Overcoming Barriers and Increasing Confidence of Providers and Nurses in Addressing Overweight and Obesity

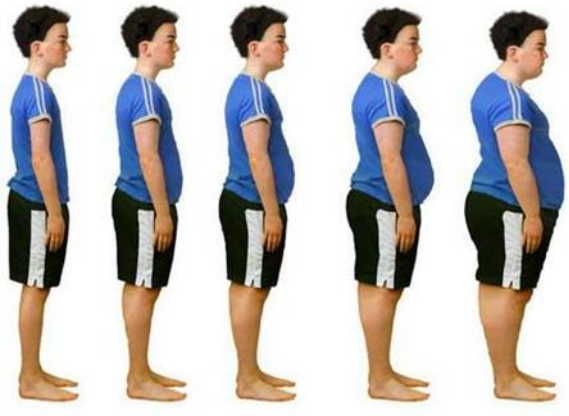
Andrea Bearden, FNP-C, MSN
Faculty Advisor: Dr. Beth Kelsey

Introduction

- Background Knowledge
- Local Problem
- Intended Improvement
- Project Questions

Background

- In 2011-2012, 34.9% of adults were obese.
- The estimated cost of obesity in the U.S. in 2008 was $147 billion.
- 31.8% of Indiana residents are obese (CDC, 2013).
- Half of all deaths in the U.S. are related to unhealthy behaviors.
- Only 5% of the $2 trillion spent on health care each year is dedicated to decreasing behavioral and social risk factors.



Local Problem

- 78% of Veterans are overweight or obese (OW/O) (VA/DOD 2014).
- At VANIHCS--35,618 Veterans are OW/O.
- Only 2.67% of Veterans within VANIHCS have had one or more MOVE visits (US Department of Veterans Affairs, 2014).

Conventional Method of Treatment:

Project Purpose/Intended improvement

- The purpose of this quality improvement project was to improve weight loss management by decreasing barriers and increasing provider and nurse confidence in addressing overweight and obesity with patients.

Project Questions

- 1. Does an educational program for nurse/providers that incorporates the Transtheoretical Model (TTM) of Change, Motivational Interviewing (MI) and the 5As of behavioral counseling decrease barriers and increase confidence in addressing weight management with patients?
- 2. Does an educational program that addresses barriers to weight management, and promotes utilization of the TTM, 5As, and MI increase discussion of weight management among patients and nurses/providers?
- 3. Does discussion of weight management among patients and nurses/providers increase the number of patients who enroll in the MOVE program?

Conceptual Model Framework

- Transtheoretical Model of Change
- Motivational Interviewing
- Modified 5As of Obesity Management

Transtheoretical Model of Change (TTM)

- Model focuses on intentional change and decision making in individuals.
- Core constructs include:
  - Precontemplation
  - Contemplation
  - Planning/Preparation
  - Action
  - Maintenance
- Decisional balance
- Self-efficacy

(Nursing Theories, 2012)

Motivational Interviewing

- Patient-centered approach
- Enhances motivation to change by exploring ambivalence
- Patients develop their own agenda and find their reasons for change.
- Collaborative approach in which the patient is the expert
- Open-ended questions are a key component

Modified 5As of Obesity Management

- **Ask** permission to discuss weight and assess readiness to change.
- **Assess** risk and causes of obesity.
- **Advise** on health problems related to obesity and provide treatment options.
- **Agree** on goals that are based on patient's ability/confidence to make behavior change (SMART goals).
- **Assist**--refer/arrange follow-up

Adapted from Glasgow, R., Emont, S., & Miller, D. (2006). Assessing delivery of the five 'As' for patient-centered counseling.

Methods

- Setting and Population
- Outcome Objectives
- Project Design/Intervention
- Methods of Evaluation – Study of the Intervention
- Analysis of Evaluation Data
- Results

Setting and Population

- VANIHCS
- Participants recruited via email invitation and by overviewing DNP project at 2 Patient Aligned Care Team (PACT) Town Hall Meetings.
- Convenience sample
- 13 participants (involved in primary care)
  - 4 Nurse Practitioners
  - 9 nurses (RNs and LPNs)

Outcome Objectives

- There will be a 50% decrease in perceived barriers to addressing weight loss with patients among providers and nurses.
- There will be a 50% increase in confidence in addressing weight loss with patients among providers and nurses.
- There will be a 30% increase in number of obese patients who receive weight management education from the providers and nurses
- There will be a 5% increase in the number of patients who enroll in the MOVE program.

