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## An Integrative Review: Health and Wellness Coaching for Lifestyle Intervention Toolkit and Presentation

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An Integrative Review:

Health and Wellness Coaching for Lifestyle Intervention Toolkit and Presentation

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## TABLE OF CONTENTS

	Page
Abstract.....	4
Introduction.....	5
Background.....	5
Problem Statement.....	8
Organizational “Gap” Analysis of Project Site.....	8
Review of the Literature .....	10
Health and Wellness Coaching Using the Transtheoretical Model (Stages of Change).....	14
Health and Wellness Coaching Using <i>Mindfulness</i> Techniques.....	15
Health and Wellness Coaching Using Motivational Interviewing Method .....	16
Health and Wellness Coaching for Improved Cardiometabolic Risk Factors .....	17
Evidence-Based Practice: Verification of Chosen Option.....	20
Theoretical Framework/Evidence-Based Practice Model .....	20
Goals and Objectives .....	21
Project Design and Methods .....	22
Project Site and Population.....	22
Health and Wellness Coaching for Lifestyle Intervention: Toolkit/Blog.....	23
Pre-Presentation and Toolkit/Blog Process .....	23
Toolkit/Blog.....	25
Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation Outline	27
Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation .....	28

AN INTEGRATIVE REVIEW: HEALTH AND WELLNESS COACHING	3
Results.....	30
Qualitative Questions:.....	37
Interpretation and Discussion .....	38
Strengths and Challenges: Lessons Learned.....	41
Cost-Benefit Analysis/Budget .....	42
Ethical Considerations/Protection of Human Subjects .....	42
Implications/Conclusion .....	42
References.....	45
APPENDICES	
A. Schema .....	52
B. Detailed Outline for Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog.....	60
C. Invitation .....	65
D. Post-Presentation Feedback Survey .....	67
E. Poster Presentation .....	69

### **Abstract**

**Background:** Chronic illnesses such as cardiovascular diseases, diabetes mellitus, respiratory diseases, and cancer account for 71% of all deaths globally. Health and wellness coaching provides an evidence-based platform from which healthcare professionals can orchestrate coaching strategies with the finesse necessary to elicit and sustain a client's desire for positive lifestyle change for risk factor reduction of chronic illnesses.

**Purpose:** The purpose of this Integrative Review for Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation was to demonstrate to healthcare professionals an evidence-based best practice designed to increase self-efficacy and empower individuals.

**Presentation of Toolkit:** A 90-minute evidence-based Toolkit/Blog Presentation to 11 healthcare professionals via Zoom and in person took place at a northeastern university satellite.

**Results/Interpretation:** Presenter effectiveness in presenting to overall purpose/goal that the healthcare professional achieved current knowledge and skills in health and wellness coaching for lifestyle intervention had a Likert scale weighted average (WA) of 4.57 from a scale of 5 (strongly agree) to 1 (strongly disagree). Learner's achievement of objectives on Questions 2–6 had a grand mean WA of 4.48 (strongly agree), and presentation expertise of the speaker evaluated by Questions 7–10 had a grand mean WA of 4.69 (strongly agree). Quantitative results and qualitative responses strongly supported achievement of the purpose/goals.

**Conclusion:** Health and wellness coaching is essential. Obesity prevalence remains high, adherence to a healthy lifestyle low, and lack of health and wellness coaching expertise exists, all demonstrating a need for this evidence-based Health and Wellness Coaching Toolkit/Blog using mindfulness, motivational interviewing, and self-determination theory to improve self-efficacy and empower clients for sustainable lifestyle changes.

**Keywords:** health coach, lifestyle coach, motivation, wellness

## **Introduction**

Health and wellness coaching has been demonstrated to motivate clients to embrace behavioral lifestyle changes such as in the reduction of risk for chronic diseases such as cardio-metabolic syndrome and cardiovascular disease (Jacobson et al., 2015; Khera et al., 2016; Merkin, Karlamangla, Elashoff, Grogan, & Seeman, 2015; Nichols, 2017). According to the World Health Organization (WHO), four of the the most common noncommunicable diseases for premature deaths (cardiovascular disease, diabetes, chronic respiratory diseases, and cancer) account for 71% of all global deaths and are preventable by addressing risk factors of physical inactivity, unhealthy nutrition, tobacco and alcohol use (WHO, 2018). Khera et al. (2016) demonstrated that subjects with a higher number of risk factors had a higher incidence of cardiovascular disease and those who followed healthy lifestyles to reduce their risk factors had a 50% lower relative risk of developing coronary artery disease. Research demonstrates that knowledge alone is insufficient to enact behavioral lifestyle change. A health and wellness coach versed in motivational interviewing who has experience empowering clients by increasing autonomy and self-efficacy to enact positive behavioral change is essential. Combined lifestyle interventions of physical activity and healthy nutrition have been effective in promoting and sustaining weight loss in overweight and obese patients (Brown et al., 2009; Franz, Boucher, Rutten-Ramos, & VanWormer, 2015; Kivelä, Elo, Kyngäs, & Kääriäinen, 2014; Leblanc, O'Connor, Whitlock, Patnode, & Kapka, 2011; Prochaska et al., 2012; Silva et al., 2011).

## **Background**

Health coaching has evolved over time from addiction counseling to health education for patients with chronic illness (Olsen & Nesbitt, 2010) to health and wellness coaching that encompasses behavioral change related to lifestyle intervention. Historically, health coaching

was not clearly defined, with health coaches having varied educational backgrounds, training, and methods of coaching. Olsen and Nesbitt (2010) sought to evaluate the effectiveness of health coaching for improving lifestyle behaviors in an integrative review of 15 peer-reviewed health coaching research studies (1999–2008) that included seven randomized controlled trials. In this integrative review, health coaching demonstrated significant improvement in one or more areas of weight loss, healthy nutrition, physical activity, and medication adherence in 40% of the studies. Health risk factors such as blood glucose, lipids, and blood pressure improved in the health coaching intervention groups. Significant improvements in weight ( $p < 0.001$ ) and improved BMI ( $p = 0.001$ ) were noted in the health coaching group by Vale et al. (2003). Olsen and Nesbitt (2010) identified effective methods for successful health coaching and determined that motivational interviewing (used in 27%) and goal setting (used in 73%) of effective studies were important, in addition to collaboration with healthcare providers (used in 25%) of studies and a coaching time frame of 6–12 months. Health coaching had evolved from motivational interviewing, which remains a vital piece. Motivational interviewing has been deemed efficacious for health behavior change and addiction counseling in numerous studies (Hardcastle, Blake, & Hagger, 2012; Hettema, Steele, & Miller, 2005). A recognition that health coaching needed to be more clearly defined and methods for coaching more consistent for stronger support of evidence was realized.

A systematic review by Wolever et al. (2013) of 800 abstracts with resultant 284 full-text coaching articles from PubMed evaluated evidence for health and wellness coaches to determine how health and wellness coaches were defined and what characteristics and methods constituted health and wellness coaching. Patient-centered health and wellness coaching incorporated identified goals from methods of exploration, and accountability for behavior was prevalent, but

limitations included that less than one third of the articles clearly described the coaching methods used during the interventions and only 22% reported training. Professional background also varied with only 53% of coaches determined to be from the medical profession, 51% from allied health, and 42% with a professional nursing background (Wolever et al., 2013). Professional standards were deemed crucial to ensure optimal coaching; education, experience, and expertise needed to be standardized and regulated for proficient health and wellness coaches (Wolever, Jordan, Lawson, & Moore, 2016). The National Consortium for Credentialing Health and Wellness Coaches (NCCHWC) was established to professionalize health and wellness coaches by creating guidelines to ensure competency (Wolever et al., 2016). This has subsequently changed to the International Consortium for Health and Wellness Coaches (ICHWC).

Wolever et al. (2016) more clearly defined the role of the health and wellness coach, reporting that specific techniques should be used to elicit health and wellness goals from the client including communication strategies that encourage the client to explore and self-reflect. Health and wellness coaches motivate and guide clients as they make necessary lifestyle changes by promoting accountability with goal setting and monitoring.

A Health and Wellness Coach National Certification Exam was recently created with prerequisites that included a healthy lifestyle education, an ICHWC accredited training program, a practical skills assessment, and documentation of health and wellness coaching practice. Standardization and professionalization were deemed crucial to ensure health and wellness coaching as an evidence-based practice for optimal client safety and high quality care (Wolever et al., 2016).

The ICHWC (2017) provided a definition on health and wellness coaches:

Health and wellness coaches partner with clients seeking self-directed, lasting changes, aligned with their values, which promote health and

wellness and, thereby, enhance well-being. In the course of their work health and wellness coaches display unconditional positive regard for their clients and a belief in their capacity for change, and honoring that each client is an expert on his or her life, while ensuring that all interactions are respectful and non-judgmental (ICHWC, 2017).

Health coaching has been utilized to assist patients with various chronic illnesses such as obesity and type 2 diabetes mellitus follow healthy diets, and improve physical activity for weight loss and improved HbA1C (Wayne, Perez, Kaplan, & Ritvo, 2015). Health and wellness coaching that targets physical activity, healthy diet, stress management, and smoking cessation through behavioral change is recognized by healthcare professionals as being essential to client care (Prochaska et al., 2012; Wolever et al., 2016).

### **Problem Statement**

Chronic illnesses such as cardiovascular diseases, diabetes mellitus, respiratory diseases, and cancer account for 71% of all global deaths (World Health Organization [WHO], 2018). Healthcare professionals have a gap in knowledge and skills regarding the best practice and effective methods and means for health and wellness coaching for lifestyle intervention that must be addressed. Education regarding recommended lifestyle changes for risk reduction is insufficient in most cases to motivate clients to initiate and adhere to positive lifestyle change. Health and wellness coaching for lifestyle intervention provides an evidence-based platform from which the healthcare professional can orchestrate coaching strategies with the finesse necessary to elicit and sustain a client's desire for positive lifestyle change.

### **Organizational "Gap" Analysis of Project Site**

A knowledge and skills gap existed for health and wellness coaching for lifestyle intervention in healthcare professionals that needed to be addressed. An urban satellite of a northeastern university was identified as an ideal project site since it allowed for affiliated

healthcare professionals to attend to address this gap.

An acute/urgent care focus had taken precedence over preventive practice. Time constraints in primary care practices with brief follow-up visits did not allow adequate time to tackle prevention. A disease-focused model needed to shift to a more holistic wellness paradigm. Healthcare professionals often have a knowledge deficit in exercise guidelines, healthy nutrition, and prevention and are not sufficiently equipped to promote wellness (Rimmer, Rauworth, Wang, Herckerling, & Gerber, 2009). Medicare and other insurances had not historically reimbursed for wellness visits and required documentation of a disease-focused visit. The Preventive Care Task Force, based on important findings from a systematic review by Leblanc et al. (2011), recommended that adults with obesity be provided a multicomponent behavioral intervention program by primary care clinicians. Leblanc et al. reviewed 6,498 abstracts and 648 articles from MEDLINE, Cochrane Central Register of Controlled Trials and PsycINFO from January 2005 to September 2010 and discovered that behavioral-based interventions resulted in a 6.6-pound greater weight loss, and a 30–50% reduced incidence of diabetes mellitus in patients with prediabetes. The Centers for Medicare and Medicaid Services (CMS) supported the Preventive Care Task Force recommendations and are currently reimbursing preventive obesity counseling (CMS, 2017). The Preventive Care Task Force (Leblanc et al., 2011), Healthy People 2020 (Healthy People 2020, 2017), the Centers for Disease Control and Prevention (CDC, 2017) and the World Health Organization (WHO, 2018) all encourage health promotion, prevention, and well-being that can be addressed with health and wellness coaching.

The healthcare paradigm is also evolving to include a more holistic health and wellness focus incorporating physical, mental, environmental, and social issues. Exercise, nutrition and behavioral health are all essential components to promoting well-being. Maintaining a healthy

lifestyle is vital for reducing the incidence of chronic disease. Recognizing the importance of mind/body connection and complementary and integrative practices are key ingredients to holistic practice. Evidence from review of the literature demonstrated physiological changes that occur with the relaxation response, which include favorable telomere changes (Dusek et al., 2008).

Health and wellness coaching for lifestyle intervention, which is specifically designed to reduce the cardiovascular risk factors of obesity, dyslipidemia, prediabetes mellitus, and diabetes mellitus, is ideally performed prior to disease formation. The preventive-focused Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation that was offered at a northeastern university urban satellite was the perfect instrument to address lifestyle behavior that could generate a positive influence for many years. Health and wellness coaching was identified as an ideal evidence-based practice for successful lifestyle intervention for healthcare professionals who had a knowledge and skills deficit requiring training from an easy-to-navigate Toolkit/Blog.

### **Review of the Literature**

A complete search was performed as follows: a PubMed search (which included a Medline search) with (health coach or lifestyle coach) resulted in 125 articles; addition of “and motivation” resulted in 65 articles; adding a 5-year filter and “humans” resulted in 52 articles; restricting it to ages 19–44 resulted in 19 articles, while ages 44+ resulted in 16 articles; addition of “and lifestyle changes or lifestyle modification” limited the search to 8 articles, but this was eventually omitted for a more inclusive search. A Cumulative Index to Nursing and Allied Health Literature (CINAHL) search was performed with only Boolean/phrase-related words to ensure a broad enough search, articles were restricted to the past 5 years that were English and

peer reviewed. “All” articles were included to ensure a broad enough search. (Health coach or lifestyle coach) resulted in 210 articles, added in (and motivation), which decreased it to 14 articles, which was further reduced to 11 articles when restricted to academic journals. An additional CINAHL search was performed with “health coaching and nurse practitioners” using only randomized controlled trials without success; eliminating “and nurse practitioners” resulted in one higher quality interdisciplinary randomized controlled trial with 3,391 subjects in which health coaching used the Transtheoretical Model of Change (TTM) and was included for review.

A PsycINFO search of “health and coach or lifestyle coach and motivation” resulted in 204 articles while “(health or lifestyle) and coach and motivation,” adult, resulted in 134 articles; limiting to past 5 years resulted in 105 articles for review. An ERIC search with the above terms produced two articles. A review of pertinent articles follows that includes some articles that were cited with the original search and deemed appropriate for review and inclusion. Articles were excluded due to coaching not being health-related, and others due to their focus on a pediatric population. Articles were chosen based on a higher quality of evidence rating as determined by using the Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) appraisal tool.

