used for the pre-survey (i.e., including month of birth and favorite color) the ATOP, BAOP and GSES was again queried in detail to the healthcare provider (Gujral, 2011; Bandura, 2006).</p>
<p><u>Analyze and evaluate data</u> -> data presented as mean and standard deviation. Evaluation of statistical data using descriptive statistics on a convenience sample. Determination of effectiveness of a webinar-based practice intervention that used evidence-based tools. Positive outcomes by healthcare providers in self-efficacy, attitudes and beliefs about obesity and care provided to obese truck drivers with training and use of evidenced-based tools when counseling these patients.</p>

Appendix I

Budget

Budget for Implementation of Obesity Counseling Tools to Improve Healthcare Provider				
Comfort				
Estimated Costs				
Category	Item	Quantity	Price	Total
Staffing	DNP student	360	Gratis	0
Educational Materials	Educational packet	40 Electronic, no charge	0	0
Training	Staff training	22 @ 60 min	Salaries vary	Approximately \$1320 based on average hourly rate
Training	Monitoring	6–8 weeks	0	0
Data	Qualtrics	N/A	No Charge	0
HCP Participation	Gift Cards	22	\$10	\$220
Total Costs				\$ 1,540

Appendix J

Copyrights, Tools, and Other Author Permissions

ATOP and BAOP Information and Scale Authorization

2/4/17 Evaluation of nurse's attitudes toward adult patient of size. H. Gijral, C. Tea, and M. Sheridan. Requested permission for use of ATOP and BAOP information with scoring scale. Takes up to 15 days to reply – not yet received authorization as of print.

Dear Mrs. Giordano,

Thank you for your request. The details are summarized below:

Title: Mrs. Sheryl Giordano

Institute/company: Johns Hopkins Medicine

Address: 6500 W. Sunset Rd.

Post/Zip Code: 89118

City: Las Vegas

State/Territory: NV

Country: United States

Telephone: 7023035804

Email: sg13fnp@yahoo.com

Type of Publication: Journal

Journal Title: Evaluation of nurse's attitudes toward adult patients of size

Journal ISSN: 15507289

Journal Volume: 7

Journal Issue: Surgery for Obesity and Related Diseases

Journal Year: 2011

Journal Pages: 536 to 430

Journal Author: Harpreet Gujral, Christine Tea, Michael Sheridan

Journal Article title: Evaluation of nurse's attitudes toward adult patients of size

I would like to use: Figure(s)

Quantity of material: Use of Appendix 1, 2 and 3 The Attitudes Toward Obese Person Scale Beliefs About Obese Persons Scale and Scoring Instructions All reprints requested and to be placed as appendix material in my DNP project.

Excerpts:

Are you the author of the Elsevier material? No

If not, is the Elsevier author involved? No

If yes, please provide details of how the Elsevier author is involved:

In what format will you use the material? Print and Electronic

Will you be translating the material? No

If yes, specify language:

Information about proposed use: Other

Proposed use text: Will be using in a DNP (Doctoral of Nursing Practice) project. There is no requirement at this time to publish. Should I decide to publish, would like to request that authorization at a later date.

Additional Comments / Information: Thank you. Sheryl Giordano, APRN-C

Kind regards,

Elsevier Permissions

Obesity Counseling Treatment Algorithm Authorization

The guidelines have been reviewed and endorsed by many professional organizations. In fact, because of the associated risks between high blood pressure and high blood cholesterol and overweight and obesity, the document represents the first clinical practice guidelines to be reviewed and endorsed by members of the coordinating committees of both the National Cholesterol Education Program and the National High Blood Pressure Education Program, which comprise approximately 52 professional societies, government agencies, and consumer organizations. Two additional groups endorsing the guidelines are the North American Association for the Study of Obesity and the NIDDK National Task force on the Prevention and Treatment of Obesity.

