

2016

# The Development and Content Validation of an Adult Obesity Educational Program

Abel Okuma  
*Walden University*

Follow this and additional works at: <http://scholarworks.waldenu.edu/dissertations>

 Part of the [Nursing Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Health Sciences

This is to certify that the doctoral study by

Abel Okuma

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

## Review Committee

Dr. Dana Leach, Committee Chairperson, Health Services Faculty  
Dr. Courtney Hines, Committee Member, Health Services Faculty  
Dr. Jeannie Garber, University Reviewer, Health Services Faculty

Chief Academic Officer  
Eric Riedel, Ph.D.

Walden University  
2016

The Development and Content Validation of an Adult Obesity Educational Program

by

Abel O. Okuma

MSN, Tennessee State University, 2003

BSN, Tennessee State University, 2000

BSCE, Tennessee State University, 1984

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

February 2017

## Abstract

Overweight and obesity in patients with intellectual and developmental disabilities (IDD) are at epidemic levels in the United States. The problem identified for this DNP project is the incidence of overweight and obesity in IDD. The framework used involved the quality model for improvement. For this DNP project a new program called the Daily-Enhanced Physical Activities Program (DEPA) was developed to promote weight loss, reduce sedentary activities, and optimal body mass index (BMI) for IDD patients. Local experts consisting of two registered nurses, two physical therapists, and one direct support personnel working with IDD patients were recruited. Each expert reviewed the newly developed DEPA program using a 10 question, 4-point Likert type scale survey. Results of expert surveys showed expert agreement that daily physical activity is necessary for IDD patients to reduce the risk for other chronic disease related to sedentary lifestyle. Furthermore, all experts “agreed” that a disability should not prevent a person from engaging in activity to enhance the quality of life. Finally, all experts indicated that the selected population would take advantage of the DEPA project. Social change occurs when IDD patients are engaged with a structured DEPA project to possibly reduce obesity, increase activity and improve BMI.

The Development and Content Validation of an Adult Obesity Educational Program

by

Abel O. Okuma

MSN, Tennessee State University, 2003

BSN, Tennessee State University, 2000

BSCE, Tennessee State University, 1984

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

February 2017

## Dedication

I dedicate this project to the memory of my father James Onogeharho Okuma, who instills in me a lifelong learning. To my mother, Eseraiberuo Okuma, who through continuous prayer intersection kept me safe, healthy, and alive. A special dedication to the love of my life, Mary Oghenekevwe Okuma, for believing I can do it, and for providing selfless support in this educational journey. To all my children, who through their moral support and prayers were the sources of motivation in continuing my education to this stage. Special thanks to my boys, (The Triple Ds), David, Daniel, and Darius, I love you, this project, I dedicate.

A. O. O.

## Acknowledgments

My appreciation goes to the Doctor of Nursing Practice (DNP) faculty at Walden University who were supportive of this DNP journey. Your mentoring, guidance, and encouragement provided me with grounding for this project. I would like to extend a heartfelt gratitude to my Chair, Dr. Dana Leach, and committee members, Dr. Courtney Hines and Dr. Jeannie Garber for refining and editing the project to fruition. I would also like to extend a very special thanks to my preceptor Guerrah, Abdelmadjid MD, and my nurse manager Mrs. M. Diugu, RN, for your unwavering support, thank you.

A.O.O

## Table of Contents

List of Tables .....	iii
List of Figures.....	iv
Section 1: Overview of the Evidence-Based Project .....	1
Introduction.....	1
Problem Statement.....	2
Purpose Statement and Project Objectives .....	3
SIGNIFICANCE AND RELEVANCE OF THE PROJECT TO PRACTICE .....	4
DNP Project Question.....	5
Evidence-based Significance of the Project .....	5
IMPLICATIONS FOR SOCIAL CHANGE IN PRACTICE.....	7
Definitions of terms .....	7
Assumptions and Limitations .....	8
Summary.....	9
Section 2: Review of Literature and Theoretical and Conceptual Framework.....	10
Review of Scholarly Evidence.....	11
Specific Literature.....	11
General Literature.....	11
Conceptual Models, Theoretical Frameworks.....	12
Section 3: Methodology.....	14
Project design/methods .....	14



Population and sampling.....	16
Data collection.....	16
Data analysis.....	17
DNP project evaluation plan.....	17
Summary .....	19
Section 4: Findings, Discussion, and Implications .....	21
Feasibility Tool.....	22
Implications .....	24
Section 5: Scholarly Product.....	26
References.....	31
Appendix A: DEPA Questionnaire.....	<a href="#">36</a>
Information Flyer .....	37
Appendix B: .....	38
Letter of Cooperation from a Research Partner.....	38

List of Tables

Table 1. An example of BMI measurement; Adapted from CDC (2013)..... 17

Table 2. Feasibility Results.....23

List of Figures

Figure 1 Nine-month BMI Evaluation Progression .....19

## Section 1: Overview of the Evidence-Based Project

### **Introduction**

The Centers for Disease Control and Prevention (CDC, 2013) reported that obesity and overweight are significant health issues for individuals with intellectual and developmental disabilities (IDDs). Likewise, the National Committee for Quality Assurance (NCQA, 2010) indicated that obesity is widespread in this vulnerable and dependent population. The issue of overweight and obesity in individuals is commonplace, causes health difficulties, and leads to chronic diseases (Bhaumik, Watson, Thorp, Tyrer, & McGrother, 2008). Furthermore, Moussa and Tomasik (2011) stated that the cost of treating an obesity-related chronic condition, such as diabetes, heart disease, or cancer is over \$80 billion annually. The CDC found that poor eating habits, genetic predisposition, metabolic disorders, and lack of physical activities contributed to overweight and obesity in individuals with IDD (CDC, 2013).

A 2014 survey of an organization that provides care for individuals with IDD found that the services offered remain below the national benchmark in the areas of physical exercise, weight, and nutritional management. A problem in the organization is that for the last three consecutive (2012, 2013, and 2014) years, the organization has not met the nutritional and weight management goals of individuals with IDD. This shortcoming has led to difficulty in ensuring a healthy body mass index [BMI] (Department of Intellectual and Developmental Disabilities [DIDD], 2014). Similarly, the institution lacks leadership in areas of exercise, habilitation, nutrition, and weight management. Because nutrition is necessary and affects individuals' quality of life,

proper leadership is required to comply with quality indicators, maintain appropriate health status, and prepare the individual for community placement. Furthermore, physical activities and proper dietary modification are some of the quality indicators recommended by the NCQA (2010).

The ability to provide care to this population is tedious, time-consuming, and challenging (DIDD, 2014). The organization scored 16% and 8% on the Centers for Medicare and Medicaid Services (CMS) guidelines for quality improvement in areas of physical activity and weight management, in the past three years. In addition, the scores in this area for 2013 were 60% and 40% when compared to CMS standard for quality compliance. These findings indicated the organization has not met goals in the areas of nutritional, weight, and physical activities. In spite of stated objectives to deliver services based on DIDD Quality Assurance (QA) protocol, performance has been poor. Similarly, the requirement to offer programs in collaboration with major insurance carriers, stakeholders, and CMS guidelines, the organization has performed poorly in the primary indicators for quality improvement (DIDD, 2014).