Systematic reviews of randomized controlled trials were included, as were other research articles with significant findings pertinent to this discussion of health and wellness coaching. A final count of about 25 articles was used for this review. Six systematic reviews, one integrative review, as well as randomized controlled and longitudinal studies were included, demonstrating effectiveness of health and wellness coaching, as follows:

Kivelä et al. (2014) in a systematic review of studies published between 2009 and 2013 with inclusion criteria of health coaching for adults with chronic disease by healthcare professionals, evaluated 11 randomized controlled trials and two quasi-experimental studies.

This systematic review demonstrated statistically significant improvement in areas of physiological changes such as weight loss (Bennett et al., 2010; Hersey et al., 2012; Rimmer et al., 2009), psychological changes such as improved mental health and self-efficacy (Linden, Butterworth & Prochaska, 2010) and behavioral changes such as increased physical activity with significant improvement noted in six of the studies. Good quality evidence for health and wellness coaching by healthcare professionals was demonstrated.

Health and wellness coaching has also been demonstrated to be an effective and efficient mechanism to promote client autonomy and self-efficacy resulting in positive behavioral change (Deci & Ryan, 2008; Rutten et al., 2014; Silva et al., 2011; Wolever et al., 2013). Autonomy is defined as the desire to be in control of one's life or destiny. Clients often become rebellious or resistant when they perceive they are being lectured to about what they should do instead of allowing for autonomy. Healthcare professional/client relationships that are authoritative and judgmental with ineffective communication skills are often perceived as condescending with resultant client resistance to change (Deci & Ryan, 2008). A closer look at Rutten et al. (2014) and Silva et al. (2011) follows.

In a prospective cohort trial using a longitudinal questionnaire survey of 298 obese patients in 29 general Netherlands practices, Rutten et al. (2014) implemented and evaluated the Dutch (BeeweeKurg) intervention. This intervention was a combined lifestyle intervention that used physical activity support, dietary advice with lifestyle coaching, and motivational interviewing to examine the shift in motivation to increase physical activity and diet. Autonomy-supportive lifestyle coaching led to a more autonomous type of motivation in the physical activity group; integrated regulation and intrinsic motivation increased while amotivation and external regulation decreased significantly. In order for healthy dietary behavior to occur, only

external motivation decreased significantly. Rutten et al. (2014) reported that the chances of combined lifestyle interventions being successful are increased when clients are intrinsically motivated. Using lifestyle coaching to increase a participant's motivation to perform increased physical activity was demonstrated.

Silva et al. (2011) in a randomized controlled longitudinal trial of 221 overweight/obese women (ages 25–50 years) demonstrated that autonomous motivation from 1 year of a self-determination theory intervention resulted in significant effects on 1- and 2-year autonomous regulation, 2-year sustained moderate to vigorous exercise programs, and 3-year weight loss. A sustained moderate-to-vigorous exercise program had a significant effect ( $p < 0.001$ ) on 3-year weight loss providing evidence that increased autonomous motivation through self-determination theory intervention results in sustained exercise and weight loss. Silva et al. also encouraged focusing on a client's values, meaning in life and goals to promote change, which are other key components to health and wellness coaching. A focus on the positive experience of physical activity is recommended with health and wellness coaching rather than just focusing on the end result of weight loss. Silva et al. (2011) and Rutten et al. (2014) clearly demonstrated the importance of using autonomy as a critical component of self-determination theory for health and wellness coaching to promote and sustain positive lifestyle change.

Health and wellness coaching has also been demonstrated to effect positive change through the use of the TTM, mindfulness, and motivational interviewing as demonstrated by the following review of studies with resultant significant improvement in health risk factors including cardiometabolic risk.

**Health and Wellness Coaching Using the Transtheoretical Model (Stages of Change)**

The TTM has been incorporated into health and wellness coaching in practices for promoting client well-being (Prochaska et al., 2012). In one of the first randomized controlled trials that evaluated health coaching to reduce health risk factors, Prochaska and his fellow investigators studied 3,391 subjects that were enrolled into three study subsections: (a) a telephonic health coaching session with exercise as the primary behavioral target and stress management as secondary, (b) an online program with stress management as primary and exercise as secondary, and (c) a control group. Results demonstrated that at the 6-month follow-up 57.3% of the participants in the health coaching group with exercise as the primary target were more likely to progress to the action or maintenance stage compared to 37.8% of the control group, while 46.6 % of participants in the online program, with exercise as secondary behavior to stress management, were significantly more likely to achieve success than the control group (Prochaska et al., 2012). A significantly greater percentage of the health coaching group for stress management reached the action/maintenance stage for stress management compared to the control group (74.4% vs. 53.1%) at 6 months. The difference was significant between the health coaching and control group for overall change in health behavior risk (average risk reduction 1.18 vs. 0.49).

The evaluation by Prochaska et al. (2012) of well-being outcomes demonstrated that the health coaching group had the highest improvement in each well-being score, with a significant difference between the health coaching group and control, and the online group and control for overall well-being, and four out of six domains, which were emotional health, physical health, life-evaluation and health behaviors. In summary, the largest degree of change was noted to be

an increase in percentage of participants who considered themselves to be *thriving*, a measure of *positive life self-evaluation*, which was associated with a reduction in health risk.

Exercise and stress management were chosen by Prochaska et al. (2012) as the health behaviors to conquer since they were considered to have the greatest likelihood for changing well-being domains, which was demonstrated. Exercise has numerous benefits including stress reduction, improved self-esteem, increased energy, and weight loss. Healthy People 2020 and the WHO both support physical and psychosocial well-being (Healthy People 2020, 2017; WHO, 2016).

### **Health and Wellness Coaching Using *Mindfulness* Techniques**

Health and wellness coaches also use *mindfulness* techniques, eliciting a state of mind that requires being fully present in the moment (Kabat-Zinn, 1994) as another vital tool to effect positive change. In the modern world of social media, deadlines, and distractions, mindfulness is rarely practiced. Eating without being mindful and overindulging in comfort food in response to stressors is attributed to the obesity that is highly prevalent in our society. Mindfulness allows the client to find an alternative to unhealthy and binge eating. A health and wellness coach is key to bringing an awareness of the importance of relinquishing the past and future to be mindful of the present. Sohl, Birdee, and Elam (2016) demonstrated mindfulness and motivational interviewing as key components to effective health coaching. Mindfulness allowed the practitioner to be fully present with the client, who was appreciative of the health coach being completely engaged with effective listening. A mindful practitioner is more likely to *roll with resistance*, which as described below is a key component of health and wellness coaching and motivational interviewing. Mindfulness facilitates effective communication between the practitioner and the client, promoting discussion of concerns and goals (Sohl et al., 2016).

### **Health and Wellness Coaching Using Motivational Interviewing Method**

Health and wellness coaching has evolved from motivational interviewing, which remains a vital part. Motivational interviewing is one client-centered technique a health and wellness coach uses to effect behavioral change. A successful health and wellness coach collaborates with a client, is an effective listener, and allows the client to decide which lifestyle they would like to change. Through techniques of *reflective listening* and *rolling with resistance*, motivational interviewing has been described as an essential communication tool that the practitioner elicits to effectively guide their client through the change process. (Frates, Moore, Lopez, & McMahon, 2011; Miller & Rollnick, 2002, 2013). Motivational interviewing requires a *Spirit of MI*, which is a *heart- and mindset* that recognizes the importance of establishing a *collaborative partnership* with the client that is one of *acceptance and compassion* and is not manipulative, that *evokes* a client's own reasons for change (Miller & Rollnick, 2013). Miller and Rollnick describe these four processes of motivational interviewing: (a) *Engaging*: developing a relationship in which a client is actively interested, (b) *Focusing*: guiding a client in a direction toward their goal, (c) *Evoking*: assisting a client to determine their own reason for change, and (d) *Planning*: a discussion that occurs when a client is ready to take action steps that are client generated (Miller & Rollnick, 2013).

Motivational interviewing is a form of communication used to enhance autonomy and intrinsic motivation, resolve ambivalence, and promote behavior change (Hettema et al., 2005; Miller & Rollnick, 2002, 2013). Pollak et al. (2011) in their study on motivational interviewing demonstrated that physicians who used reflective listening were perceived as providing high *autonomy support* and that patients reported a higher level of perceived satisfaction with physicians who were empathetic—another key component of health and wellness coaching.

Patients' confidence level in their ability to lose weight was associated with perceived *autonomy support*. This study further supports the use of autonomy and intrinsic motivation in health and wellness coaching as being essential to change (Deci & Ryan, 2008; Pollak et al., 2011; Rutten et al., 2014; Silva et al., 2011).

Motivational interviewing has also been demonstrated to improve health coaching participant self-efficacy, with fewer participants increasing their stages-of-change risk than nonparticipants ( $P < 0.01$ ) per Kivela et al. (2014) in their systematic review of Linden et al.'s (2010) quasi-experimental study in which 106 chronically ill health coaching participants who received motivational interviewing demonstrated a significant improvement in self-efficacy ( $P = 0.01$ ), lifestyle change score ( $P = 0.01$ ), patient activation ( $P = 0.02$ ) and health status ( $P = 0.03$ ), compared to 230 chronically ill nonparticipants.

In addition to psychological and behavioral effects, motivational interviewing has also resulted in physiological changes such as significant weight loss (Hersey et al., 2012; Kivela et al., 2014) and improved BMI (Hardcastle, Taylor, Bailey, Harley, & Hagger, 2013), as discussed in further detail below when reviewing evidence of how health and wellness coaching improves cardiometabolic risk factors essential for cardiovascular risk reduction.

### **Health and Wellness Coaching for Improved Cardiometabolic Risk Factors**

In their systematic review, Kivela et al. (2014) reported significant weight loss, as noted by Hersey et al. (2012) in a randomized controlled trial (RCT) of 1,755 overweight participants who were randomized to three arms: (a) RCT1 participants received written materials and basic web access, (b) RCT2 had additional interactive web access, and (c) RCT3 participants received telephonic support or email from trained health lifestyle coaches every 2 weeks using motivational interviewing. All arms demonstrated significant increase in physical activity from

29.1 % at baseline to 40.2% at 12 months, and 44.2% after 15–18 months. Improved blood pressure and significant weight loss (-4.0%, -4.0%, and -5.3% in RCT1, RCT2, RCT3, respectively) were also noted at 12 months, and (-3.5%, -3.8%, and -5.1% in RCT1, RCT2, and RCT3, respectively) at 15–18 months. Participants in the lifestyle coaching with motivational interviewing arm demonstrated larger improvements in physical activity and weight loss.

Hardcastle et al. (2013) in a randomized controlled trial of 203 participants, demonstrated motivational interviewing as an effective method to promote exercise and healthy nutrition with a significant improvement in cholesterol, BMI, physical activity, and improved blood pressure. Additionally, Holmen et al. (2016) in a three-armed randomized controlled trial of 151 (90% overweight/obese) patients with type 2 diabetes mellitus evaluated the stages of change for behavioral change and demonstrated a reduced hemoglobin A1C (HbA1C) for patients in the action stage of activity, with lower BMI values and improved health-related quality of life (HRQL) scores. Holmen et al. (2016) also demonstrated that higher scores on positive and active engagement in life were associated with the action stage of physical activity, demonstrating the importance of coaching clients to achieve the action stage of the TTM stages of change.

Wayne et al. (2015) performed a randomized controlled trial on 131 patients with type 2 diabetes mellitus of low socioeconomic status under the age of 70, from two primary care health centers in Canada. A significant reduction in weight ( $P = .006$ ), and waist circumference ( $P = .01$ ) occurred in the intervention group but not the control group, and a significant difference in HbA1C occurred at 3 months between groups ( $P = .03$ ) but not at 6 months. Additionally, the HbA1C improved 0.84% ( $P = 0.001$ ) in the intervention group and 0.81% ( $P = .001$ ) in the control group at 6 months. A significant improvement in mood, quality of life, and satisfaction with life was noted in both groups. A significant quicker improvement in HbA1C in the group

with mobile telephone counseling occurred at 3 months, demonstrating the benefits of health coaching. Each intervention was provided by a health coach who was a behavior change counseling specialist, an expert in chronic disease management and evidence-based theory, and six of these health coaches had either a bachelor or master's degree in exercise physiology, demonstrating expertise. Both control and intervention groups received the health coaching intervention, which may have accounted for a significant improvement in the control group too. The intervention group was provided with an additional mobile telephone and received software with 24/7 access to health coach messaging. The primary goal was to increase frequency, intensity, and duration of exercise and decrease carbohydrate intake with additional goals of medication and stress management adherence. Both groups received exercise prescriptions, trainer monitoring and support, and group exercise classes consisting of cardiovascular exercise and resistance training, resulting in a very comprehensive exercise program. Subjects documented their food intake, exercise, and mood using hospital anxiety and depression scales, Positive and Negative Affect Schedule (PANAS) forms, and a Short-Form Health Survey-12 (SF-12) quality-of-life survey. Limitations were that the study was performed in Canada, making it less generalizable to the U.S. population, and consisted of a smaller number of participants. Strengths were being a RCT with a strong design and expert coaches and 90% of patients being from a lower socioeconomic status with a HbA1C greater than 7.3. The numbers in the trial, although adequate for power, were still small and would recommend repeating this trial in the U.S. with a larger number of subjects.

In summary, an integrative review of the literature on health and wellness coaching for lifestyle intervention supports that it is evidence-based with good quality systematic reviews of RCTs that demonstrate positive results in physiological effects such as weight loss, reduced

HbA1C, improved lipid profile, and blood pressure. Additionally, psychological improvement in stress reduction, promotion of well-being, and improved HRQL scores were demonstrated.

Limitations were inconsistent health coaching training and what defined a health coach in various studies. Other limitations were some studies had a small number of subjects or were not RCTs.