The report, the evidence model and its accompanying evidence tables, and a body mass index calculator are available on the NHLBI website at the following location:

http://www.nhlbi.nih.gov/nhlbi/cardio/obes/prof/guidelns/ob_home.htm

An abbreviated version of the evidence report is being prepared and will be distributed to primary care physicians, nurses, registered dietitians and nutritionists, and other healthcare practitioners. It is our hope that these clinical guidelines will not only help the healthcare practitioner understand the importance of weight management but also provide them with the tools to assess and treat their patients more effectively. Equally important, we hope that the guidelines lead to a greater public understanding of obesity and a greater appreciation for the persistent efforts of millions of people to lose weight. (Claude Lenfant, M.D., *Director National Heart, Lung, and Blood Institute*)

Prochaska – Diagram Stages of Change Model

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Reproduction. Permission is given for fair dealing with this material including for the purposes of private study and research and may be reproduced as permitted under the Copyright Act 1968. A copy of the Act is available on the Federal Register of Legislation the legal information retrieval system owned by the Australian Attorney General's Department. All other rights are reserved. Any permitted reproduction made must acknowledge the Commonwealth as the source of any selected passage, extract, diagram or other information or material reproduced. Any reproduction made of the information or material must include a copy of the original copyright and disclaimer notices as set out here.

Table 1. Attitudes Toward Obese Persons Scale

	Pre-Webinar (<i>n</i> = 22)	Post-Webinar (<i>n</i> = 11)
	Mean (<i>SD</i>)	Mean (<i>SD</i>)
Obese people are as happy as non-obese people	-0.14 (1.61)	0.82 (1.54)
Most obese people feel that they are not as good as other people.	0.09 (1.63)	-0.82 (1.60)
Most obese people are more self-conscious than other people.	1.18 (1.37)	0.91 (1.30)
Obese workers cannot be as successful as other workers.	-2.18 (1.37)	-2.00 (0.89)
Most non-obese people would not want to marry anyone who is obese.	-0.50 (1.90)	-0.27 (1.49)
Severely obese people are usually untidy.	-2.18 (1.18)	-2.27 (0.65)
Obese people are usually sociable.	0.82 (1.59)	0.91 (1.30)
Most obese people are not dissatisfied with themselves.	-0.50 (1.66)	0.64 (1.57)
Obese people are just as self-confident as other people.	0.41 (1.59)	1.09 (1.51)
Most people feel uncomfortable when they associate with obese people.	-1.86 (1.36)	-0.55 (2.02)
Obese people are often less aggressive than non-obese people.	-1.59 (1.40)	-1.09 (1.30)
Most obese people have different personalities than	-2.45 (0.67)	-1.64 (1.43)

non-obese people.

Very few obese people are ashamed of their weight.	0.14 (1.75)	-1.18 (1.17)
Most obese people resent normal weight people.	-0.82 (1.68)	-1.09 (1.22)
Obese people are more emotional than non-obese people.	-2.05 (1.33)	-2.00 (0.89)
Obese people should not expect to lead normal lives.	-2.23 (1.51)	-1.64 (1.96)
Obese people are just as healthy as non-obese people.	-1.41 (1.65)	-0.55 (1.92)
Obese people are just as sexually attractive as non-obese people.	-0.09 (2.00)	0.00 (2.10)
Obese people tend to have family problems.	-2.05 (1.05)	-2.18 (0.75)
One of the worst things that could happen to a person would be for him/her to become obese.	-1.05 (1.59)	-1.73 (1.68)
Final Calculated Attitudes Toward Obese Persons Score*	73.73 (13.57)	75.91 (10.24)

The scale for this instrument ranges from -3 (strongly disagree) to +3 (strongly agree).

* The final score was calculated per instrument instructions and ranges from 0 to 120; greater score indicates more positive attitudes.

Table 2. Beliefs About Obese Persons Scale

	Pre-Webinar (n = 22)	Post-Webinar (n = 11)
	Mean (SD)	Mean (SD)
Obesity often occurs when eating is used as a form of compensation for lack of love or attention.	0.05 (1.86)	0.00 (1.67)
In many cases, obesity is the result of a biological disorder.	0.50 (1.44)	0.27 (1.74)
Obesity is usually caused by overeating.	0.91 (1.77)	0.64 (2.01)
Most obese people cause their problem by not getting enough exercise	0.59 (1.65)	0.36 (1.80)
Most obese people eat more than non-obese people.	0.86 (1.55)	1.09 (1.64)
The majority of obese people have poor eating habits that lead to their obesity.	1.00 (1.54)	1.27 (1.56)
Obesity is rarely caused by a lack of willpower.	0.00 (1.72)	-0.64 (1.80)
People can be addicted to food, just as others are addicted to drugs, and these people usually become obese	1.73 (1.12)	1.36 (1.86)
Final Calculated Beliefs Toward Obese Persons Score*	19.36 (6.64)	18.91 (9.43)

The scale for this instrument ranges from -3 (strongly disagree) to +3 (strongly agree).