### **Problem Statement**

The problem identified in this DNP project is the incidence of overweight and obesity in IDD in a local residential facility that supports people with various disabilities. Several studies have shown that individuals with IDD face numerous health challenges, including obesity and overweight (CDC, 2013). As a result, prevention of overweight and obesity through the attainment and management of healthy BMI forms the focus of this DNP project.

Rimmer, Yamaki, Lowry, Wang, and Vogel (2010) reported that the middle age adult segment of the population with IDD has a pervasive overweight and obese problem. However, individuals with IDD are often inadequately managed and frequently not included in education or counselling (Dixon-Ibarra & Horner-Johnson, 2014). According to Dixon-Ibarra and Horner-Johnson (2014), individuals with IDD are more prone to chronic diseases because of lack of adequate physical activities, including overweight and obesity. As a result, Healthy People 2020 suggested the inclusion of people with disabilities for health promotion interventions (Dixon-Ibarra & Horner-Johnson, 2014).

**Purpose statement and project objectives.** The purpose of this DNP project was to develop an educational program to facilitate weight loss that will lead to the attainment of healthy BMI for individuals with IDD. The program provides activities in the organization for clients through daily-enhanced physical activity (DEPA) and nutrition surveillance. As Terry (2012) indicated, a DNP project should not just review literature but seek to utilize critical appraisal skills to evaluate credible sources of information. Furthermore, Terry suggested unbiased principles of analysis to valued sources accurately, noting any strength and weaknesses. The CDC (2013) guideline for BMI forms a credible source for comparison. The guideline recommendation shows a healthy BMI range is 18.5 to 24.9. An adult with a BMI between 25 and 29.9 is overweight while an adult with BMI  $\geq 30$  kg/m<sup>2</sup> is obese. The cohort will have dietary guidelines that comply with the American Dietetic Association (ADA) recommendations.

In this DNP educational project I focused on evaluating factors associated with overweight and obesity in individuals with IDD, such as nutrition and sedentary lifestyle.

Through the determination of the relationship between inactivity, obesity, and the environmental effect I examined the potential changes that can positively influence health (Rimmer & Yamaki, 2006). In addition, the DNP emphasis will assist me with establishing nutritional status appropriateness (NSA) to maintain healthy BMI. Nonetheless, no alteration to the current dietary regimen will take place, as the primary focus of this project is on education that will increase physical activity involvement to promote a desirable BMI.

***Significance and relevance of the project to practice.*** The literature review indicates a gap in educating, counseling, and providing the appropriate intervention to persons with IDD in order to maintain proper BMI. Researchers have suggested that individuals with IDD are at increased risk of developing chronic diseases because of overweight or obesity. Nonetheless, fewer active interventional or educational programs focusing on those with IDDs exist (CDC, 2013). Furthermore, there is a lack of evidence showing that the normal weight requirements are effective in this unique population.

From the review of existing external survey records, the organization scores 16% and 8% in areas of nutritional management and habilitation services. These scores have remained below the national average for three consecutive years (2012, 2013, 2014) when compared to a national benchmark. Similarly, the scores in this area for 2014 were 60% and 40%, respectively, when compared to similar facilities. Because of these low scores, the DNP candidate initiated a quality improvement (QI) strategy that focused on nutritional surveillance and enhanced daily physical activity.

The process required of an institution to provide services to individuals with IDD are detailed, complicated, and require significant professional involvement. An Intermediate Care Facility for individuals with IDD (ICF/IDD) provides an extensive range of medical and health-related services to their clientele. These services include health care, rehabilitation, and active treatment programs to maintain a quality lifestyle. The core active treatment programs are access to medical and social services, psychological, vocational, financial, educational, and legal support. Furthermore, under the federal government mandate, the institution is currently transitioning these individuals to various group homes (GHs) within a five-mile radius. Therefore, the environment includes both clients in the institution and GHs. Currently, there are over 250 persons with IDD under the management of the organization. Of these, 190 or 76% are overweight or obese. This figure suggests the need for an alternate program to improve the quality of life for this population.

*DNP project question.* In individuals with IDD, what is the relationship between physical activity and body mass index?

$H_0$ : Increased physical activity has no effect on BMI.

***Evidence-Based significance of the project.*** Dunlop et al. (2014) reported that physical activities are effective in reducing overweight, improving health, and reducing disability. Furthermore, Dunlop et al. asserted that increasing daily exercise reduces the risk of an obesity-related impairment, regardless of an increase in the intensity of that additional activity. A needs assessment revealed that most of the IDD individuals spend the majority of their waking hours watching television or sitting idle. For this reason,



developing an educational intervention to increase daily-enhance physical activities (DEPA) has the potential of promoting weight loss. The weight loss will improve health and wellness, and decrease the risk of new onset of chronic medical conditions, such as type 2 diabetes.

In this DNP project I developed an educational intervention to provide DEPA for the defined population to provide major gross muscle activities for at least 150 minutes per week. Researchers indicated that moderate-intensity physical exercise between 150 and 250 minutes per week was adequate to promote weight loss with moderate food restriction but not severe diet restriction (Donnelly et al., 2011). Furthermore, Sniehotta, Scholz, and Schwarzer (2006) found that a sedentary lifestyle is difficult to change. Therefore, planning to keep these individuals motivated by physical exercise is a core part of this DNP project. Also, the educational program will be a part of routine care for individuals helping to develop an action plan to accomplish the objective. Importantly, these individuals would be engaged in forming DEPA as a habitual behavior pattern. Researchers have suggested habit development leads to motivation, decreases resistance to change, and promotes the desired intervention (Sniehotta et al., 2006). At the same time, individuals will be encouraged to report any difficulties or barriers to activities. By discussing and eliminating the problems reported, these individuals would continue to show motivation.

***Implications for social change in practice.*** Overweight and obesity is a major public health concern because of associated comorbidities, especially due to nature and the progression of the comorbidities (Shreve, 2015). The implication for social change is

that the outcome of this project would promote optimal BMI levels in the study participants. A healthy BMI is associated with decreased development of chronic conditions. One social impact is to create a culture of health and wellness in the community involved in caring for the IDD population. As a result, attaining and maintaining healthy BMI in the subpopulation of individuals with IDD has a social implication of local, state, and federal stakeholders. To that end, the NCQA (2010) suggested that weight controlling should begin with recognizing and calculating the BMI of the individual. Hence, all participants will seek to achieve a BMI within the commonly recommended ranges.