### **Evidence-Based Practice: Verification of Chosen Option**

Based on the integrative review, a Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog for healthcare professionals was created and presented. Health and wellness coaching techniques can assist clients to develop and maintain healthy physical activity, nutrition and stress management for risk factor reduction of obesity, hypertension, dyslipidemia, and diabetes mellitus to prevent chronic illness. Health and wellness coaching techniques and easy access to the Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog were provided to healthcare professionals for use in their professional practices.

### **Theoretical Framework/Evidence-Based Practice Model**

Self-determination theory provides a framework for health and wellness coaching as a way to promote a client's autonomy. Individuals are often resistant to change, and this allows clients the opportunity to make their own decisions (See Appendix A for Schemas).

Rutten et al. (2014) demonstrated how changes in motivation were attributed to motivational interviewing and how self-determination theory inspired participants to increase their physical activity through an increase in autonomy. The positive effect of increased intrinsic motivation resulted in increased physical activity. Autonomy, a key aspect of self-determination theory, is crucial to motivate individuals in behavior change as opposed to controlled motivation from external sources or internal sources of guilt in which clients feel compelled to make a

change (Deci & Ryan, 2008). Autonomous motivation is when a behavior is engaged in due to a client's own desire. Health and wellness coaching is designed to promote autonomy and uses motivational interviewing to allow the individual to make their own choice in behavior change.

Health and wellness coaches also initially assess where a client is at in relation to the TTM (Prochaska, 2014). According to Prochaska, there are six stages of health behavior change: pre-contemplation, contemplation, preparation, action, maintenance, and termination. A client who is not ready to make a change is either in the pre-contemplation, contemplation, or preparation stage. A health and wellness coach assesses what level the client is at and is trained to provide appropriate coaching at each level to assist the client to progress to the stage where they are willing to initiate changes. Health and wellness coaches collaborate with clients to assist them to overcome barriers in various stages including sustaining their lifestyle change in the maintenance stage. Nurse practitioners have used the TTM model in primary care practices to promote lifestyle changes (Singer, 2007). If a client is resistant to making a change and is in the pre-contemplation stage, then the health and wellness coach relies on the individual's autonomy to decide when they are ready to initiate change. Health and wellness coaches use the TTM stages of change to assist clients to initiate and sustain lifestyle changes.

### **Goals and Objectives**

The overall goal was to create an effective evidence-based Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog and Presentation for healthcare professionals. An anonymous post-presentation feedback survey and qualitative questions were provided to the participants via Survey Monkey. The DNP student presenter was rated on the effectiveness in presenting the evidence-based Health and Wellness Coaching for Lifestyle Intervention Toolkit

components. The healthcare professionals also rated how well the presented evidence improved their knowledge and skills in health and wellness coaching.

Objectives were as follows:

1. The DNP student will provide evidence-based information from an in-depth integrative review on health and wellness coaching.
2. The DNP student will review evidence-based theories that guide health and wellness coaching practice.
3. The DNP student will identify the difference between health and wellness coaching and *expert education* and reasons for using health and wellness coaching to avoid resistance and overcome ambivalence.

### **Project Design and Methods**

An integrative review framework with an educational evaluation design was used for the presentation. The educational design included presenting this evidence within the blog format to a group of healthcare professionals and surveying them about their understanding of the material and satisfaction with the presenter/presentation.

### **Project Site and Population**

The evidence-based Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog was created and presented at a large northeastern university urban satellite conference center, an area with vulnerable diverse populations of low socioeconomic status. A room with a capacity to hold 10–15 healthcare professionals with computer access and Zoom capacity for teleconferencing was used.

Eleven healthcare professionals attended via Zoom teleconference or in person. They consisted primarily of psychiatric mental health, adult gerontology primary care and family nurse practitioners from urban and rural settings, the Veteran's Administration (VA), university

settings, and academia, many with either a PhD or DNP degree. There was also a participant with a master of science degree in nursing education with a focus in community health.

### **Health and Wellness Coaching for Lifestyle Intervention: Toolkit/Blog**

#### **Pre-Presentation and Toolkit/Blog Process**

The DNP student obtained evidence-based resources for health and wellness coaching through an integrative review. The DNP student has had more than 15 years of experience as a nurse practitioner for a lipid management program that incorporated lifestyle counseling with her clients to promote healthy diets, physical activity, and stress management. Barriers to prevention included healthcare practices with an acute/urgent care focus and time constraints that limited quality health and wellness promotion due to brief encounters with clients, as demonstrated by Healthy People 2020's tracking of preventive counseling (Healthy People 2020, 2017). Cardiovascular risk factors such as obesity and diabetes continue to be prevalent in spite of client education (CDC, 2017). The DNP student recognized a need to identify a method for healthcare professionals to motivate clients to make positive lifestyle changes. Through the integrative review, health and wellness coaching was identified as an evidence-based practice that could be incorporated into healthcare to promote self-efficacy for positive changes. The Health and Wellness Coaching Toolkit/Blog for Lifestyle Intervention was created as a resource for healthcare professionals in their busy practices. The DNP student wanted to provide a toolkit/blog that could be easily accessed from a website so that healthcare professionals had resources necessary to utilize these health and wellness coaching skills and techniques with their clients to promote lifestyle change at their practices.

After doing the integrative review, the DNP student discerned the need for standardization of health and wellness coaching and the importance of being credentialed. She

queried health and wellness coaching experts and explored optimal coaching programs for certification. An important message of this toolkit/blog is to inform healthcare professionals of the standardization and accreditation required to become credentialed as per the ICHWC website (<http://ichwc.org/individuals/>). The DNP student attended multiple conferences, met with key experts in the field, and trained in motivational interviewing and health and wellness coaching at Wellcoaches (<https://wellcoachesschool.com/>) and WellPeople (<http://www.wellpeople.com>).

Evidence-based complementary and integrative modalities (CIM) for promotion of health and wellness were evaluated for the toolkit/blog through March 2018. The mind/body connection to optimal wellness was explored by the DNP student through daily mindfulness practice and meditation. She attended a relaxation response session at a conference in June 2017. The DNP student reinforced the “Mind/Body Change” material skills previously learned at the Mind/Body Medical Institute in 2003 that had been incorporated into a stress management program for cardiovascular patients.

Mindfulness-based stress reduction concepts previously acquired by the DNP student from an 8-week mindfulness-based stress reduction training program based on Dr. Jon Kabat-Zinn’s program were reinforced. The DNP student completed the CIM nursing courses that focused on the mind/body connection as part of a CIM certification program that she has been pursuing with anticipated completion in Spring 2019. The DNP student has also received training in a holistic approach to health and wellness. A mobile device app for mindfulness was evaluated for the toolkit/blog, and a section on integrating mobile devices to promote adherence to lifestyle changes was included.

The lifestyle interventions for the toolkit/blog were evidence-based and current from the integrative literature review and the DNP student’s expertise, reinforced through continuing

education conferences. The physical activity and healthy nutrition knowledge and best practice guidelines were updated by the DNP student. Questions for the post-presentation feedback survey were initiated in November 2017 and incorporated into the Survey Monkey in March 2018, when the final copy was slightly modified to 10 questions with the addition of two qualitative questions .

### **Toolkit/Blog**

The Toolkit/Blog is comprised of health and wellness coaching methods for lifestyle intervention skills and resources on physical activity, healthy diet, and stress management with links to reputable websites such as the American College of Sportsmedicine, Centers for Disease Control and Prevention, Healthy People 2020 guidelines, Preventive Task Force, Harvard Health, Mayo Clinic, Mindfulness Based Stress Reduction, and Motivational Interviewing Network Training (MINT).

The complete Toolkit/Blog was devised between December 2017 and March 2018 from an outline created and refined over the DNP student's capstone courses to depict the essential components of the Health and Wellness Coaching for Lifestyle Intervention Toolkit for healthcare professionals, as described in the Pre-Presentation and Toolkit/Blog process above.

The health and wellness coaching integrative review revealed that an important method to promote a client's self-efficacy or belief in themselves is through use of self-determination theory, which recognizes the need for autonomy and positive support to motivate clients with intrinsic motivation; so this was highlighted. Prochaska's TTM theory was also incorporated since it allows the healthcare professional to determine what stage of change the client is in, which is crucial for effective coaching.

Motivational interviewing is an integral component of health and wellness coaching for effective communication and listening techniques to elicit change talk; so this was a key component of the toolkit and was supported by the videos and MINT link, which demonstrates effective motivational interviewing skills (Miller & Rollnick, 2013). Mindfulness is essential to being fully present in the moment, which is imperative to the coaching process as well as for stress management; so links to expert resources were provided. The importance of the health and wellness coaching credentialing process was also included as a vital component of the Toolkit/Blog Presentation.

The DNP student's goal was to provide an interactive easy-to-navigate website for healthcare professionals; so collaboration was initiated with information technologists (IT) on how to best facilitate this. While exploring her vision with IT and a marketing colleague, the DNP student discovered that a blog would be a perfect venue for this endeavor. She obtained training on how to create a blog and began the data input process. She selected visually appealing, relaxing images that would reflect the various components of the blog including a beach scene, meditation scene, and a vineyard with grapes as a reflection of the Mediterranean diet. The DNP student discussed her desire to incorporate this blog as part of her DNP presentation in place of a PowerPoint as an interactive way to capture the healthcare professional audience, which was deemed feasible by her Chair and IT.

A table of contents page was created for healthcare professionals to easily navigate back and forth from, an essential component, and a link to facilitate this was positioned on the lower-left corner of each page. The DNP student input all of the text and graphics based on the Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog outline and, to be more interactive, she highlighted text with hyperlinks to other pages. A cover page with a biography

link was established by the DNP student to promote her expertise and educational background. Feedback from a focus group suggested blog refinements to include voice links for a more interactive toolkit/blog, which were designed and added.

The Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation was updated for final presentation on March 21, 2018. The Toolkit/Blog outline was modified to reflect the merging of the toolkit and presentation outlines into one entity. The health and wellness coaching aspect was moved to the beginning of the presentation to highlight this area. Please see the Health and Wellness Coaching for Lifestyle Intervention final Toolkit/Blog Presentation Outline below.

### **Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation Outline**

1. Health and Wellness Coaching:
  - a. Health and Wellness Coaching Program Training and Certification
    - i. International Consortium for Credentialing Health and Wellness Coaches (ICHWC)
  - b. Why use health and wellness coaching techniques?
  - c. When to use health and wellness coaching techniques.
  - d. What are effective health and wellness coaching techniques?
  - e. Health and wellness coaching implementation
  - f. Health and wellness coaching process: ICHWC (Wolever et al., 2016)
2. Evidence-Based Practice—Integrative Review and Framework
  - a. Health and Wellness Coaching for Lifestyle Intervention: Background
  - b. Problem Statement
  - c. Gap Analysis
  - d. Integrative review of studies: highlight specific studies
3. Health and Wellness Coaching
  - a. The International Consortium for Health and Wellness Coaches (2017) definition.
4. Health and Wellness Coaching Theories/Skills:
  - a. Theoretical Framework: Self-Determination Theory
  - b. Transtheoretical Model Stages of Change
  - c. Motivational Interviewing
  - d. Self-efficacy
5. Lifestyle Intervention

(See Appendix B for a detailed outline of the Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation.)

The DNP student emailed an invitation to healthcare professionals December 2017–February 2018 to determine who would be interested in attending the presentation (See Appendix C for invitation).

A post-presentation feedback survey with Likert style and two qualitative questions was created in Survey Monkey to assess the effectiveness of the DNP student presenter with the Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation on March 21, 2018. (See Appendix D).

### **Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation**

A presentation to inform healthcare professionals about this evidence-based Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog was offered at a northeastern university center urban satellite on March 21, 2018. An interactive 90-minute podium presentation with discussion of evidence for the Health and Wellness Coaching for Lifestyle Intervention was provided to healthcare professionals in person and via Zoom teleconference.

The presentation included the integrative review of evidence for health and wellness coaching for lifestyle intervention, with comprehensive resources and coaching strategies as described in detail above. (See Appendix B for detailed outline). Motivational interviewing techniques were discussed and further demonstrated with videos of effective and ineffective motivational interviewing communication scenarios to ensure participants understood key components with a link for Motivational Interviewing Network for Trainers (MINT) (<https://motivationalinterviewing.org/>).

The Preventive Task Force website (<https://www.ahrq.gov/professionals/prevention->

[chronic-care/decision/uspstf/index.html](https://www.uspstf.org/chronic-care/decision/uspstf/index.html)) to provide healthcare professionals with updated resources for use in their clinical practice was demonstrated. An electronic preventive service selector for mobile devices for healthcare professionals (<https://epss.ahrq.gov/PDA/index.jsp>) was included. Preventive Task Force recommendations that adults be screened for obesity and offered intensive multicomponent behavioral interventions was discussed. Self-care client guidelines were included.

The Centers for Disease Control website (<https://chronicdata.cdc.gov/Nutrition-Physical-Activity-and-Obesity/Percent-of-Adults-who-engage-in-no-leisure-time-ph/8mz7-s5ke>) which tracks percent of adults who engage in no leisure time physical activity supported the critical need for health and wellness coaching to promote physical activity. Specific evidence-based physical activity guidelines including those for cardiovascular and resistance training were made available from the American College of Sportsmedicine (ACSM) website ([https://journals.lww.com/acsm-msse/Fulltext/2011/07000/Quantity\\_and\\_Quality\\_of\\_Exercise\\_for\\_Developing.26.asp](https://journals.lww.com/acsm-msse/Fulltext/2011/07000/Quantity_and_Quality_of_Exercise_for_Developing.26.asp)).

Mind/body connection evidence of the importance of the relaxation response countering effects of stress from Dr. Herbert Benson, an expert in mind/body medicine was discussed from Harvard Health Publishing website (<https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response>). A mindfulness-based stress reduction (MBSR) website from Dr. Jon Kabat-Zinn, a renowned expert in MBSR, (<https://www.umassmed.edu/cfm/mindfulness-based-programs/>) was provided, and mindfulness was explored through the use of his video, which is easily accessible for client use on YouTube. Apps for mobile devices were discussed. Complementary and integrative modalities for wellness were explored with associated hyperlinks. The importance of overall mental health and well-

being was discussed, with a link to the National Institute of Mental Health (<https://www.nimh.nih.gov/index.shtml>) website and easy access to therapists (<https://www.psychologytoday.com/us/therapists>).