* The final score was calculated per instrument instructions and ranges from 0 to 48; greater score indicates stronger belief that obesity is not under the obese person's control.

Table 3. General Healthcare Provider Self-Efficacy Scale

	Pre-Webinar (<i>n</i> = 22)	Post-Webinar (<i>n</i> = 11)
	Mean (<i>SD</i>)	Mean (<i>SD</i>)
As a healthcare provider, I am comfortable solving difficult problems if I try hard enough.	84.09 (13.68)	84.55 (9.34)
I am comfortable conducting physical exams on obese truck driver patients.	88.64 (20.07)	90.00 (13.42)
It is easy for me to discuss obesity, lifestyle (e.g., exercise program), and dietary changes with my patients, especially truck drivers.	87.73 (6.85)	90.91 (8.31)
I am confident that I could assess a truck driver on obesity.	85.00 (19.70)	85.45 (26.22)
Thanks to my resourcefulness, I know how to discuss and advise my patients on the sensitive condition of obesity and its co-morbidities.	80.00 (18.77)	88.18 (9.82)
I can solve most problems if I invest the necessary effort and establish goals with the patient as a team (i.e., SMART goals that are specific, measurable, achievable, realistic and time bound).	82.73 (11.62)	87.27 (11.91)
I can remain calm when facing difficult patient situations (e.g., tense discussions about obesity)	84.55 (10.11)	83.64 (14.33)

because I can rely on my coping abilities.

When confronted with an obese patient, I can assist to find several solutions (e.g., nutritionist, behavioral therapist, group therapy, medications, referral to bariatric surgeon).	81.36 (18.33)	83.64 (9.24)
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If the patient is obese and needs help, I can arrange and work with the patient for a solution (e.g., refer to weight management clinic, family/social support groups, other community resources).	79.09 (23.89)	84.55 (13.69)
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I can easily counsel an obese patient to lose weight, make lifestyle changes and increase their activities of daily living.	84.09 (10.98)	87.27 (12.72)
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Final Calculated Healthcare Provider Self-Efficacy Score*	837.27 (106.78)	865.45 (92.99)
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Note: The scale for this instrument ranges from 0 (cannot do skill at all) to 100 (highly certain, can do skill)

* The final score was calculated per instrument instructions and ranges from 0 to 1000; greater score indicates high levels of healthcare provider self-efficacy in caring for and counseling an obese patient.

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Curriculum Vitae

Sheryl M. Giordano, APRN-C

PROFILE

Self-motivated, organized, energetic, independent professional with over 30 years experience in nursing. Possess a variety of experience working in multiple healthcare environments with excellent public speaking, oral/written communication skills and a sense of humor.

REGISTRATION

Nevada APN #00828	Nevada Pharmacy Registration #APN00797
Nevada RN #23803	Illinois RN #041-241316 (In-active)
DEA #MG 1225196	Active
NPI #1972568657	

CERTIFICATION

American Association of Nurse Practitioners Certification as a Family Nurse Practitioner #F0305055 (Certification 3/1/05-3/2020)
Cardiopulmonary Certification thru 6/2019
National Registry, Department of Transportation, CDL 4964119515, Exp. 1/17/23

EDUCATION

Master of Nursing - Graceland University, Lamoni, Iowa Graduation 11/30/04
Required 665 hours of supervised clinical training

Bachelors of Science, Nursing – Graceland University, Lamoni, Iowa Graduation 11/30/04

Associates Degree in Applied Science, Registered Nursing Program – Oakton Community College, Illinois 5/1986

CLINICAL EXPERIENCE

April 17 – present **Nevada State Board of Nursing** Las Vegas, Nevada
Nurse Practitioner – Part-Time