Researchers have indicated that preventing inappropriate weight burden in adults 20 years and older improves psychosocial functioning, reduces destructive mood, and inhibits eating disorders (Tanofsky-Kraff et al., 2014). Most importantly, Bhaumik, et al. (2008) asserted that overweight and obesity in adults with IDD poses a significant clinical and public health problem. Therefore, ensuring a healthy BMI in individuals with IDD will improve the patients' quality of life (NCQA, 2010).

### **Definitions of Terms**

*Body mass index (BMI):* A screening tool for determining overweight or obesity. BMI is a calculation based on weight in kilograms divided by the square of height in meters (kg/m<sup>2</sup>) (CDC, 2013).

*Developmental disability:* A cluster of conditions related to a deficiency in language, physical, learning, or behavior areas (CDC, 2015b).

*Overweight:* An adult with a BMI between 25 kg/m<sup>2</sup> and 29.9 kg/m<sup>2</sup> for a given height,

*Obesity:* Weight that is greater than the suggested for a given height or an adult with BMI  $\geq$  30 kg/m<sup>2</sup>.

### **Assumptions and Limitations**

There is a limitation associated with using BMI to ascertain whether an individual is overweight or obese because BMI does not account for the structure of body fat (Teramoto, Bungum, Landwer, & Wagner, 2015). Similarly, individuals with a physical disability may not be able to stand and maintain straight posture for height measurement used for BMI calculation. Therefore, a recumbent length used to calculate the BMI may not provide 100% accuracy (Teramoto et al., 2015). Likewise, BMI does not differentiate between fat and muscle, which tends to be heavier and has the potential of assigning overweight or obesity to more toned individuals (Teramoto et al., 2015). Additionally, BMI is a measurement of excess weight rather than surplus body fat (CDC, 2015a). Furthermore, BMI does not recognize that men lose less muscle mass with age than women. However, the loss of muscle mass leading to sarcopenic obesity is common in women, and an inverse association between muscular strength and mortality to men (Shah & Braverman, 2012).

An assumption considered is that BMI is an inexpensive, noninvasive, and simple method for measuring body fat (CDC, 2015a). Also, having the right measuring equipment, the individuals BMI calculated will produce a realistically accurate result. At the same time, CDC states that BMI levels correlate with body fat and it indicates

potential future health risks, which could be used to predict future morbidity and mortality. CDC reported that highly trained athletes or muscular individuals have a high BMI due to increased muscle mass. Importantly, BMI is assumed to be interpreted by using standard weight status classifications that are the same for all ages, for men, and for women (CDC, 2015b).

### **Summary**

The DNP project is designed to create an educational program to facilitate culture of health and wellness to promote attainment of optimal BMI in the selected subgroup. In addition, the DNP project requires a time commitment and the understanding of the complex issues of weight management. Therefore, a systematic approach to developing a new strategy for improving health and well-being mandates patience (Nash, Reifsnnyder, Fabius, & Pracilio, 2011). Despite the fact that BMI is a reasonable indicator of body fat for both adults and children, the project is limited to the target population as defined above. Conversely, BMI is not be used as a diagnostic tool, but as a screening method to track weight status and to identify potential weight problems in individuals ages 20 to 40 years old. As CDC suggested, the first step in weight management is screening individuals through measurement of BMI. Furthermore, Tanofsky-Kraff et al. (2014) state that inhibiting inappropriate weight gain in adults over 20 years and older improves psychosocial functioning, reduces destructive mood, and prevents eating disorders. Moreover, through the BMI monitoring and providing the necessary DEPA interventions, a state of universal rigor among these individuals would be avoided or reduced.

## Section 2: Review of Literature and Theoretical and Conceptual Framework

### Review of Scholarly Evidence

#### Specific Literature

The Walden Library, CINAHL, and Google Scholar were used to locate research articles related to developing overweight and obesity in individuals with IDD. Limited literature exists in primary research linking obesity and overweight in this subgroup. Nevertheless, poor eating habits, physical inactivity, and genetic predisposition were the main contributing factors uncovered. In Dixon-Ibarra and Horner-Johnson's study (2014), ( $n = 2,619$ ) individuals with IDD had a higher prevalence of obesity compared to their counterparts without IDD. Additionally, Jackson, Doescher, Saver, and Hart (2005) found in a cross-sectional prevalence study, from 1994 ( $n = 10,705$ ), 1996 ( $n = 13,800$ ), 1998 ( $n = 18,816$ ), and 2000 ( $n = 26,454$ ) that the proportion of obese patients receiving information to lose weight fell from 44.0% to 40.0%. Similarly, from 2003-2004, 17.1% of U.S. children and adolescents were overweight, and approximately 32.2% of adults were obese (Ogden et al., 2006). Furthermore, research findings have shown that Americans with IDD have a greater prevalence of obesity and extreme obesity compared to the general population (Rimmer & Yamaki, 2006). Also, lack of patient education, deprived counseling, and environmental constraint were contributing factors found to increase BMI (Dixon-Ibarra & Horner-Johnson, 2014). Furthermore, CDC reported that genetic predisposition, metabolic disorders, and lack of physical exercise contributed to overweight and obesity in persons with IDD (CDC, 2013).

#### General Literature

Another significant finding from the literature indicates that adverse effect of some prescription medications contributes to weight gain. Brian, Ogden, and Flegal (2012) found in a cross-sectional analysis of prescription drug use among 9,789 adults and concluded that several prescription medications contribute to weight gain.

Importantly, the particular classes of drugs prevalent in treating IDD may increase appetite or cause changes in metabolism. Similarly, these classes of drugs may cause stimulation of appetite. There are some drugs that delay calorie utilization by altering metabolism, and some causes fatigue, preventing or slowing physical activities (Kyle & Kuehl, n.d.). These categories of medications include mood stabilizers, mood-stabilizing antipsychotics, certain antidepressants, and antidepressant-antipsychotics (Hall-Flavin, 2015). Due to high usage of these among IDDs, they are a potential contributor to overweight and obesity. For this reason, an assessment revealed that the majority of the selected cohort have added burden of weight gain because of therapeutic intervention. Therefore, an alternate solution to counter the adverse drug reactions (ADRs) to some of these drugs will improve weight management, leading to desired BMI.

### **Conceptual Models, Theoretical Frameworks**

The model for addressing BMI, overweight, and obesity is multifaceted. As a result, the framework is the quality model for improvement (MFI). The model consists of two interrelated parts. The first part provides an answer to the question of what the intervention is trying to accomplish, the effect of the program, and the result of interventions. The second part consists of continuous cycles of “Plan-Do-Study-Act” (PDSA) model of testing and implementing the intervention (Stiefel, 2011). The PDSA

model provides the ability to develop a *plan* of logical objectives, predictions and plans to achieve the cycle (Stiefel, 2011). The *do* phase requires carrying out the plan, recording data, and observations. The *study* phase involves analyzing the data, verifying predictions, and summarizing the result of what is learned. At the same time, in the *act* phase, any changes to the process are incorporated into the next step of the cycle, and the cycle repeats (Stiefel, 2011).