Healthy dietary information was provided with a link to Mediterranean diet guidelines from the Mayo Clinic (<https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/mediterranean-diet>), a reputable resource. The Mediterranean diet had been incorporated into the DNP student professional practice for 20 years since it is evidence-based from research such as the PREDIMED study by Estruch et al., (2013) and Esposito et al., (2009). A link to Oldways website (<https://oldwayspt.org/health-studies>) was deemed imperative, since Oldways has provided Mediterranean dietary education including the renowned Mediterranean Diet Pyramid for years. This Oldways website contains evidence-based studies that reinforce the Mediterranean diet's beneficial effect on cardiovascular risk reduction, among other health benefits. The Centers for Disease Control and Prevention website demonstrated the percent of adults who consume less than one vegetable/day: <https://chronicdata.cdc.gov/Nutrition-Physical-Activity-and-Obesity/Percent-of-adults-who-consume-vegetables-less-than/snbg-5p8c>. Socioeconomic, gender, race/ethnicity, age and education levels all impact this. Resources for client access to healthy food in scarce areas such as food deserts including farmer's markets, food banks, and community gardens were also included.

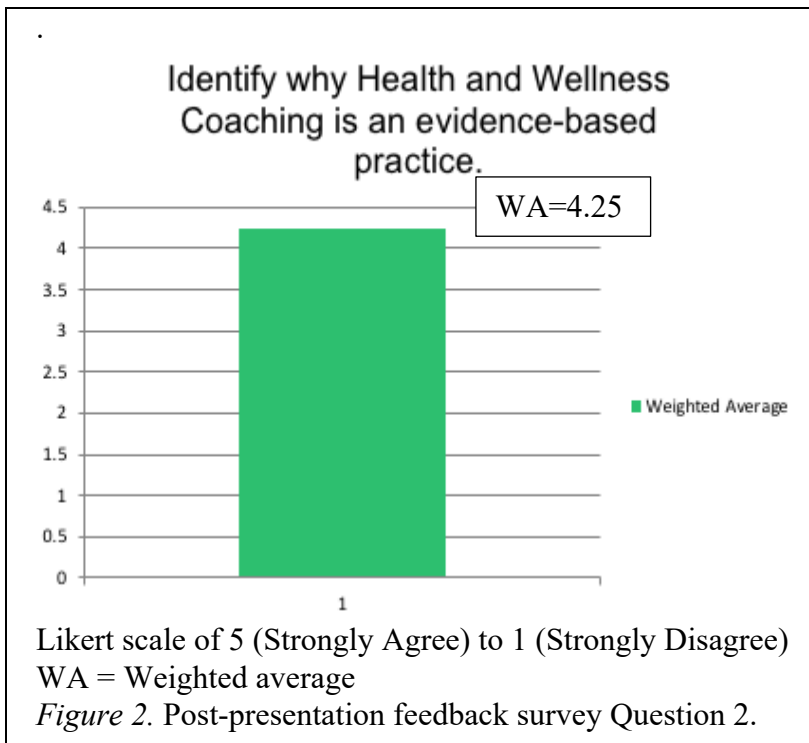
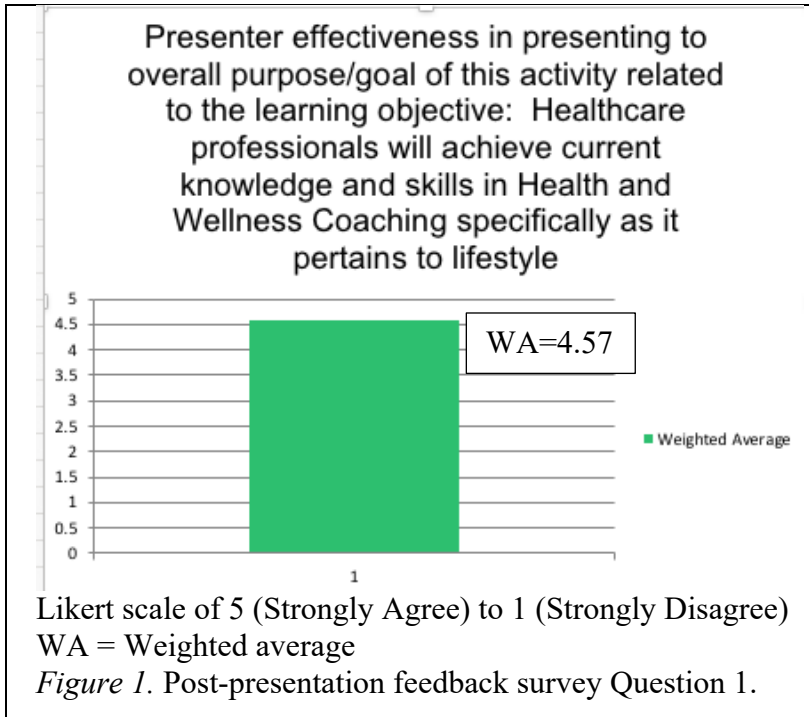
## **Results**

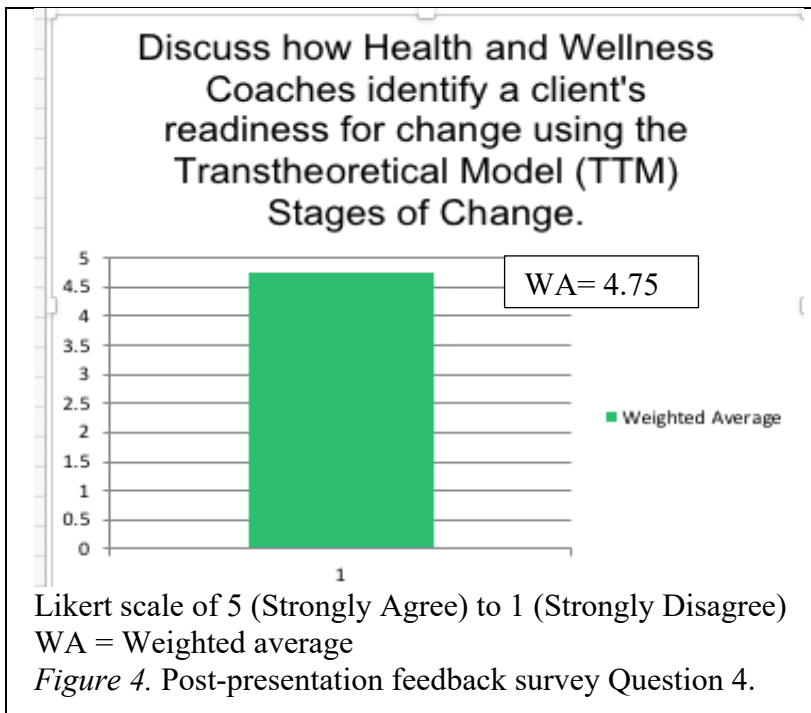
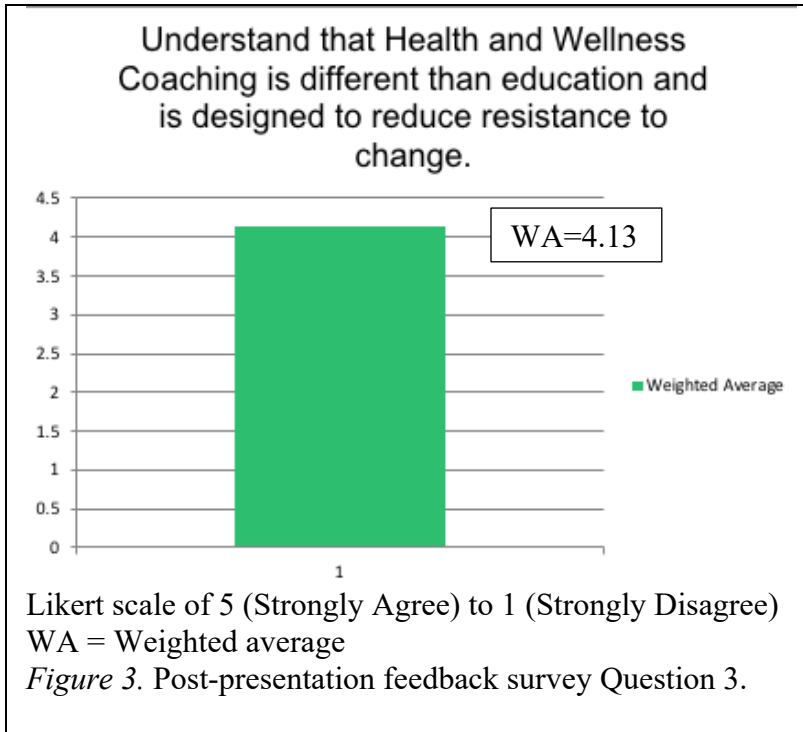
The Health and Wellness Coaching Toolkit/Blog Presentation took place on March 21, 2018 at a northeastern university urban satellite center for 11 healthcare professionals who attended via Zoom teleconference or in person. The professionals consisted primarily of psychiatric mental health, adult-gerontology primary care and family nurse practitioners from

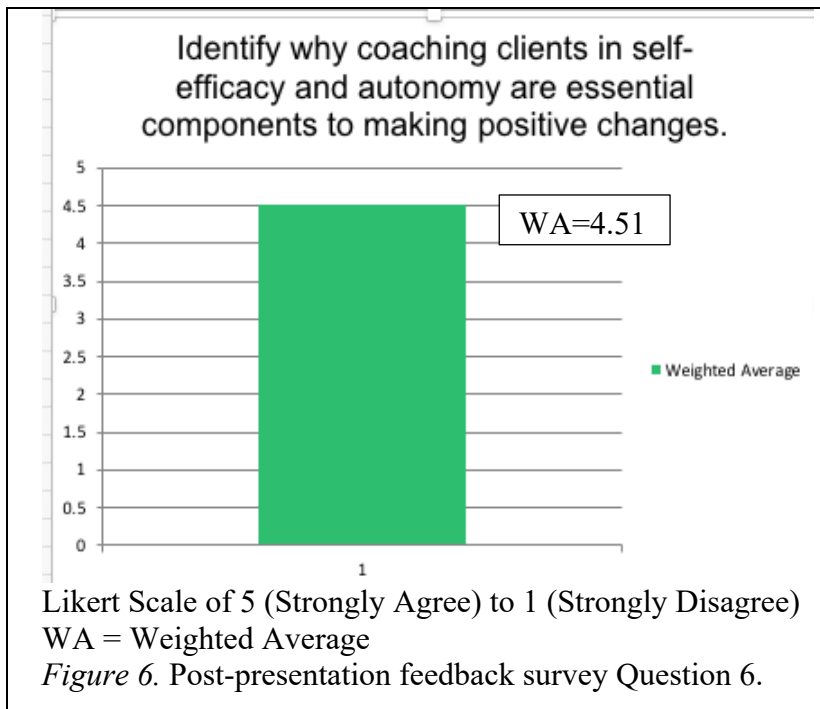
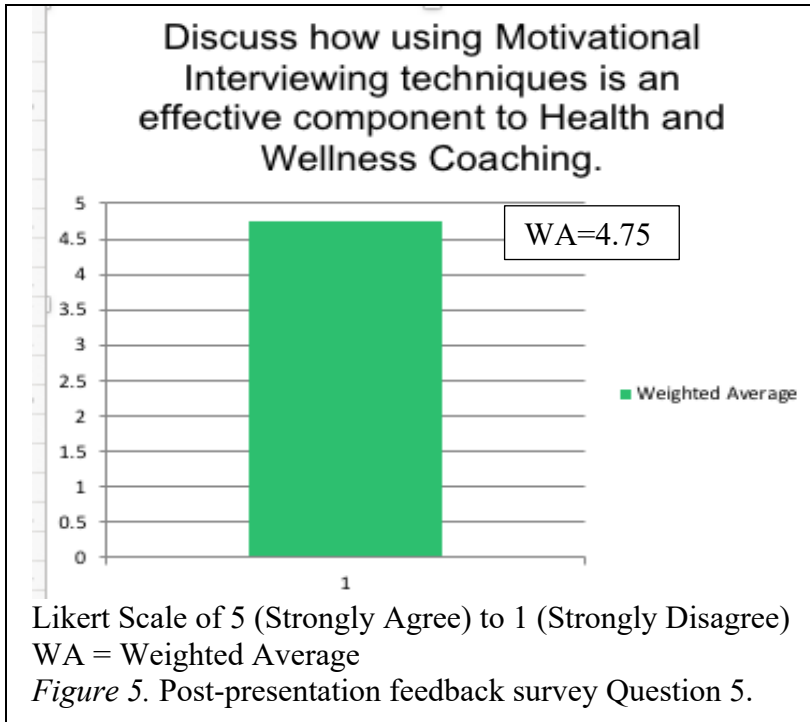
rural settings, the VA, university settings, and academia, with either a PhD or DNP degree. Also attending was a participant with a master of science degree in nursing education with an interest in community health. The participants met the criteria of targeted healthcare professionals affiliated with the university. To measure the outcomes of this DNP project, the following measurement was used: anonymous post-presentation presenter surveys were provided via Survey Monkey to the participants so they could provide feedback about the effectiveness of the presenter regarding “An Integrative Review: Health and Wellness Coaching for Lifestyle Intervention Toolkit/ Blog Presentation.” The data was collected and reviewed to evaluate how effective the DNP student was in the components of her presentation. All question results and comments from the post-presentation surveys in Survey-Monkey will remain anonymous. The survey had Likert scale questions of 5 (strongly agree) to 1 (strongly disagree) to address the presenter’s effectiveness in presenting to the overall purpose/goal, achievement of objectives, and expertise as follows:

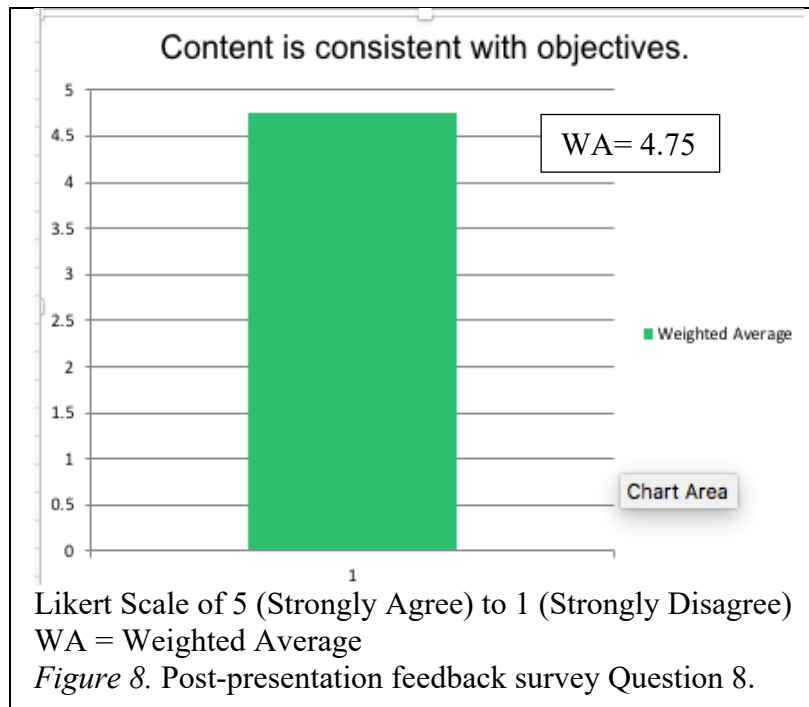
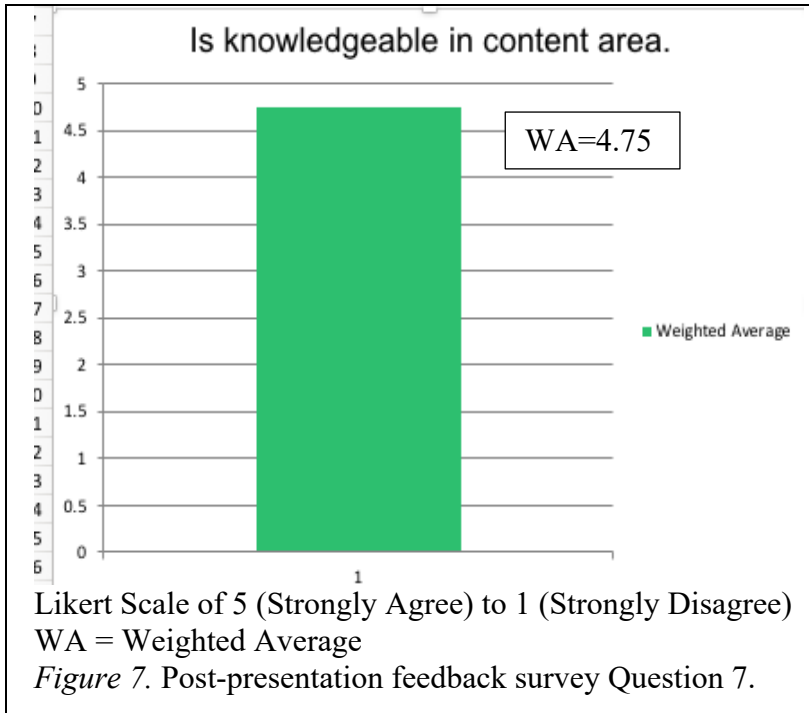
1. “Presenter effectiveness in presenting to overall purpose/goal of this activity related to learning objective: Healthcare professional will achieve current knowledge and skills in health and wellness coaching specifically as it pertains to lifestyle intervention to reduce risk of chronic illness”: Likert scale weighted average was 4.57.
2. Objectives/Learner’s Achievement of Objectives on Questions 2–6 had a grand mean weighted average of 4.48.
3. Presentation expertise of speaker on Questions 7–10 had a grand mean weighted average of 4.69.

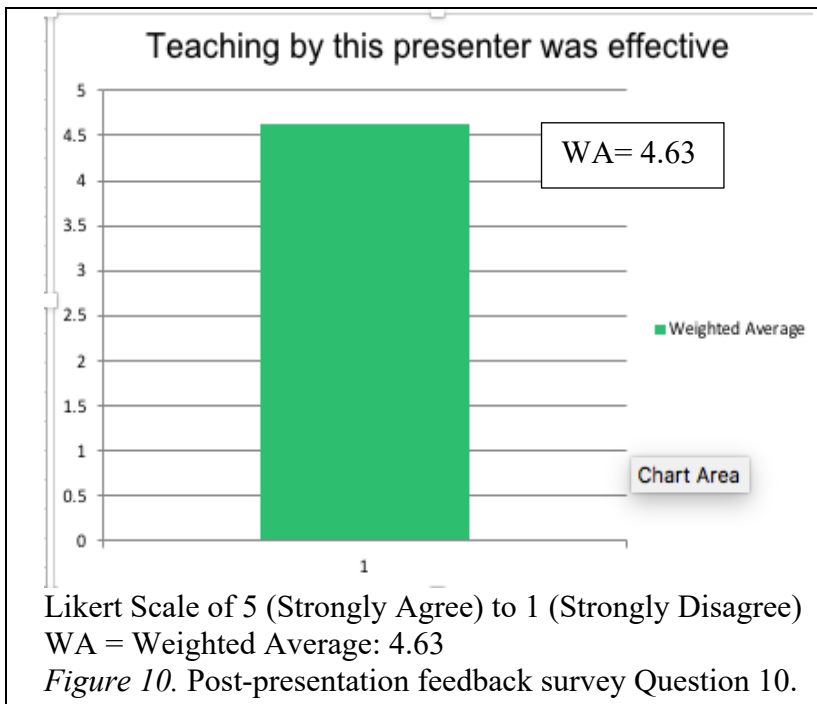
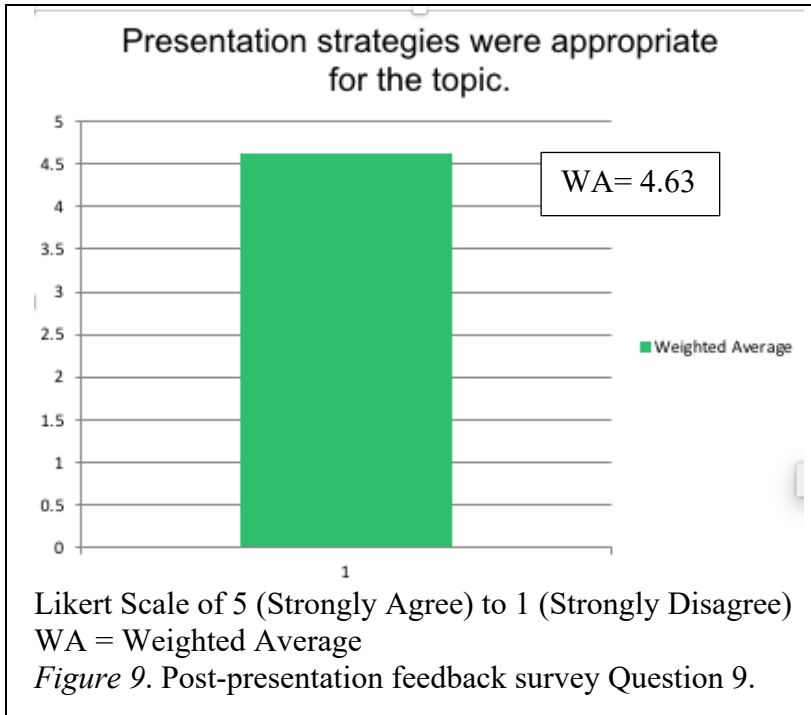
The Likert scale weighted average range was 4.75 (strongly agree) to 4.13 (agree). Results demonstrate that the overall purpose/goal related to objectives was met. See Figures 1–10 below.











Likert scale weighted average range was 4.75 (Strongly Agree) to 4.13 (Agree).

**Qualitative Questions:**

In addition to the Likert Scale questions above, participants were instructed to complete the following two qualitative questions.

Question 1: What did you find will be most useful for you or your clients from this Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog and Presentation?

Themes that emerged from participant responses to Question 1 were the ease, flow, and format of the Toolkit/Blog that was easy to access for use in practice with great evidence-based information in one location and abundant linking of resources. Respondents also reported that motivational interviewing application and links for mindfulness-based stress reduction and meditation will be most useful for their clients.

Question 2: What area do you plan to change when you are with your clients to affect positive lifestyle change as a result of this toolkit and presentation?

Themes that emerged from healthcare professional respondents were a planned change in their approach with clients that is “more of a coaching process,” the use of motivational interviewing, SMART goal setting in supporting individual wellness goals and nonjudgment. One anecdote that demonstrates a common thread in respondents’ comments follows:

Having some background with Motivational Interviewing, I am finding it easy to “leave” people sit in the pre-contemplation/contemplation stage. However, I really feel as providers, this is where we need to plant the seed—provide them the map to the door that leads to change, and I think your toolkit is the answer. Again, it is full of resources to assist with ambivalence, resistance to change, and how to move the discussion. Excellent work! Excellent presentation! Congratulations!

## **Interpretation and Discussion**

The objectives were that the DNP student would provide healthcare professionals with evidence-based information from the Integrative Review on Health and Wellness Coaching, discuss theories that guide practice so participants could identify the difference between health and wellness coaching and expert education and why it is used to avoid resistance and overcome ambivalence. The overall goal was to create an effective evidence-based Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog and Presentation for healthcare professionals.

Results demonstrated that the overall purpose/goal related to these objectives was met based on the Survey Monkey post-presentation feedback survey Likert scale responses as follows: Presenter effectiveness in presenting to overall purpose/goal of this activity that the healthcare professional will achieve current knowledge and skills in health and wellness coaching for lifestyle intervention had a Likert scale weighted average of 4.57 from a scale of 5 (Strongly Agree) to 1 (Strongly Disagree), reflecting that respondents strongly agreed. Learner's achievement of objectives on Questions 2–6 had a grand mean weighted average of 4.48, and presentation expertise of speaker on Questions 7–10 had a grand mean weighted average of 4.69, both reflective that respondents strongly agreed. The Likert scale weighted average range was 4.75 (Strongly Agree) to 4.13 (Agree) for all questions.

The qualitative themes that emerged from respondents' comments on Survey Monkey and in-person focus groups of the Toolkit/Blog are that it is evidence based, has an easily accessible format for use in practice, with excellent comprehensive client resources. These comments further support that this Toolkit/Blog will be clinically relevant for use in healthcare professionals' practices. Participant responses indicated a recognition that healthcare professionals need to coach their clients, rather than just educate them, to motivate them to make

changes. Benefits of motivational interviewing as an effective communication tool were reported with plans to use these in their healthcare professional practice. Participants also discussed the importance of mind/body connection and incorporating mindfulness into client practice. Results strongly support that the overall purpose/goals were met and exceeded.

As author of the “Physical Activity” chapter in *Coronary Heart Disease & Risk Factor Management: A Nursing Perspective* (Lyne, 1999), the DNP student provided instruction on how to *counsel* clients in need of lifestyle modification using the Transtheoretical Model (TTM) Stages of Change to assess physical activity readiness to change and self-efficacy theory to promote adherence to physical activity. Self-efficacy theory is how a client’s perceived ability to perform a behavior affects their capability to perform that behavior (Bandura, 1986; Lyne, 1999). This lifestyle behavioral modification *counseling* often used a combination of *expert advice, teaching and counseling*. The DNP student recognized in practice that some patients were more successful than others at initiating and sustaining lifestyle changes. Through this integrative review and DNP journey, the DNP student discovered that lifestyle behavioral modification counseling has advanced to health and wellness coaching with a need for more client autonomy, less *expert advice*, and effective relationship building through motivational interviewing techniques and self-determination theory, all of which will increase a client’s self-efficacy. Motivational interviewing skills incorporate reflective listening and are used to overcome ambivalence and promote positive change. Silva et al. (2011) demonstrated that the use of self-determination theory intervention to promote autonomous motivation resulted in sustained weight loss through a causal relationship between autonomous motivation, sustained moderate vigorous activity, and sustained weight loss at 3 years. Health and wellness coaching encourages exploration of a client’s desires based on their own meaningful goals, and through this process

the client discovers what is most important to them so that they will initiate and be successful with that change. A health and wellness coach often discovers that there may be an underlying fear that has paralyzed a client into inaction, but effective coaching methods and use of tools can propel them into action and provide them confidence (competence) in their ability to make a change, increase their self-efficacy or belief in themselves that may benefit other areas. Silva et al. (2011) emphasized that, by doing a physical activity a client enjoys, they will be able to sustain that activity, and this may benefit other areas such as following a healthy diet—an amazing concept to reinforce with clients and students. This can also apply to the importance of using a holistic approach to wellness as discovered through the 12 dimensions of the Wellness Inventory by WellPeople (<http://www.wellpeople.com/>). One dimension can positively affect another dimension and, as discovered through this integrative review, combining lifestyle changes such as physical activity and dietary changes can be more beneficial than individual changes. Incorporating mindfulness into health and wellness coaching can also positively affect effective communication and promote a client's desire for lifestyle change. Physical activity that produces natural endorphins can induce a feeling of pleasure and relaxation that, when combined with mindfulness and deep breathing, can affect multiple dimensions of well-being. The importance of mind/body connection was reinforced; by enhancing one aspect, we can positively affect the other. Health and wellness coaching recognizes self-care and balance as key for sustaining healthy nutrition and physical activity lifestyle changes. Mindfulness can be incorporated to promote the relaxation response as an essential component to physical and psychological wellbeing.

The Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation provided the DNP student with a mechanism for demonstrating to healthcare professionals the

significance of recognizing a client's autonomy and collaborating with them to increase their self-efficacy to make positive changes for sustainable lifelong impact. Providing healthcare professionals the opportunity to use this information with their clients allows the DNP student's health and wellness passion to be extended to a wider client population in a ripple effect that can be magnified if healthcare professional students are also taught this in their curriculum. Health and wellness coaching is an area that has global impact and should be initiated at the collegiate level to train healthcare practitioner students as an essential component to client physical and mental wellbeing.