Intervention – Education Session

- 30 minute educational session for nurses/providers on strategies that can be used in addressing the issue of OW/O with patients. Topics included:
  - TTM of Change, MI, and 5As used to address OW/O.
  - Barriers to change,
  - and how to tailor discussion interventions that are specific for the patient.

Intervention—Education Session (cont'd)

- 2 sessions provided at Fort Wayne campus, with availability for participants at other facilities to join live online. You Tube pre-recorded session also available and sent as a link via email to participants that could not attend live.
  - Project Director reserved conference rooms and set up online meetings.
  - 2 nurses, 1 social worker, 1 psychologist attended the first session
  - 1 nurse practitioner attended the second session
  - The remaining 10 participants viewed the session via You Tube.

Intervention – Patient Weight Management Folders

- Topics included in folders:
  - Facts about healthy weight
  - 10 Health Gains from a 10% Weight loss
  - How do I get Started with Changing my Eating Habits?
  - Mindful Eating
  - Eating well on a Budget
  - Motivate!
  - Physical Activity on a Budget
  - How do I get Started with Increasing my Physical Activity?
  - No Time for Physical Activity?
  - Physical Activity Pyramid
  - Daily Food and Physical Activity Diary
- Taken from MOVE National website (www.move.va.gov) and National Institute of Health
- Collaborated with VA Education Department for approval of handouts used in folder.
- Rationale: these are all topics that patients tend to have concerns about or feel that can be barriers to weight loss.

Intervention – Clinical Reminder

- Collaborated with Clinical Reminder Specialist with developing and setting up the clinical reminder. Informatics request placed for approval of clinical reminder.
- Clinical reminder in CPRS prompts nurses/providers to offer OW/O Veterans a Patient Weight Management Folder, consider Stage of Change and use MI and 5As in patient interactions.

Reminder Resolution: Weight Management Education Folder

Important points to remember when interacting with patients:

- Remember to consider what Stage of Change that a patient is in during patient encounters (Precontemplation, Contemplation, Planning/Preparation, Action, Maintenance). This will help you to provide information and develop a plan that is patient-centered.

- Use Motivational Interviewing open-ended questions, actively listen.

 ~ Consider using the Confidence Ruler ("On a scale of 1-10, how confident are you that you can make healthy choices?")
 ~ Set SMART goals (Specific, Measurable, Attainable, Realistic, Timely)

- Think of the 5A's when discussing weight management with patients (Assess, Advise, Agree, Assist, Arrange).