Although the MFI is the framework, the DNP project does not involve human subject at this stage. Therefore, not all the phases would be completed at this level. However, the MFI is an appropriate choice for addressing overweight and obesity because it allows for developing a clear statement to answer the question of what the project aims to accomplish. At the same time, MFI enables the application of the “SMART” criteria through systematic data collection, analysis, and revision. SMART criteria refers to goals that are Specific, Measurable, Attainable or agreed upon, Realistic, and Time-phased (LeBlanc, O'Connor, Whitlock, Patnode, & Kapka, 2011). Similarly, the MFI supports the end user to apply a systematic process that can be modified, terminated, or revised. The revisions can be done at set times or intervals to achieve the anticipated result (Singh, Sanderson, Galarneau, Keister, & Hickman, 2013).

### Section 3: Methodology

#### **Introduction**

This project was selected due to the nature of inactivity that exists among IDD and their caregivers. I found that a common misconception exists that IDDs require little or no physical activity and would not benefit from maintaining and obtaining ideal body mass index (BMI). Before starting this study, I requested and obtained permission from Walden University's Institutional Review Board (IRB) to uphold and ensure ethical protection of research subjects. The IRB (Reference # 05-19-16-0524474) approved "The Development and Content Validation of an Adult Obesity Educational Program" under the supervision of Dr. Dana Leach (Chair) and supporting committee members.

#### **Project design/methods**

The DNP project proposal involves education and physical exercises that will be followed by six months weight loss and six months weight maintenance to compare two approaches to weight management. Overweight and obesity guidelines recommended by the CDC (2013), will indicate the basis for participation. The initial BMI of the patient will determine the study subjects' inclusion. The individuals' BMI calculation utilized in this project is a reliable quality indicator for measuring body fat in most people (CDC, 2013). Furthermore, BMI is a CMS defined core quality measure, used to screen for weight categories that may lead to health problems, and or obesity-related diseases (CDC, 2013).

The NCQA (2010) suggested that weight management should start with identifying and calculating the BMI of the person. As a result, a ten point Likert



questionnaire will use to conduct a survey of local experts. These experts include people caring for individuals with disability, direct care personnel, therapist, and nurses. The questionnaire will be score based on (1=disagree/not at all; 2= strongly agree/unlikely; 3=agree/most likely; 4=excellently/definitely). A descriptive analysis will be used to determine the feasibility of the proposed DEPA program before implementation. However, the project is not implemented at this point, but the proposed method is designated for future reference.

Group 1 - Meal Time Monitoring (MTM) without intervention (G1C)

Group 2 – Meal Time Monitoring plus Daily Enhance Physical Activity (MTM + DEPA). G2E will have daily enhanced activities beyond generally scheduled activities.

The DNP proposal involved the implementation of the design after graduation. As a result, the experimental group (G2E) will undergo 30 minutes (8:00 AM- 8:30 AM) of brisk walking. The group will walk around the gym on Mondays, Wednesdays, and Fridays (MWF). In addition, the group (G2E) will kick soccer balls for 45 minutes from 9:00 AM – 9:45 AM. Walking will resume, followed by modified basketball games for 45 min (8:00 AM – 8:45 AM) on Tuesdays, Thursdays, and Saturday (TThS). The amended basketball game will involve throwing balls to each other, kicking, and rolling the ball from point A to point B. The goal of the exercise activities is to provide major gross muscle activities for at least 150 minutes per week. Every evening between 4:00 PM to 5:00 PM, all participants will be involved in an activity of choice. The control group G1C and G2E will have mealtime monitoring. The goal of DEPA is to burn an average of 500 calories each day. Both groups will be encouraged to avoid extra sources

of foods. Researchers indicated that moderate-intensity physical exercise between 150 and 250 minutes per week was adequate to promote weight loss with moderate food restriction but not severe diet restriction (Donnelly et al., 2011).

### **Population and Sampling**

The CDC (2013) guideline suggested that a healthy BMI for an adult ranged from 18.5 kg/m<sup>2</sup> to 24.9 kg/m<sup>2</sup>. An adult with a BMI between 25 kg/m<sup>2</sup> and 29.9 kg/m<sup>2</sup> is overweight while an adult with a BMI  $\geq$  30 kg/m<sup>2</sup> is obese. Therefore, using the CDC BMI guideline as the approach to identifying all individuals in need for healthy BMI improvement is an appropriate method to accomplish the goal. Therefore, all individuals with a BMI greater than 25 kg/m<sup>2</sup> will be included in the project for quality improvement. The investigator will select all individuals ages 20 to 40 years with current BMI greater than 25 kg/m<sup>2</sup>. This cohort and their research partners are randomized into two groups that will be included in 12-month effectiveness trial. Currently, there are 250 persons with IDD in the organization. Of these, 190 or 76% are overweight or obese (BMI > 25 kg/m<sup>2</sup>). These individuals are the core target population.

### **Data Collection**

This stage of the project does not involve actual data collection. However, the result of the questionnaire analysis will enable the investigator to direct data collection after graduation. For this reason, the initial data obtained from the medical records contain current BMI that will serve as the basis for the selection of participants. The direct care providers and the unit nurses will handle collecting and recording the second sets of data by direct supervision. These sets of data will serve as pre-intervention and

will be used to compare post intervention. Since the investigator is currently working in the facility, this will be a convenient way of ensuring data reliability. The measuring device (ArjoHuntleigh) will be calibrated based on manufacturer's suggested guidelines to ensure accuracy. The selected group will undergo a monthly weight monitoring protocol for 12 months and/as compared to recommended weight ranges to assess BMI.

Table 1

*An example of BMI measurement*

Height	Weight Range	BMI	Considered
5' 9"	124 lbs. or less	Below 18.5	Underweight
	125 lbs. to 168 lbs.	18.5 to 24.9	Healthy weight
	169 lbs. to 202 lbs.	25.0 to 29.9	Overweight
	203 lbs. or more	30 or higher	Obese

*Note.* Adapted from CDC (2013).

### **Data Analysis**

A quarterly assessment will determine the effectiveness of the interventions. There is limitation associated with using BMI to ascertain whether an individual is overweight or obese. The reason is that BMI does not account for the composition of body fat or differentiate muscle mass (Teramoto, Bungum, Landwer, & Wagner, 2015). Furthermore, individuals with a physical disability may not be able to stand and maintain straight posture for height measurement used for BMI calculation. Therefore, recumbent length is used may not provide 100 percent accurate BMI (Teramoto et al., 2015).