### **Strengths and Challenges: Lessons Learned**

Strengths include that the Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog was well received by expert healthcare professionals in attendance as an "excellent" comprehensive toolkit with valuable easy-to-access resources for their clients. General consensus was that the presentation was informative and successful in conveying the key evidence for coaching about lifestyle change and that hard work was evident. Reasons for using health and wellness coaching for lifestyle intervention was addressed. Participants who attended via Zoom reported they were able to view the presentation clearly.

Lessons learned is that there always needs to be a plan in place to anticipate potential challenges and preempt them if possible. Close communication with participants and stakeholders is essential to ensure that everyone is informed of change in a timely manner. Adequate time to create the Toolkit/Blog and prepare for the presentation was necessary to provide a high-quality product. Flexibility and resilience in spite of obstacles are key to success. Challenges can be unanticipated occurrences that need to be addressed.

### **Cost-Benefit Analysis/Budget**

The projected cost of this project attributed to health and wellness coaching for lifestyle intervention and toolkit was anticipated to be small compared to cost/benefit of reducing healthcare expenditures. Costs were either contributed services cost or in-kind:

- Cost of nurse practitioner: \$64/hour x 2 hours = \$128—contributed service as a DNP student
- IT services were included without charge as an in-kind contribution
- Motivational interviewing: Used video and website link at no cost
- Creation of Toolkit/Blog was at no cost, contributed service as DNP student; healthcare provider resources were incorporated into this Blog with website links
- Use of room at northeastern university urban satellite was at no cost

### **Ethical Considerations/Protection of Human Subjects**

Internal Review Board (IRB) approval was obtained prior to initiating the DNP project. The official IRB Determination Form was submitted as soon as the proposal was approved. Ethical considerations were taken into account to ensure that no participant was identified or harmed. All information collected as part of evaluating the impact of this project was anonymous and aggregated and will not include any potential participant identifiers. Feedback surveys were anonymous via Survey Monkey, and results will be in locked filing cabinets accessible only to the DNP student.

### **Implications/Conclusion**

Health and wellness coaching is an evidence-based practice that can be used for prevention across client populations and settings. This Toolkit/Blog was designed for any healthcare professional who has a client requesting assistance with a lifestyle change. This resource has been identified as a tool that is easy to access and use to assist clients to increase self-efficacy and overcome resistance to change. With obesity levels high and adhering to

recommended lifestyle changes of healthy diet and physical activity low, there is a significant need for this Toolkit/Blog.

The Toolkit/Blog presentation was created to promote wellness incorporating motivational interviewing, self-determination theory, and mindfulness to improve a client's self-efficacy and promote a positive lifestyle change. Health and wellness coaching can be used to empower clients to increase their physical activity, follow healthy diets, and adhere to stress management programs to reduce their risk for chronic illnesses including cardiometabolic syndrome and cardiovascular disease. The favorable responses of the participants demonstrated that the need for an evidence-based Health and Wellness Coaching Toolkit/Blog for healthcare professionals has been met.

The Toolkit/Blog via the UMASS blog link (<https://blogs.umass.edu/loriannelyne/>) is an ideal way for healthcare professionals to obtain information since it can be bookmarked for future use and accessed from any computer for client use promoting sustainability. Incorporating links to reputable websites that will be updated to reflect current information was essential. The design of the Toolkit/Blog as an online resource makes it accessible for both healthcare professionals and students.

A poster presentation was also done at UMASS Amherst, College of Nursing for Graduate Scholar Day. DNP and PhD students presented their work to the College of Nursing administrators including Directors of the DNP and PhD programs, Associate Dean of Research, Associate Dean for Academic Affairs, and other esteemed faculty, and professional colleagues including nurse practitioners and DNP alumni. Dissemination of this Toolkit/Blog as a resource for healthcare professionals and students was discussed (See Appendix E for poster). The plan is to disseminate this information at conferences and webinars for healthcare professionals and for

student use as part of their curriculum. It will be uploaded into ScholarWorks. Please see the Toolkit/Blog section for specific details of how this toolkit/blog was created. Please email [loriannelyne@nursing.umass.edu](mailto:loriannelyne@nursing.umass.edu) for further discussion, questions, or interest as a consultant.

### References

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, N.J.: Prentice Hall.
- Bennett, C. G., Herring, S. J., Pulieo, E., Stein, E. K., Emmons, K. M., & Gillman, M. W. (2010). Web-based weight loss in primary care: A randomized controlled trial. *Obesity* 18, 308–313.
- Brown, T., Avenell, A., Edmunds, L. D., Moore, H., Whittaker, V., Avery, L., & Summerbell, C. (2009). Systematic review of long-term lifestyle interventions to prevent weight gain and morbidity in adults. *Obesity Reviews*, 10(6), 627–638. doi: 10.1111/j.1467-789X.2009.00641.x
- Centers for Disease Control and Prevention (2017). Retrieved from <https://chronicdata.cdc.gov/Nutrition-Physical-Activity-and-Obesity/Percent-of-adults-aged-18-and-older-who-have-obesi/cwdv-83mi>
- Centers for Medicare and Medicaid Services (CMS). (2017). Medicare preventive services. Retrieved from [https://www.cms.gov/Medicare/Prevention/PrevntionGenInfo/medicare-preventive-services/MPS-QuickReferenceChart-1.html#OBESITY\\_IBT](https://www.cms.gov/Medicare/Prevention/PrevntionGenInfo/medicare-preventive-services/MPS-QuickReferenceChart-1.html#OBESITY_IBT)
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macro theory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, 49(3), 182–185. doi: 10.1037/a0012801
- Dusek, J. A., Otu, H. H., Wohlhueter, A. L., Bhasin, M., Zerbini, L. F., Joseph, M. G., . . . Libermann, T. A. (2008). Genomic counter-stress changes induced by the relaxation response. *PloS One*, 3(7), e2576. doi: 10.1371/journal.pone.0002576

Esposito, K., Maiorino, M. I., Ciotola, M., Di Palo, C., Scognamiglio, P., Gicchino, M., . . .

Giugliano, D. (2009). Effects of a Mediterranean style diet on the need for antihyperglycemic drug therapy in patients with newly diagnosed type 2 diabetes. *Annals of Internal Medicine*, *151*(5), 306–314. doi: 10.7326/0003-4819-151-5-200909010-00004

Estruch, R., Ros, E., Salas-Salvado, J., Covas, M.I., Corella, D, Aros, F.,...Martinez-Gonzalez,

M.A. (2013). Primary Prevention of Cardiovascular Disease with a Mediterranean Diet. *New England Journal of Medicine*, *368*, 1279–1290. DOI: 10.1056/NEJMoa1200303

Franz, M. J., Boucher, J. L., Rutten-Ramos, S., & VanWormer, J. J. (2015). Lifestyle weight-loss

intervention outcomes in overweight and obese adults with type 2 diabetes: A systematic review and meta-analysis of randomized clinical trials. *Journal of the Academy of Nutrition and Dietetics*, *115*(9), 1447–1463. doi: 10.1016/j.jand.2015.02.031

Frates, E. P., Moore, M. A., Lopez, C. N., & McMahon, G. T. (2011). Coaching for behavior

change in physiatry. *American Journal of Physical Medicine & Rehabilitation*, *90*(12), 1074–1082. doi: 10.1097/PHM.0b013e31822dea9a

Hardcastle, S., Blake, N., & Hagger, M. S. (2012). The effectiveness of a motivational

interviewing primary-care based intervention on physical activity and predictors of change in a disadvantaged community. *Journal of Behavioral Medicine*, *35*(3), 318–333. doi: 10.1007/s10865-012-9417-1

Hardcastle, S. J., Taylor, A. H., Bailey, M. P., Harley, R. A., & Hagger, M. S. (2013).

Effectiveness of a motivational interviewing intervention on weight loss, physical activity and cardiovascular disease risk factors: A randomized controlled trial with a 12-month post-intervention follow-up. *International Journal of Behavioral Nutrition and Physical Activity*. doi: 10.1186/1479-5868-10-40

Healthy People 2020. (2017). Retrieved from <https://www.healthypeople.gov/>

Hersey, J. C., Khavjou, O., Strange, L. B., Atkinson, R. L., Blair, S. N., Campbell, S., . . . Britt,

M. (2012). The efficacy and cost-effectiveness of a community weight management

intervention: A randomized controlled trial of the health weight management

demonstration. *Preventive Medicine, 54*(1), 42–49. doi: 10.1016/j.ypmed.2011.09.018

Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of*

*Clinical Psychology, 1*, 91–111. doi: 10.1146/annurev.clinpsy.1.102803.143833

Holmen, H., Wahl, A., Torbjørnsen, A., Jennum, A. K., Småstuen, M. C., & Ribu, L. (2016).

Stages of change for physical activity and dietary habits in persons with type 2 diabetes

included in a mobile health intervention: The Norwegian study in RENEWING

HEALTH. *BMJ Open Diabetes Research & Care, 4*(1). doi: 10.1136/bmjdr-2016-00019

International Consortium for Health and Wellness Coaching (ICHWC). (2017). What is health &

wellness coaching? Retrieved from <http://ichwc.org/individuals/>

Jacobson, T. A., Maki, K. C., Orringer, C. E., Jones, P. H., Kris-Etherton, P., Sikand, G., . . .

Brown, W. V. (2015). National lipid association recommendations for patient-centered

management of dyslipidemia: Part 2. *Journal of Clinical Lipidology, 9*(6, Supplement),

S122.e1. doi://dx.doi.org.silk.library.umass.edu/10.1016/j.jacl.2015.09.002

Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation*. New York:

Hyperion.

Khera, A. V., Emdin, C. A., Drake, I., Natarajan, P., Bick, A. G., Cook, N. R., . . . Kathiresan, S.

(2016). Genetic risk, adherence to a healthy lifestyle, and coronary disease. *New England*

*Journal of Medicine, 375*, 2349–2358. doi: 10.1056/NEJMoa1605086

- Kivelä, K., Elo, S., Kyngäs, H., & Kääriäinen, M. (2014). The effects of health coaching on adult patients with chronic diseases: A systematic review. *Patient Education and Counseling, 97*(2), 147–157. doi: 10.1016/j.pec.2014.07.026
- Leblanc, E. S., O'Connor, E., Whitlock, E. P., Patnode, C. D., & Kapka, T. (2011). Effectiveness of primary care-relevant treatments for obesity in adults: A systematic evidence review for the U.S. preventive services task force. *Annals of Internal Medicine, 155*(7), 434–447. doi: 10.7326/0003-4819-155-7-201110040-00006
- Linden, A., Butterworth, S. W., & Prochaska, J.O. (2010). Motivational Interviewing-based health coaching as chronic care intervention. *Journal of Evaluation in Clinical Practice, 16*, 166–174.
- Lyne, L. A. (1999). Physical activity. In N. Jairath (Ed.), *Coronary heart disease & risk factor management: A nursing perspective* (pp. 156–174). Philadelphia: W. B. Saunders.
- Merkin, S. S., Karlamangla, A., Elashoff, D., Grogan, T., & Seeman, T. (2015). Change in cardiometabolic score and incidence of cardiovascular disease: The multi-ethnic study of atherosclerosis. *Annals of Epidemiology, 25*(12), 917.e1. doi: 10.1016/j.annepidem.2015.09.006
- Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people to change* (2<sup>nd</sup> ed.). New York: Guilford Press.
- Miller, W. R. & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3<sup>rd</sup> ed.). New York: Guilford Press.
- Nichols, G. A. (2017). Cardiometabolic risk factors among 1.3 million adults with overweight or obesity, but not diabetes, in 10 geographically diverse regions of the United States, 2012–2013. *Preventing Chronic Disease, 14*. doi: 10.5888/pcd14.160438

- Olsen, J. M., & Nesbitt, B. J. (2010). Health coaching to improve healthy lifestyle behaviors: An integrative review. *American Journal of Health Promotion: AJHP*, 25(1), e12. doi: 10.4278/ajhp.090313-LIT-101.
- Pollak, K. I., Alexander, S. C., Tulsy, J. A., Lyna, P., Coffman, C. J., Dolor, R. J., . . . Østbye, T. (2011). Physician empathy and listening: Associations with patient satisfaction and autonomy. *Journal of the American Board of Family Medicine*, 24(6), 665–672. doi: 10.3122/jabfm.2011.06.110025
- Prochaska, J. O. (2014). Psychotherapy. *Access Science*. doi: 10.1036/1097-8542.555200
- Prochaska, J. O., Evers, K. E., Castle, P. H., Johnson, J. L., Prochaska, J. M., Rula, E. Y., . . . Pope, J. E. (2012). Enhancing multiple domains of well-being by decreasing multiple health risk behaviors: A randomized clinical trial. *Population Health Management*, 15(5), 276–286. doi: 10.1089/pop.2011.0060
- Rimmer, J. H., Rauworth, A., Wang, E., Heckerling, P. S., & Gerber, B. S. (2009). A randomized controlled trial to increase physical activity and reduce obesity in a predominately African American group of women with mobility disabilities and severe obesity. *Preventive Medicine*, 48(5), 473–479.
- Rutten, G. M., Meis, J. J. M., Hendriks, M. R. C., Hamers, F. J. M., Veenhof, C., & Kremers, S. P. J. (2014). The contribution of lifestyle coaching of overweight patients in primary care to more autonomous motivation for physical activity and healthy dietary behaviour: Results of a longitudinal study. *International Journal of Behavioral Nutrition and Physical Activity*, 11, 86. doi: 10.1186/s12966-014-0086-z
- Silva, M., Markland, D., Carraca, E. V., Viera, P. N., Coutinho, S. R., Minderico, C. S., . . .