April 09 – present	Johns Hopkins University	Las Vegas, Nevada
Nurse Practitioner		
January 14 – present	University of Nevada, Las Vegas	Las Vegas, Nevada
Nurse Practitioner - Part-Time/Per Diem Instructor		
August 08 – April 09	Take Care Health Systems	Las Vegas, Nevada
Nurse Practitioner		
December 06-August 08	Minute Clinic Diagnostic	Las Vegas, Nevada
Nurse Practitioner – Team Leader		
April 06- January 2012	Forte Family Practice	Las Vegas, Nevada
Nurse Practitioner		
February 06 – April 2007	Clark County School District	Las Vegas, Nevada
Registered Nurse		
October 2005 – January 2006	Spectrum Healthcare Services	Henderson, Nevada
Nurse Practitioner	Outpatient Veteran’s Association Clinic	
May 2005 – October 2005	Rivas/Accustaff	
Registered Nurse	State of Nevada	Las Vegas, Nevada
Health Facility Surveyor II	Bureau of Licensure and Certification, Health Division	
January 2005 – May 2005	Gerinet of Nevada	Las Vegas, Nevada
Nurse Practitioner		
July 1997 – January 2005	State of Nevada	
Registered Nurse	Bureau of Licensure and Certification	
Health Facility Surveyor II	Health Division	Las Vegas, Nevada

Positions involved:

- * Program Manager for occupational health on-site clinic. Oversight of clinic, development of treatment plans and patient care as provided by family nurse practitioner. Federal and non-federal urine drug screens and breath alcohol testing. Certified as BAT and UDS provider.
- * Family nurse practitioner – working with all age groups & disabilities in private practice, developing care plans based on AANP, AAP, AFP standards of practice, monitoring lab values, prescribing treatments including medications, teaching medical diseases and care to patients and family members, following patients with acute and chronic diseases. Providing care in a sub-acute retail health/quick care environment based on accepted standards of care.
- * Part-time APRN consultant and investigator for the Board of nursing investigating complaints against APRNs, reviewing renewal applications at the direction of

- Executive Director, develop and present to community special projects, chair APRN advisory committee, and legislative duties as assigned.
- * Part-time/Per-Diem instructor for MSN family nurse practitioner program. Work as needed on contract only. Developing student abilities in practical clinical settings.
- * School nurse for special needs population with diseases including cerebral palsy, seizure disorders, rare diseases, trisomy 13, 18, autism. Maintaining/replacing gastrostomy tubes and tracheostomies as needed.
- * Knowledge as an adult and geriatric nurse practitioner in a clinic setting. Complete management of a variety of patients with multiple diseases and co-morbidities. Developing and implementing plan of care, prescribing medications, reviewing and interpreting laboratory results for VA patients.
- * Knowledge as a geriatric nurse practitioner in the long-term care setting. Travel to long-term care facilities as a provider of a patient caseload with multiple chronic diagnoses. Collaborating with multiple physicians and managing patient treatment plans. Writing orders, interacting with residents, family members and facility staff. Managed a resident census of over 50.
- * Knowledge of Federal Medicare, Medicaid regulations and JCAHO requirements for various healthcare facility types. Surveying healthcare facilities, including hospitals and nursing homes for compliance with federal and state regulations. Specialized in complaint investigations of all types including hospitals, nursing homes and staff. Assisted as the lead sole state surveyor with the American College of Surgeon's trauma team two consecutive times for University Medical Center's re-certification Level 1 Trauma center in the Las Vegas region; was the lead sole state surveyor for Mountain View Hospital's open-heart unit program; and lead state surveyor for St. Rose Siena's initial state licensure hospital survey. Daily contact with the public and providers, which required professionalism, excellent communication skills, a neat appearance and tactfulness especially when giving unfavorable information. In-office quality assurance activities as assigned and related to research findings.
- * Clinical assessment/treatment of patients of various ages with various diagnoses.
- * Various roles between 1993 – 1997 with home health as Administrator for Interim Health Care, Medicare supervisor as well as Southern Nevada Home Health, surgical team supervisor.

AWARDS AND SCHOLARSHIPS

American Academy of Nurse Practitioners (AANP)	
Nurse Practitioner Advocate of the Year – Nevada	2017-18
Recognition for Collaborating & Influencing from JHU	2013
American Academy of Nurse Practitioners (AANP)	
Nurse Practitioner of the Year – Nevada	2008-09
Outstanding Surveyor Appreciation Award, Las Vegas Office	2003

PROFESSIONAL ORGANIZATIONS

Western Regional Advanced Practice Nurses Network	2017 - present
American Academy of Nurse Practitioners	2004 - present
Nevada Advanced Practice Nurses Association (Treasurer 2014-2016)	2005 - 2016
American Nurses Association	2007 - present

REFERENCES

Available on request