### **DNP project evaluation plan**

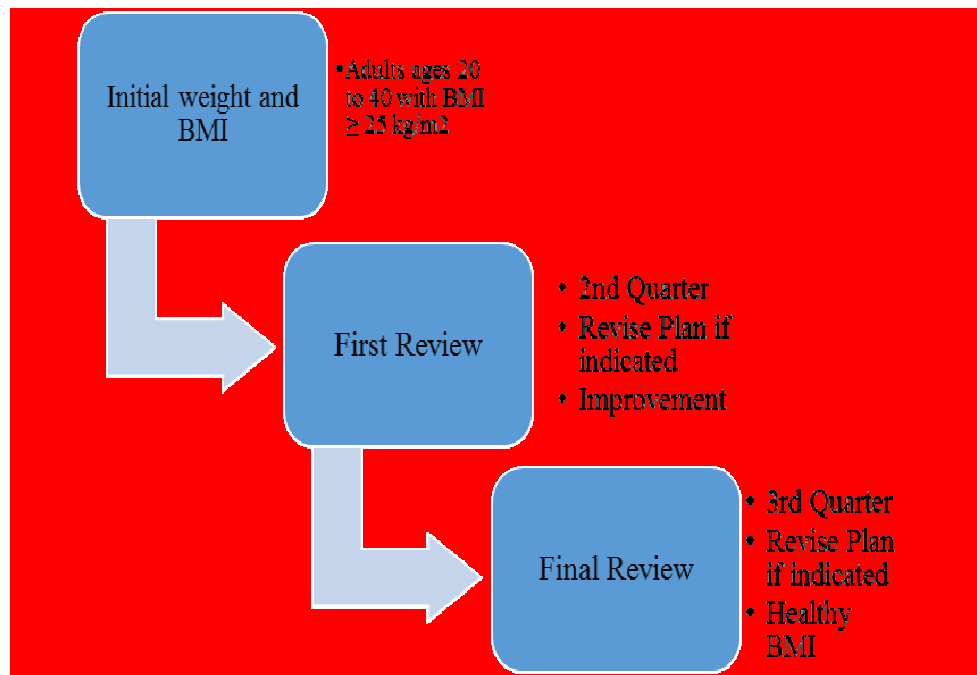
The plan for project evaluation method is an application of a summative model. The summative evaluation enables project designer to judge the worth of the activities

initiated at the end of the six months (Hodges & Videto, 2011). The method directs the focus of activities on the outcome rather than providing information about the project (Hodges & Videto, 2011). Furthermore, the mechanisms used to collect the pre-intervention data would be the same. The method of data collection will be a specified systematic procedure and will use the same instrument. The use of the same instrument for data collection, assessment, and analysis increases validity to the outcome. At the same time, applying the same methodology to the evaluation of data allows the determination of the value and effectiveness of the program. As a result, summative evaluation allows assessing whether the outcome of the intervention met the stated goals (Clark, 2015).

The goal of this project is for individuals with BMI over 25 to attain and maintain ideal body mass index (BMI) for height and weight. To achieve the outcome objectives of the program, the target population will lose approximately 0.5 pounds to 1 pound a week for six months. The program planned (DEPA) will enable people to burn an average of 500 calories per day to reach the stated goal. A monthly weight measurement would determine progress and to ensure success is sustained over time. Meanwhile, according to CDC (2013) a healthy BMI is between 18.5 and 24.9, for recommended weight range and height. Therefore, any amount of weight lost is equivalent to not gaining additional weight, which will translate into a positive outcome.

Figure 1 below indicates a potential nine-month trend for G2E cohort outcome. In the first quarter review, probable improvements will show a trend towards achieving the desired BMI for G2E goal. At the end of the project period, the plan will be found to be

efficient and adequate for the population and will be adopted with stated goals for continuous health improvement. The continued success of the DEPA was the result of the active collaboration of the team, caregivers, and the firm leadership in implementing the project.



*Figure 1.* 12-month BMI evaluation progression.

### Summary

Donnelly et al. (2013) asserted that the overweight and obesity rate among individuals with IDD is higher than in the general population. These individuals are underserved, have limited weight management attention and dietary characteristics to promote weight gain. Similarly, Donnelly et al. found that weight administration in this population has been conducted over short periods, in small samples, occasionally used a randomized design, and lacked adequate evaluation. The project coordinator will

encourage a monthly meeting to review previous months' findings. This process will support and engage the team in a continuous commitment to the project. Also, all discussion will focus on any challenges encountered the prior month and how to ratify those shortcomings. The team suggestions for what specific changes, if needed, for the upcoming month will evaluate the anticipated problems likely faced. The evaluation process would allow members to share, learn, troubleshoot, and to improve collaboration (Kelly, 2011).

Sniehotta, Scholz, and Schwarzer (2006) found that a sedentary lifestyle is difficult to change, therefore, planning to keep these individual motivated in daily enhanced physical activities, is an essential part of this project. In addition, the training program will be a part of routine care with individuals helping to develop an action plan to accomplish the objective. The individuals would be engaged in forming DEPA as a habitual behavior patterns. Researchers suggest habit development will lead to motivation, decreased resistance to change, and promotion of the desired intervention. Individuals will be encouraged to report any difficulties or barriers during program activity. By discussing and eliminating the problems reported, these individuals would continue to show motivation, adopt behavior, and improve their quality of life.

## Section 4: Findings, Discussion, and Implications

### **Evaluation of Findings**

This program is developed to address the care gap identified among IDD in a local setting. Teams of experts working with this population reviewed the program and completed a questionnaire. Five participants, two registered nurses, two physical therapists, and one direct support personnel, completed an anonymous survey. The implication of this pilot study has the potential to lead the organization-wide practices of sedentary activity reduction to obtain an optimum quality of life for individuals with IDD. Furthermore, an outcome of this daily-enhanced physical activity (DEPA) small initial study will be duplicated and implemented in various similar settings.

This quantitative study indicates a positive result in many aspects. One such outcome is the reduction of inactivity among IDD population. Another intended effect is the decrease amount of time individuals spend in doing nothing. Before the study, most these people spend the majority of their waking hours watching television. The study enables staff to devote more time engaging these individuals in daily-enhanced activities to decrease sedentary activities. This addition time was an expected outcome. Similarly, there is lots of understanding among participants that DEPA will promote well-being, improve muscle tone, and increase staff and individual morale.

### **Discussion of Findings**

One of the surprise findings is that all the participants admit that people with disability should engage in some form of daily physical activity. These reviewers believed that if the DEPA project is implemented after graduation, the selected group will

benefit from a potential decrease in the development of obesity-related chronic diseases (Bhaumik, Watson, Thorp, Tyler, & McGrother, 2008). These conditions include cancer, heart disease, and diabetes (Mousa & Tomasik, 2011). Similarly, the reviewer agreed that the program would lead to weight reduction, decrease muscle rigidity, and will improve the quality of life. Furthermore, the participants overwhelmingly (80%) agreed that disability should not prevent a person from engaging in activity to enhance the quality of life. The caregivers that completed the survey unanimously ( $N = 5$ , 100%) believed people with disability would benefit from maintaining ideal body weight (BMI). Also, 80% of the participants indicated that the selected population would take advantage of the DEPA project.