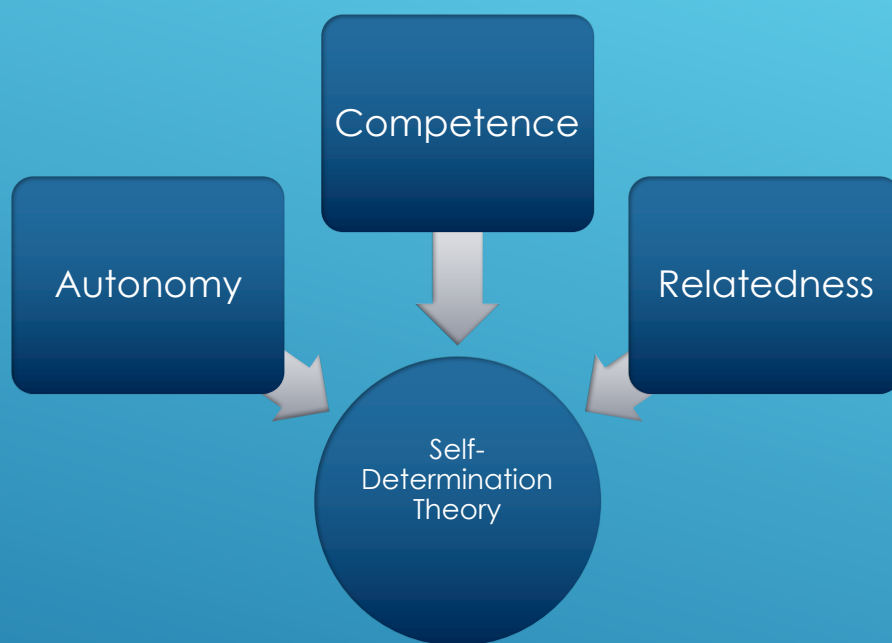
- Teixeira, P. J. (2011). Exercise autonomous motivation predicts 3-year weight loss in women. *Medicine & Science in Sports & Exercise*, *43*(4) 728–737.
- Singer, E. A. (2007). The transtheoretical model and primary care: “The times they are a-changing.” *Journal of the American Academy of Nurse Practitioners*, *19*(1), 11–14. doi: 10.1111/j.1745-7599.2006.00189.x
- Sohl, S. J., Birdee, G., & Elam, R. (2016). Complementary tools to empower and sustain behavior change: Motivational interviewing and mindfulness. *American Journal of Lifestyle Medicine*, *10*(6), 429–436. doi: 10.1177/1559827615571524
- Vale, M. J., Jelinek, M. V., Best, J. D., Dart, A. M., Grigg, L. E., Hare, D. L., . . . McNeil, J. J. (2003). Coaching patients on achieving cardiovascular health (COACH). *Archives of Internal Medicine*, *163*, 2775–2783.
- Wayne, N., Perez, D. F., Kaplan, D. M., & Ritvo, P. (2015). Health coaching reduces HbA1c in type 2 diabetic patients from a lower-socioeconomic status community: A randomized controlled trial. *Journal of Medical Internet Research*, *17*(10), e224. doi: 10.2196/jmir.4871
- Wolever, R. Q., Jordan, M., Lawson, K., & Moore, M. (2016). Advancing a new evidence-based professional in health care: Job task analysis for health and wellness coaches. *BMC Health Services Research*, *16*. doi: 10.1186/s12913-016-1465-8
- Wolever, R. Q., Simmons, L. A., Sforzo, G. A., Dill, D., Kaye, M., Bechard, E. M., . . . Yang, N. (2013). *A systematic review of the literature on health and wellness coaching: Defining a key behavioral intervention in healthcare*. Los Angeles: SAGE Publications. doi: 10.7453/gahmj.2013.042

World Health Organization (WHO). (2016). Fact sheet; Mental health: Strengthening our response. Retrieved from <http://www.who.int/mediacentre/factsheets/fs220/en/>

World Health Organization (WHO). (2018). Time to deliver: Report of the WHO Independent High Level Commission on Non-Communicable Diseases. Retrieved from <http://www.who.int/ncds/management/time-to-deliver/en/>

**Appendix A  
Schema**

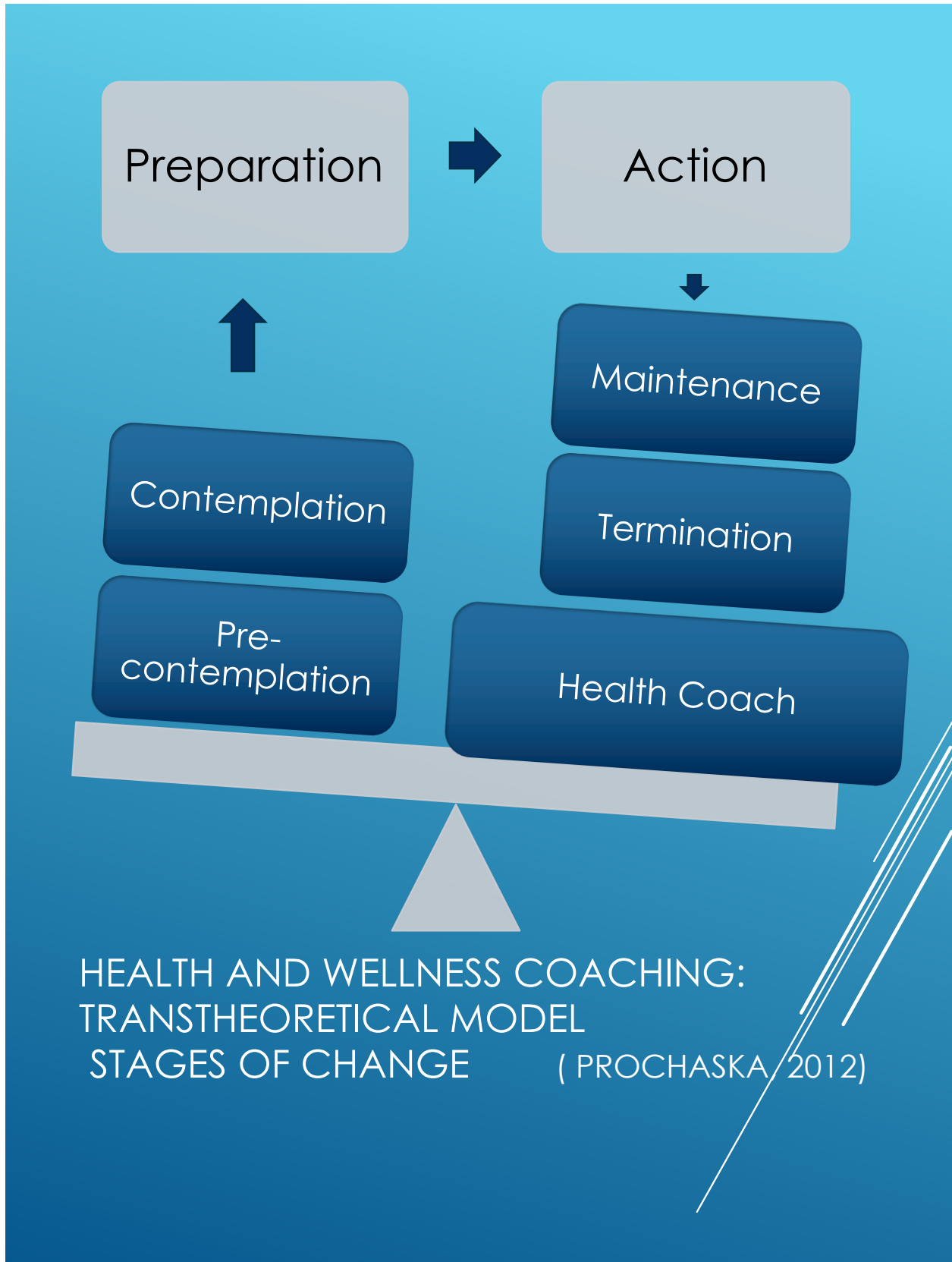




HEALTH AND WELLNESS  
COACHING:  
SELF- DETERMINATION THEORY  
(DECI & RYAN, 2008)



SELF- EFFICACY: BELIEF IN ABILITY  
TO MAKE CHANGE  
(BANDURA, 1986)





Motivation



Ambivalence

MOTIVATIONAL INTERVIEWING  
(MILLER & ROLLNICK, 2002)

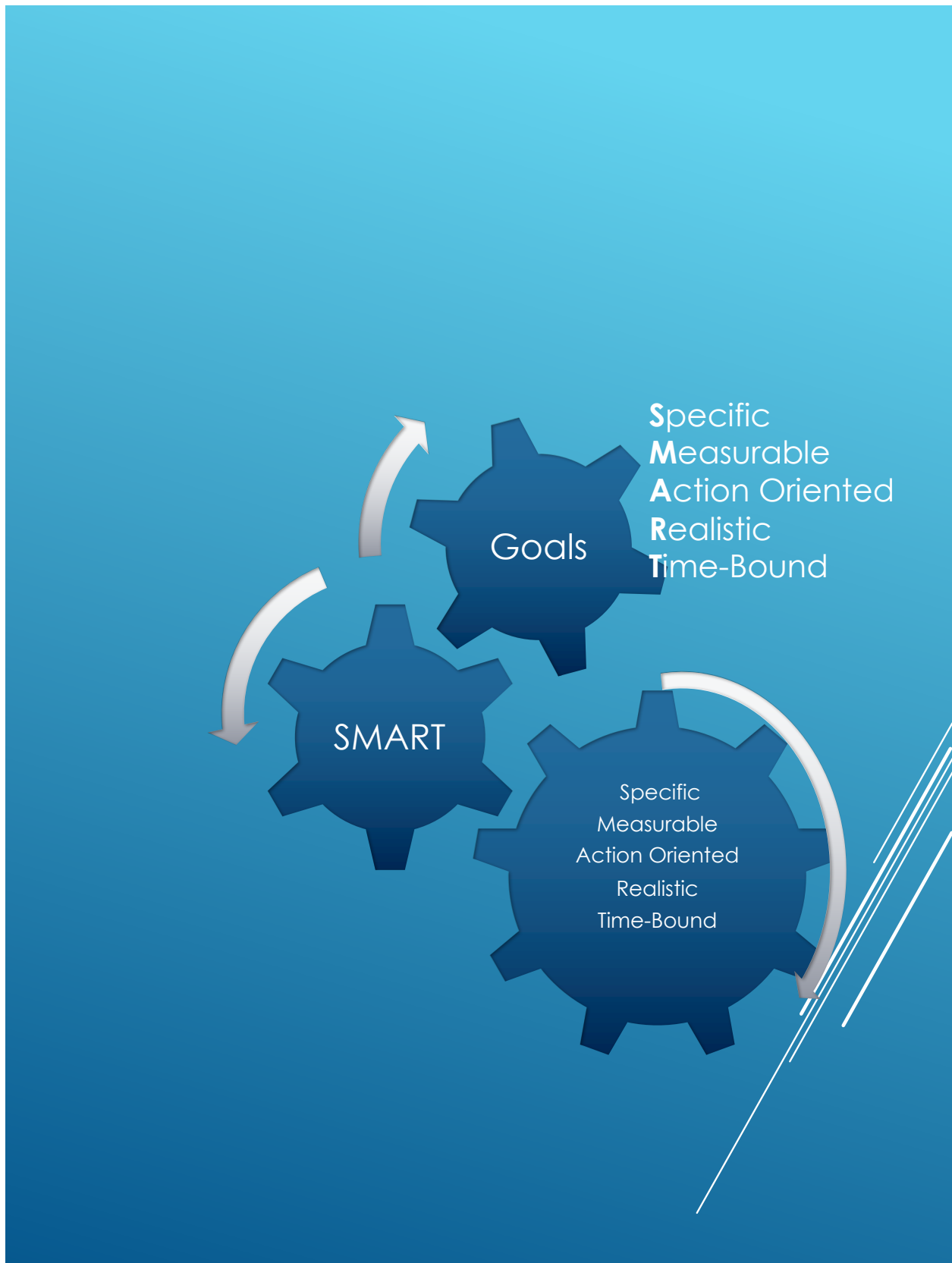




## MOTIVATIONAL INTERVIEWING (MILLER & ROLLNICK, 2002)



MINDFULNESS



## Appendix B

### Detailed Outline for Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog

#### 1. Health and Wellness Coaching: Introduction

##### A. Health and Wellness Coaching Program Training and Certification

- i. International Consortium for Credentialing Health and Wellness Coaches
  1. Accredited education/ training programs in Health and Wellness coaching
  2. Assessment of Practical skills
  3. Coaching documentation
  4. Exam for Certification

#### 2. Health and Wellness Coaching

- i. The International Consortium for Health and Wellness Coaches (2017) provides a definition on Health and Wellness Coaches: <http://ichwc.org/individuals/>

#### 3. Health and Wellness Coaching:

##### A. Why use Health and Wellness Coaching techniques:

- i. Clients are resistant to making change.
- ii. Clients have a need for autonomy.
- iii. Clients are in different Stages of Change readiness.
- iv. Health and Wellness Coaching overcomes resistance, improves self-efficacy so clients are empowered to make changes.

##### B. When to use Health and Wellness Coaching Techniques:

- i. Clients who need to make positive lifestyle changes:
  1. Increase physical activity
  2. Follow a healthy diet
  3. Stress management
  4. Desire for wellness

##### C. Health and Wellness Coaching Techniques

- i. Transtheoretical Model Stages of Change
- ii. Mindfulness- non-judgmental attitude
- iii. Self-Determination theory
- iv. Motivational Interviewing

- v. SMART Goals
- vi. Promote self-efficacy

#### **D. Health and Wellness Coaching: Overview**

- i. Initial appointment
  - a. Identify what area the client has a desire to make a change in.
  - b. Establish a professional connection with client, explain role of the coach is to guide client.
  - c. Discuss client goals, specific plan of action.
- ii. Follow up appointments scheduled as per client need.
  - a. Discuss client successes, strengths.
  - b. Identify new client goals.
  - c. Discuss client goals and specific plan of action.

#### **E. Health and Wellness Coaching Process: (Wolever, 2016; ICHWC, 2017)**

- a. Coach is focused on client.
- b. Client and coach professional affiliation is established.
- c. Communication skills are essential.
- d. Listening skills are imperative to good Health and Wellness Coaching.
- e. Motivational Interviewing skills are important.
- f. Readiness and confidence scales to determine readiness for change.
- g. Autonomy and self-efficacy is promoted throughout Health and Wellness Coaching.