### **Feasibility Tool**

I asked the five participants, (two RN, two PT, and one DSP) that reviewed the educational module to evaluate the program by completing the survey. The evaluation questionnaire consists of 13 items; ten questions scored on 4-point Likert-type scale (Burns, Grove, & Gray, 2013). The legends on the Likert scale are 1= Disagree/Not at all, 2= Strongly Agree/Unlikely, 3= Agree/Most Likely, and 4= Excellently/Definitely. Three items designed to solicit suggestions (Appendix A).



Table 2

*Feasibility Results*

Question	Population	N= 5				
		Raw Score	Total	Mean	Percent	
1. Do you believe a daily-enhanced physical activity will improve wellbeing?		4, 4, 2, 4, 4		18	3.6	90
2. Do you believe daily physical activity is necessary for people with disability?		4, 4, 4, 4, 4		20	4	100
3. I believe regular physical exercises will help to reduce risks of developing medical problem associated with overweight.		4, 4, 2, 2, 4		16	3.2	80
4. The suggested activities will reduce the development of muscle rigidity and improve muscle tone.		4, 3, 3, 4, 3		17	3.4	85
5. Do you believe the selected group will benefit from the suggested activities?		4, 3, 3, 3, 3		16	3.2	80
6. Do you think disability should prevent people from engaging in the selected physical activities?		1, 1, 1, 1, 1		5	1	25
7. Do you believe a person with disabilities will benefit from maintaining ideal body mass index?		4, 3, 3, 3, 2		15	3	75
8. I would encourage increase staff involvement in engaging people supported in daily-enhanced physical activity.		4, 3, 2, 4, 2		15	3	75
9. Do you believe the steps indicated in the program will result in achieving moderate weight loss?		3, 3, 3, 4, 3		16	3.2	80
10. I believe the recommend program would reduce sedentary activities in the various Homes.		4, 2, 4, 4, 3		17	3.4	85

Note: All Questions 1-10, are equally weighted on 4-point type Likert scale.

The results suggested that all participants ( $N = 5$ , 100%) agreed that daily physical activity is necessary for people with disability. At the same time, 90% score on item one indicates the project meets the intended outcome, which DEPA would improve well-being. Similarly, 25% score on Question 6 translate, as disability should not prevent people from engaging in the designed DEPA program.

### **Implications**

**Process.** The responses to the survey were anonymous to add credibility to the process. I developed the questionnaire to prevent participants' professional identity. As indicated above, two registered nurses, two physical therapists, and one DSP formed the group. However, members' survey was unidentified to avoid bias in the process.

**Content.** The study wanted to find out (Question 2) if a person with a disability should be included in daily-enhanced physical activity (DEPA). All participants indication ( $N=5$ ) that daily physical exercise is necessary for people with disability.

**Design.** DEPA aims to promote wellness in debility by improving the quality of life and reducing chronic condition associated with overweight and obesity in people with disability. Question seven asks if a person with a disability would benefit from DEPA. Based on the result, 75% of participants agreed. Similarly, Question 11 solicit additional comment to improve all participants ( $N=5$ ) felt no further activity needed.

**Weaknesses.** Question 12 asked participants to list any weakness(es) of the module and give suggestions for improvement. Four ( $N=4$ ) or 80% member have no suggestion or identify any deficiencies. One ( $N=1$  or 20%) participant noted the module was indicated for people with disability.

**Strength.** All majority of participants (N=4 or 80%) stated the module will increase activities for people with disability. While one member (N=1 or 20%), indicated the module will encourage involvement in physical activity for an individual with a disability.

**Overall.** This DEPA educational module would accomplish the desired objective when implemented after graduation. When DEPA is implemented, persons with disability will improve their overall health through attaining and maintain ideal body mass index (BMI). The participants (N=4 or 80%) agreed that DEPA would lead to individual achieving moderate weight loss.

## Section 5: Scholarly Project

### **Executive Summary**

This program was developed to promote increase physical activity to reduce sedentary lifestyle among individual with IDD. To design this project, I discovered that most IDD are not involved in routine exercises to promote optimal BMI that leads to overweight and obesity. Furthermore, CDC (2013) reported a lack of interventional or educational activities to promote optimum BMI are available for persons with IDD.

To begin this project, I designed the information flyer that I called “daily enhance physical activity (DEPA) that will result in total health improvement strategy (THIS). The DEPA program was reviewed and analyzed by five experts who are working with a person diagnosed with IDD. The participants (N=5, 100%) agreed that daily physical exercise is necessary for people with disability because it would decrease sedentary activity and promote health. Similarly, physical activities are effective in reducing overweight, prevent obesity, improve health, and mitigate the risk of developing weight-related chronic diseases (Dunlop et al. 2014).

### **Background**

This DNP project was identified for study because of widespread of overweight and obesity of individuals with IDD in a local facility. In addition, studies have shown that person with IDD are prone to various health conditions, including obesity and overweight related chronic illnesses (CDC, 2013). While I was researching this project, I found that most caregivers are unaware of the health benefits people with IDD would receive from enhanced daily exercises. The expert reviewed the proposed program and

participants (N=4 or 80%) stated the module will increase activities, increase total health improvement strategy (THIS) for people with various disabilities. I met and discussed the project with the select experts after obtaining approval from Walden University's IRB (ref: # 05-19-16-0524474) the feasibility of the project. Eighty percent indicated that disability should not be deciding factor for a person with IDD to engage in activity to promote ideal BMI. One of the objective in pursuing this project is the realization that most people with disability spend the majority of their waking hours watching TV. This lack of physical activity encourages the promotion of weight gain, increase consumption of empty calories, and decrease muscle tone.

### **Proposal for Future Project Strengths**

This initial project indicates a consensus exists among caregivers and experts working with individuals with IDD that physical activity is necessary to promote optimal BMI, decrease sedentary activity, and enhance the quality of life. At the same time, all participants (N=5, 100%) verbalized that IDD individuals would benefit from the DEPA project. The strength of this program would rest on the sustained effort to promote the DEPA module, motivation, and to encourage change (Sniehotta et al., 2006).

### **Recommendation for Future Projects**

The initial recommendation for a future project is to apply the DEPA module to one of the Homes in the organization. The testing of the module in this Home would allow the understanding of what works or what needs to be changed. This strategy enables the application of Model for Improvement (MFI). The goal of MFI would be to provide answers and intervention to maintain PDSA in a logical sequence to keep the

sustainability of the project. The study, review, and revisions would promote continuous quality improvement and allow for broader organization-wide implementation (Stiefel, 2011).

### **Dissemination Plan**

The dissemination of this research project will start at the organizational level through the presentation of expert opinion. I would present the findings after graduation the educational materials used to conduct the study in our monthly management meeting. The strategy is to improve buy-in and promote the project to company stakeholders. The presentation would allow me to described, demonstrate the rationale, and promote the underpinning science of my proposed project (Wilson, Petticrew, Calnan, Nazareth, 2010). I would also reach out to professional conferences to submit my poster and handouts after graduation. The implication for this method of project dissemination is the availability to answer questions and address spectator concerns. The take home handout provided with the poster display may not be enough to response to people seeking additional information.

### **PowerPoint Presentation**

According to Wilson et al. (2010), some strategy for dissemination should include effective communication, the key message, medium, characteristics of the audience, and the setting in which the communication is expected. As a nurse leader, this project helps to seek partnership with the individual patient to prevent and decrease health risk factors associated with chronic diseases. I would display the PowerPoint slides in the conference room that will allow me to draw and capture the attention of staffs and stakeholders to

promote the project. Loepke (2011) found that most patients have difficulty meeting their health care goals; hence, providing EBP is crucial and a unique role to play in providing the focus needed practitioners to apply at the point of care (POC). As the result, the project allows the scholar-practitioner to provided individualized wellness strategy because prevention pays and improves health (Loepke, 2011).

### **Publication Aspirations**

To provide the result of a study for others to use at the point of care help to promote health and well-being of patients in health care settings. Also, the translation would elevate and add to the body of nursing knowledge. The goal of a scholar-practitioner is health promotion through research, dissemination of findings and successful translation of research to evidence-base practice (EBP).

The American Association of Nurse Practitioners (AANP) is the largest professional organization for nurse practitioners (NPs). The AANP is a full service and support for nurse practitioners (AANP, 2015). Since the AANP is committed to promoting NPs in growth, research, and practice in all areas, it is my preferred Journal of choice for publication and dissemination of my project results. Another venue for disseminating project results is the submission of abstract to a different organization such as American Journal of Nursing (AJN).

### **Conclusion**

Promoting optimal health through education, prevention, and reduction of risk factors is an important measure of nursing skills. However, health promotion should involve all persons regardless of social, physical, and mental conditions. For this reason,

disseminating research findings to peers and nurses would provide tools and encourage the evidence-base practice. The DEPA flyer and PowerPoint slides will be displayed in conference rooms as a reminder that disability should not prevent a person in engaging in meaningful activities. Furthermore, I will seek opportunities to present my studies at professional conferences. However, old habits are hard to change, rethinking the way we view people with disability as an important part of our community. This focus will enable directing time and resources to improve the care of individual with IDD. Because people disability is an integral component of the broader society, we must continue to promote chronic disease prevention.



## References

- Brian, K., Ogden, C. L. O., & Flegal, K. M. (2012). Prescription, medication use among normal weight, overweight, and obese adults, United States, 2005–2008. *Annals of Epidemiology*, 22(2), pp 112-119. doi:10.1016/j.annepidem.2011.10.010
- Centers for Disease Control and Prevention (2013). Developmental disabilities. Retrieved from <http://www.cdc.gov/obesity/data/prevalence-maps.html>
- Centers for Disease Control and Prevention (2015a). Obesity prevalence maps. Retrieved from <http://www.cdc.gov/ncbddd/developmentaldisabilities/index.html>
- Centers for Disease Control and Prevention (2015b). Body Mass Index: Considerations for practitioners. Retrieved from <http://www.cdc.gov/obesity/downloads/bmiforpractitioners.pdf>
- Clark, I. (2015). Formative assessment: Translating high-level curriculum principles into classroom practice. *The Curriculum Journal*, 26(1), 91-114, doi: 10.1080/09585176.2014.990911
- Donnelly, J. E., Saunders, R. R., Saunders, M., Washburn, R. A., Sullivan, D. K., Gibson, D. K., ... Mayo, M. S. (2013). Weight management for individuals with intellectual and developmental disabilities: Rationale and design for an 18 month randomized trial. *Contemporary Clinical Trials* 36(2013), 116–124. doi: org/10.1016/j.cct.2013.06.007
- Dunlop, D. D., Song, J., Semanik, P. A., Sharma, L., Bathon, J. M., Eaton, C. B., ... Chang, R. W. (2014). Relation of physical activity time to incident disability

in community dwelling adults with or at risk of knee arthritis: prospective cohort study. *BMJ* 2014, 348(2472) doi: 10.1136/bmj.g2472

Dixon-Ibarra, A. & Horner-Johnson, W. (2014). Disability status as an antecedent to chronic conditions: National Health Interview Survey, 2006-2012 *Preventing Chronic Disease* 7(1): 59–69. doi:10.1111/j.1741-1130.2010.00248.x

Hall-Flavin, D. K. (2015). Do all bipolar medications cause weight gain? Retrieved from <http://www.mayoclinic.org/diseases-conditions/bipolar-disorder/expert-answers/bipolar-medications-and-weight-gain/faq-20058043>

Hodges, B. C., & Videto, D. M. (2011). *Assessment and planning in health programs* (2nd ed.). Sudbury, MA: Jones & Bartlett Learning.

Jackson, J. E., Doescher, M. P., Saver, B. G., & Hart, L. G. (2005). Trends in Professional Advice to Lose Weight Among Obese Adults, 1994 to 2000. *Journal of General Internal Medicine*, 20(9), 814–818. doi: 10.1111/j.1525-1497.2005.0172.x

Kyle, T. & Kuehl, B. (n. d.). Prescription medications and weight gain. Retrieved from [http://www.obesityaction.org/wp-content/uploads/prescription\\_medications.pdf](http://www.obesityaction.org/wp-content/uploads/prescription_medications.pdf)

LeBlanc, E., O'Connor, E., Whitlock, E. P., Patnode, C., & Kapka, T. (2011). Screening for and management of obesity and overweight in adults. *Agency for Healthcare Research and Quality* 89(11) Retrieved from

<http://www.uspreventiveservicestaskforce.org/uspstf11/obeseadult/obesees.pdf>

Moussa, M. & Tomasik, J. (2011). The business of cultural change: From individual to communities. In D. B. Nash, J. Reifsnnyder, R. J. Fabius, & V. P. Pracilio (1<sup>st</sup> ed.),

*Population health: Creating a culture of wellness.* (pp. 137-151). Sudbury, MA: Jones & Bartlett Learning.

Nash, D. B., Reifsnnyder, J., Fabius, R. J., & Pracilio, V. P. (2011). *Population health: Creating a culture of wellness.* Sudbury, MA: Jones & Bartlett.

National Committee for Quality Assurance. (2010). The state of health care quality:

Reform, the quality agenda and resource use. Washington, D. C.: Author.

Retrieved from <http://www.ncqa.org/Portals/0/State of Health Care/2010/SOHC 2010 - Full2.pdf>

National Institute of Health. (2012). Understanding adult overweight and obesity.

Retrieved from [http://www.niddk.nih.gov/health-information/health-](http://www.niddk.nih.gov/health-information/health-topics/weight-control/understanding/Pages/understanding-adult-overweight-and-obesity.aspx)

[topics/weight-control/understanding/Pages/understanding-adult-overweight-and-obesity.aspx](http://www.niddk.nih.gov/health-information/health-topics/weight-control/understanding/Pages/understanding-adult-overweight-and-obesity.aspx)

Ogden, C. L., Carroll, M. D., Curtin, L. R., McDowell, M. A., Tabak, C. J., & Flegal, K.