### **4. Evidenced Based Practice –Integrative Review and Framework**

#### **A. Health and Wellness Coaching for Lifestyle Intervention: Background**

- i. According to the World Health Organization (WHO), four of the the most common noncommunicable diseases for premature deaths (cardiovascular disease, diabetes, chronic respiratory diseases, and cancer) account for 71% of all global deaths and are preventable by addressing risk factors of physical inactivity, unhealthy nutrition, tobacco and alcohol use (WHO, 2018).
- ii. Health and Wellness Coaching reduces the risk of chronic illness such as cardiovascular disease, cardiometabolic syndrome, diabetes, obesity, and hypertension (CDC, 2017).
- iii. Importance of Health and Wellness Coaching to promote positive change.
- iv. Evidence-based practice: Integrative review of studies demonstrates this.

**B. Problem Statement****C. Gap Analysis****D. Integrative review of studies: highlight specific studies****5. Health and Wellness Coaching Theories/ Skills:****A. Theoretical Framework: Self-Determination theory**

- i. Autonomy
- ii. Competence
- iii. Relatedness

**B. Transtheoretical Model Stages of Change**

- i. Transtheoretical Stages of Change
  1. Precontemplation
  2. Contemplation
  3. Preparation
  4. Action
  5. Maintenance
  6. Termination

**C. Motivational Interviewing:**

- i. Evidence based
- ii. Motivation to change
- iii. Resolves Ambivalence
- iv. Spirit of MI-
  1. Partnership
  2. Acceptance
  3. Compassion
  4. Evocation
- v. Core Skills: OARS
  1. Open ended questions
  2. Affirmations-positive, improve self-efficacy
  3. Reflections
  4. Summaries
- vi. Processing
  1. Engaging- trusting relationship

2. **Focusing on topic**
3. **Evoking**
4. **Planning**
5. **SMART goals**

#### **D. Lifestyle Intervention:**

- i. Reduces the risk of chronic illness such as cardiovascular disease, cardiometabolic syndrome, diabetes, obesity, and hypertension.
- ii. Preventive Task Force Recommendations are to use a multidimensional behavioral intervention approach to promote positive lifestyle changes.
  1. Electronic Preventive Service Selector: <https://epss.ahrq.gov/PDA/index.jsp>
- iii. Physical Activity Guidelines:
  1. **Benefits of physical activity to reduce chronic illnesses and promote wellness.**  
<https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>
  2. **Supertracker: Electronic food and physical activity tracker**
  3. **ACSM Position Paper on Physical Activity for healthy adults**
    - a. **Cardiovascular exercise: 150 minutes per week is recommended**
    - b. **Target Heart Rate**
      - i. **Moderate intensity is 220-age (50%-70%)**
      - ii. **Vigorous intensity is 220-age (70%-85%)**
    - c. **Resistance/Strength Training Exercise**
    - d. **Stretching guidelines**
    - e. **Monitor outcomes:**  
<https://www.thecommunityguide.org/sites/default/files/assets/OnePager-Activity-Monitors.pdf>
  4. **Promote sustainability in Colleges/Universities**  
<https://www.cdc.gov/physicalactivity/walking/call-to-action/pdf/colleges-universities.pdf>
  5. **Dog walking- Evidence-based benefits**
- iv. Stress Management and Mindfulness for wellness
  1. **Stress Response and relationship to chronic illness.**
  2. **Benefit of Stress Management to induce Relaxation Response and promote wellness.**
  3. **Deep Breathing**
  4. **Mindfulness: App on Mindfulness, Headspace**
  5. **Meditation:** <https://nccih.nih.gov/health/meditation/overview.htm#hed1>
  6. **Pet therapy**
  7. **Complementary and Integrative Modalities (CIM)**
    - a. Yoga, music, massage, Reiki, acupuncture, Tai Chi,
- v. Healthy Nutrition
  1. **Association between unhealthy diet and chronic illness.**

- 2. Healthy eating to promote wellness.**
  - 3. Healthy Diet:**
    - a. Reduced saturated fat, refined carbohydrates.
    - b. Increased fruits and vegetables, monounsaturated and polyunsaturated fat, olive oil, lean meat
  - 4. Mediterranean diet:**
    - a. evidence based- PREDIMED, Lyon study
    - b. Mayo Clinic link
    - c. Oldways link
    - d. RECIPES from Mediterranean diet
  - 5. Mindful Eating**
  - 6. Support system, family, friends to promote sustainability**
  - 7. Food Insecurity: <https://www.foodbankwma.org/learn/local-hunger-facts/>  
<https://www.foodbankwma.org/get-help/locate-a-local-feeding-program/>**
- vi. Mental Health:
1. National Institute of Mental Health: <https://www.nimh.nih.gov/index.shtml>
  2. Psychology Today therapists: <https://www.psychologytoday.com/us/therapists>

## Appendix C

### Invitation



# An Integrative Review: Health and Wellness Coaching for Lifestyle Intervention Toolkit and Presentation

You are invited to attend a Doctor of Nursing Practice (DNP) student capstone presentation at:  
UMass Center at Springfield <https://umasscenteratspringfield.org/about/directionsparking>

1500 Main St, Springfield, MA 01115

March 21, 2018 from 6:00 to 7:30 pm

Learn about how Health and Wellness Coaching strategies can motivate clients to make necessary lifestyle changes. A discussion of best evidence supporting Health and Wellness Coaching for lifestyle intervention will include key points about how coaches require a certain finesse to elicit and sustain a client's desire for positive lifestyle change. *Education* alone is insufficient in most cases to motivate clients to make and adhere to change. Coaching techniques

recognize a client's need for autonomy that is often resistant to *expert* advice. Best evidence from esteemed resources will be presented.

March is a time that clients stray from 2018 New Year Resolutions for following healthy lifestyles to prevent cardiovascular disease and other chronic illnesses. Learn how to reignite client motivation.

Please join me for this exciting event! I will be incorporating Mindfulness and Motivational Interviewing resources. Light snacks will be provided as we discuss healthy client nutrition resources. RSVP to [loriannelyne@nursing.umass.edu](mailto:loriannelyne@nursing.umass.edu)

[Lori Anne Lyne, MS, ACNP-BC](#)

**Appendix D**

**Post-Presentation Feedback Survey**

Survey-Monkey Questions designed from this Survey

Instructions: Please rate the presenter Lori Anne Lyne, MS, ACNP- BC with this anonymous feedback.

Using the rating scale 5 = strongly agree–1 = strongly disagree, please rate the following:

Purpose/ Goals	5	4	3	2	1
1) Presenter effectiveness in presenting to overall purpose/goal of this activity relative to the learning objective: Healthcare professionals will learn how to achieve current knowledge and skills in Health and Wellness Coaching specifically as it pertains to lifestyle intervention to reduce chronic illnesses.					
Objectives/ Learner’s achievement of objectives for presenter Lori Anne Lyne, MS, ACNP-BC As a result of this activity I am able to:					
2) identify why Health and Wellness Coaching is an evidence-based practice.					
3) understand that Health and Wellness Coaching is different than education and is designed to reduce resistance to change.					
4) discuss how Health and Wellness Coaches identify clients’ readiness for change using the Transtheoretical Model (TTM) Stages of Change.					
5) discuss how using Motivational Interviewing techniques is an effective component to Health and Wellness Coaching					
6) identify why coaching clients in self-efficacy and autonomy are essential components to making positive changes.					
Rate the presentation expertise of presenter Lori Anne Lyne, MS, ACNP- BC:					
7) Is knowledgeable in content area					
8) Content is consistent with objectives					

9) Presentation strategies were appropriate for topic					
10) Teaching by this presenter was effective					


Qualitative Questions:

Q1 What did you find will be most useful for you or your clients from this Health and Wellness Coaching for Lifestyle Intervention Toolkit and Presentation?

Q2 What area do you plan to change when you are with your clients to affect positive lifestyle change as a result of this toolkit and presentation?


Appendix E

Poster Presentation



## Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog

Lori Anne Lynn, MS, ACNP-BC, DNP student



**INTRODUCTION/PROBLEM STATEMENT**

- Healthcare professionals have a gap in knowledge and skills regarding the best practice and effective methods and means for Health and Wellness Coaching for Lifestyle Intervention that need to be addressed.
- Education about lifestyle change needs alone is insufficient in most cases to motivate clients to make and adhere to positive lifestyle change.
- Health and Wellness Coaching is designed to guide clients to make positive lifestyle changes. With Health and Wellness Coaching a client dictates what changes they are willing to make and a coach empowers them to have confidence in their ability to make that change.
- Clients are often resistant to change. A skilled Health and Wellness Coach can assist clients to overcome this resistance.
- Health and Wellness Coaching is recognized as an evidence-based practice.
- Health and Wellness Coaches are now considered an integral part of healthcare but evidence indicates the need for training at accredited programs and National Certification to ensure high quality and standardized Health and Wellness Coaches. <http://iwhwc.org/>

**BACKGROUND**

- According to the World Health Organization (WHO), four of the the most common noncommunicable diseases for premature deaths (cardiovascular disease, diabetes, chronic respiratory diseases, and cancer) account for 71% of all global deaths and are preventable by addressing risk factors of physical inactivity, unhealthy nutrition, tobacco and alcohol use (WHO, 2018)
- Health and Wellness Coaching reduces the risk of chronic illness such as cardiovascular disease, cardiovascular disease, diabetes, obesity, and hypertension.
- Health and Wellness Coaching is necessary to promote positive change.
- An integrative review was performed that demonstrated this:
  - Kivela, Kilo, Kivela and Kivela (2014) in a systematic review of 31 randomized controlled trials, and 2 quasi-experimental trials of health and wellness coaching demonstrated significant improvement in physiological changes such as weight loss, psychological changes such as improved mental wellness and self-efficacy and behavioral changes such as increased physical activity.
  - Health and Wellness Coaching is an effective mechanism to promote client autonomy and self-efficacy resulting in behavioral change. (Doo & Ryan, 2008; Kivela et al., 2014; Prochaska et al., 2012; Wolcott et al., 2013)

**GOALS AND OBJECTIVES**

- The overall goal was to create an effective evidence-based Health and Wellness Coaching for Lifestyle Intervention Toolkit/ Blog and Presentation for healthcare professionals.
- An anonymous Post-Presentation Feedback Survey was provided to the participants via Survey Monkey.
- The DNP student Presenter was rated on the effectiveness in presenting the evidence-based Health and Wellness Coaching for Lifestyle Intervention Toolkit components.
- The healthcare professionals also rated how well the evidence that was presented improved their knowledge and skills in Health and Wellness Coaching.

**TOOLKIT/BLOG PRESENTATION**

**Health and Wellness Coaching for Lifestyle Intervention Toolkit/Blog Presentation Outline**

- 1) **Health and Wellness Coaching:**
  - a) Health and Wellness Coaching Program Training and Certification (International Consortium for Credentialing Health and Wellness Coaches (ICHCWC))
  - b) Why use Health and Wellness Coaching techniques?
  - c) When to use Health and Wellness Coaching techniques?
  - d) What are effective Health and Wellness Coaching techniques?
    - i) Health and Wellness Coaching implementation
    - ii) Health and Wellness Coaching Process (Wolcott, 2016)
- 2) **Evidence Based Practice –Integrative Review and Framework**
  - a) Health and Wellness Coaching for Lifestyle Intervention: Background
  - b) Problem Statement
  - c) Gap Analysis
  - d) Integrative review of studies: highlight specific studies
  - 3) **Health and Wellness Coaching**
    - a) The International Consortium for Health and Wellness Coaches (2017) definition.
    - 4) **Health and Wellness Coaching Theoretical Skills:**
      - i) Theoretical Framework: Self-Determination Theory
      - ii) Translational Model Stages of Change (Prochaska, 2012)
      - iii) Motivational Interviewing (Miller & Rollnick, 2003)
      - iv) Self-Efficacy (Bandura, 1985)
    - 5) **Lifestyle Intervention: Physical Activity, Mediterranean Diet, Stress Management**

This Toolkit/ Blog was presented to 11 Healthcare Professionals at UMASS Center at Springfield in a 90 minute podium presentation and via Zoom teleconferencing on March 21, 2018. <https://www.umass.edu/centerforinnovation/>



**RESULTS: POST PRESENTATION FEEDBACK SURVEY**

UNEXPECTEDLY (5) (STRONGLY AGREE) TO 1 (STRONGLY DISAGREE)

- Objectives/ Learner's achievement of Objectives:** As a result of this activity I am able to:
1. Identify why Health and Wellness Coaching is an evidence-based practice. (W)=4.25
  2. Understand that Health and Wellness Coaching is different than education and is designed to reduce resistance to change. (W)=4.13
  3. Discuss how Health and Wellness Coaches identify clients' readiness for change using the Translational Model (TM) Stages of Change. (W)=4.75
  4. Discuss how using Motivational Interviewing techniques is an effective component to Health and Wellness Coaching. (W)= 4.75
  5. Identify why coaching clients in self-efficacy and autonomy are essential components to making positive changes. (W)=4.51



**Rate the Presentation Expertise of Presenter:**

1. Is knowledgeable in content area. (W)=4.75
2. Content is consistent with objectives. (W)=4.75
3. Presentation Strategies were appropriate for topic. (W)= 4.63
4. Teaching by this Presenter was effective. (W)=4.63

W= Weighted average

**CONCLUSIONS**

- Health and Wellness Coaching is an evidence-based practice that could be used across client populations for lifestyle interventions.
- This Health and Wellness Coaching for Lifestyle Intervention Toolkit/ Blog can be used for any client requesting assistance with making a lifestyle change.
- This resource has been identified as an easy to use Toolkit/ Blog to assist clients to increase self-efficacy and overcome resistance to change.
- With obesity levels high and adhering to recommended lifestyle changes of healthy diet and physical activity low, there is a significant need for this Health and Wellness Coaching for Lifestyle Intervention Toolkit/ Blog and it could be used across settings as a resource for healthcare professionals.
- It could also be incorporated into curriculum to educate healthcare professional students.

**RESULTS: POST PRESENTATION FEEDBACK SURVEY**

UNEXPECTEDLY (5) (STRONGLY AGREE) TO 1 (STRONGLY DISAGREE)

**Presenter Effectiveness in Presenting to Overall Purpose/ Goal of this Activity**



**ACKNOWLEDGMENTS**

I would like to acknowledge the contribution of my:  
 Capstone Chair: Jean DeVMartin, PhD, FNP-BC  
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