M. (2006). Prevalence and trends in overweight among US children and adolescents, 1999-2004. *Journal of American Medical Association*, 295(13), 1549-1555. doi:10.1001/jama.295.13.1549.

Rimmer, J. H., Wang, E., Yamaki, K., & Davis, B. (2010). Documenting disparities in

obesity and disability. *National Center for the Dissemination of Disability*

*Research (NCDDR)*, No 24. Retrieved from [http://chp.ahslabs.uic.edu/wp-](http://chp.ahslabs.uic.edu/wp-content/uploads/sites/4/2014/04/drrp_)

Rimmer, J. H., & Yamaki, K. (2006). Obesity and intellectual disability. *MRDD*

*Research Reviews*, 12, 22-27. doi: 10.1002/mrdd

- Rimmer, J. H., Yamaki, K., Lowry, B. M. D., Wang, E., & Vogel, L.C. (2010). Obesity and obesity-related secondary conditions in adolescents with intellectual/developmental disabilities. *Journal of Intellectual Disability Research*, 54(9), 787–794. doi: 10.1111/j.1365-2788.2010.01305.x
- Shah, N. R., & Braverman, E. R. (2012). Measuring adiposity in patients: The utility of body mass index (BMI), percent body fat, and leptin. *PLoS ONE* 7(4). doi:10.1371/journal.pone.0033308
- Shreve, M. (2015). Assessing and treating pediatric obesity. *The Clinical Advisor*, 18(6), 53-58.
- Singh, K., Sanderson, J., Galarneau, D., Keister, T., & Hickman, D. (2013). Quality improvement on the acute inpatient psychiatry unit using the Model for Improvement. *Ochsner Journal* 13(3). doi: 10.1043/1524-5012-
- Sniehotta, F. F., Scholz, U. & Schwarzer, R. (2006). Action plans and coping plans for physical exercise: A longitudinal intervention study in cardiac rehabilitation. *British Journal of Health Psychology*, 11(Pt 1), 23-37. doi: 10.1348/135910705X43804
- Stiefel, M. C. (2011). Decision support. In D. B. Nash, J. Reifsnyder, R. J. Fabius & V. P. Pracilio, *Population health: Creating a culture of wellness*. (pp. 181-198). Sudbury, MA: Jones & Bartlett Learning.
- Tanofsky-Kraff, M., Shomaker, L. B., Wilfley, D. E., Young, J. F., Sbrocco, T., Stephens, M.,... Yanovski, J. A. (2014). Targeted prevention of excess weight gain and eating disorders in high-risk adolescent girls: a randomized controlled

trial. *American Journal of Clinical Nutrition*, 100(4), 1010-1018. doi: 10.3945/ajcn.114.092536

Teramoto, M., Bungum, T. J., Landwer, G. E., & Wagner, D. R. (2015). Association of physical activity to the risk of obesity in adults with physical disabilities. *Obesity Research Open Journal*, 1(1), 16-23. Retrieved from <http://openventio.org/ArticleinPress/Association>

Terry, A.J. (2012). *Clinical research for the doctor of nursing practice*. Sudbury, MA: Jones & Bartlett Learning.

Wilson, P. M., Petticrew, M., Calnan, M. W., Nazareth, I. (2010). Disseminating research findings: what should researchers do? A systematic scoping review of conceptual frameworks. *Implementation Science*, 5(91). doi:10.1186/1748-5908-5-91.

## Appendix A: DEPA Questionnaire

## Clinician-Directed Information Component Evaluation

---

**Please rate the model for meeting daily-enhanced physical activities (DEPA) for individuals with intellectual and developmental disability ages 20 – 40 by putting a number in each box.**

**See scoring scale below**

---

### Scoring

1= Disagree/Not at all

2= Agree/Most Likely

3= Strongly Agree/Unlikely

4= Excellently/Definitely

1. Do you believe a daily-enhanced physical activity will improve wellbeing?
  2. Do you believe daily physical activity is necessary for people with disability?
  3. I believe regular physical exercises will help to reduce risks of developing medical problem associated with overweight.
  4. The suggested activities will reduce the development of muscle rigidity and improve muscle tone.
  5. Do you believe the selected group will benefit from the suggested activities?
  6. Do you think disability should prevent people from engaging in the selected physical activities?
  7. Do you believe a person with disabilities will benefit from maintaining ideal body mass index?
  8. I would encourage increase staff involvement in engaging people supported in daily-enhanced physical activity.
  9. Do you believe the steps indicated in the program will result in achieving moderate weight loss?
  10. I believe the recommend program would reduce sedentary activities in the various Homes.
  11. What additional activities would you recommend to improve physical activities?
  12. Please indicate the weakness(es) of this module. **Please list suggestions for improvement.**
- 
13. Please list the strength(s) of this module.
-

Information Flyer

# Daily Enhance-Physical Activity (DEPA) Result in **THIS** (Total Health Improvement Strategy)

## **Daily Planned Activity:** Mondays, Wednesdays, and Fridays

1. 30 minutes of brisk walking – (8:00 AM - 8:30 AM) -
2. Kicking soccer balls for 45 minutes (9:00 AM – 9:45 AM) –
3. Activity of choice, walking, jogging, tennis (4:00 PM – 5:00 PM) –

## **Daily Planned Activity:** Tuesdays, Thursdays, and Saturday

1. 30 minutes of brisk walking – (8:00 AM - 8:30 AM) –
2. Basketball game (9:00 AM – 9:45 AM) –
3. Gross Muscle activity of choice every evening between 4:00 PM to 5:00 PM –

## NOTE

Moderate-intensity physical exercise between 150 and 250 minutes per week result in **THIS** (Total Health Improvement Strategy)

## Appendix B

## Letter of Cooperation from a Research Partner

Margaret Diugu, RN, Manager  
Department of Intellectual and Developmental Disabilities  
275 Stewarts Ferry Pike  
Nashville, TN 37214  
615-400-7029  
Margaret.Diugu2@tn.gov

Date: 3/29/16

Dear Abel Okuma,

Based on my review of your research proposal, I give permission for you to conduct the study entitled “The Development and Content Validation of an Adult Obesity Educational Program” Questionnaire within the Clover Bottom developmental Center and Middle Tennessee Homes. As part of this study, I authorize you to conduct DEPA Questionnaire as Clinician-Directed Information Component Evaluation Individuals’ participation will be voluntary and at their own discretion.

We understand that our organization’s responsibilities include allowing staffs to complete an anonymous questionnaire at their own discretion. Our Staff reserve the right to withdraw from the study at any time if our circumstances change.

The student will be responsible for complying with our site’s research policies and requirements, including protecting staff privacy.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization’s policies. I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student’s supervising faculty/staff without permission from the Walden University IRB.



Sincerely,

Margaret Diugu  
615-400-7029

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verify any electronic signatures that do not originate from a password-protected source (i.e., an email address officially on file with Walden).