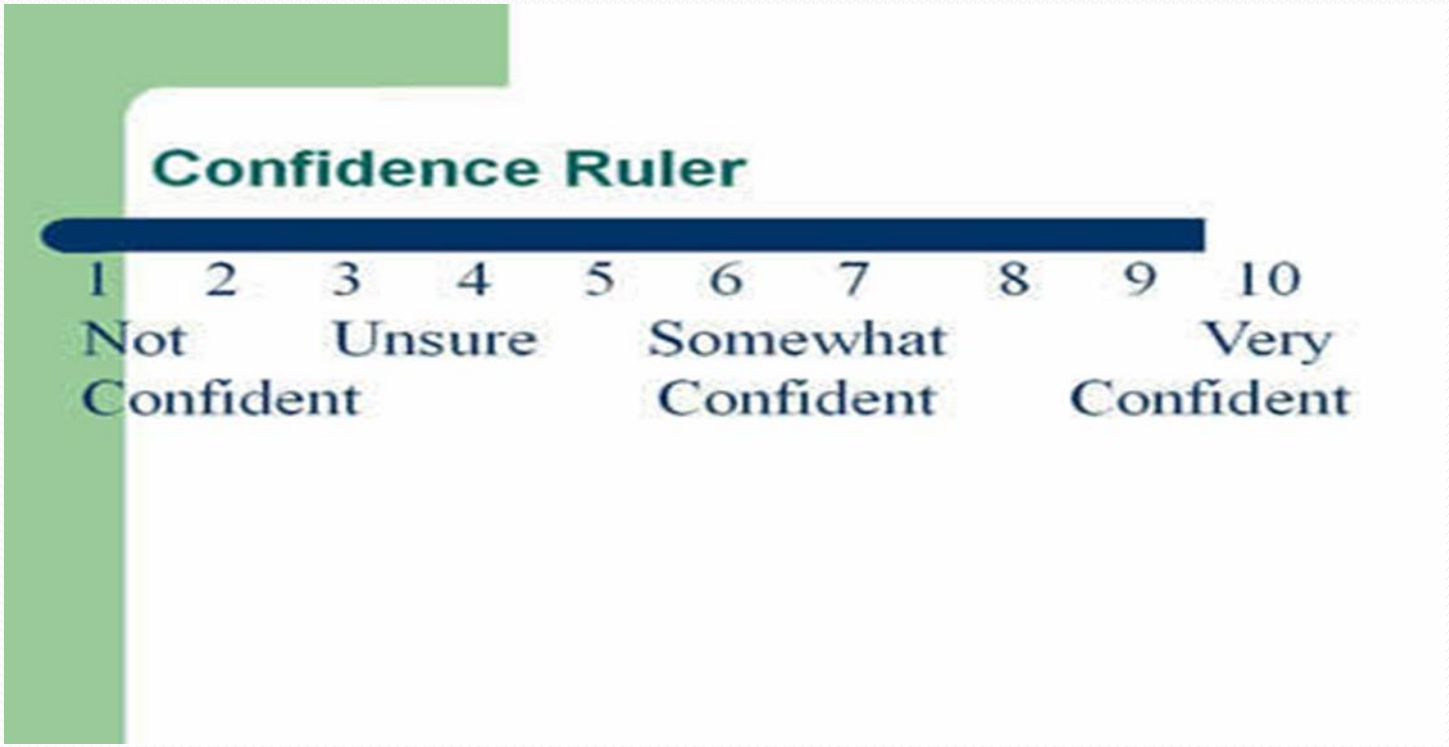
Patient's BMI is > 25 and should be provided with a Weight Management Folder.

- (•) Weight Education Folder provided.
- ( ) Weight Education Folder refused.

Methods of Evaluation of Outcomes

- Anonymous pre-intervention and post-intervention online survey
- Assess changes in confidence in discussing weight management with patient
- Ascertain changes in participants' feelings on barriers that hinder discussion
- Questions on survey were developed from the Confidence Ruler and Academic Behavioral Confidence (ABC) scale. ABC scale has been found to be valid and reliable. Confidence ruler has been found to have both construct and predictive validity.

Confidence Ruler



Pre/Post-Intervention Survey

- **On a scale of 0 to 10 with 0 being not confident at all, and 10 being extremely confident, please answer the following questions:**
- How confident are you in using motivational interviewing to help a patient to lose weight?
- How confident are you in utilizing the 5As (assess, advise, agree, assist, arrange) as a counseling strategy to assist a patient with weight loss management?
- How confident are you that you can ascertain a patient's readiness and ability to work on weight loss based on stage of readiness for change?
- How confident are you that you can provide a brief counseling intervention to help a patient to lose weight?
- How confident are you that you can prescribe a plan for weight management for your patient?
- How confident are you that you can obtain a diet history and assess for unhealthy behaviors in your patient?
- How confident are you that you can respond to a patient's questions regarding weight management?
- How confident are you that you can assist a patient in setting realistic goals and making lifestyle changes for weight loss?
- How confident are you that you can collaborate and refer patients to other providers, such as dieticians when appropriate?

Pre/Post Intervention Survey

- **Rate yourself by circling the response which most closely applies to you.**
- **(Strongly Disagree)(Disagree)(Neither Agree or Disagree)(Agree) (Strongly Agree)**
- Weight loss counseling and management is difficult.
- It is difficult to find the time to address weight management with my patients while in clinic.
- I have a thorough knowledge of weight loss management and feel qualified to treat overweight/obese patients.
- I am usually successful in helping overweight/obese patients lose weight.
- Patients are likely to benefit from weight loss counseling while being seen in primary care.
- Obesity is a condition that is treatable.
- Most obese patients will not lose a significant amount of weight.
- I feel uncomfortable addressing weight loss with patients.
- Changing patient behavior is futile.
- Please write two barriers that you believe are important in hindering discussion of weight loss with patients:
- 1.
- 2.

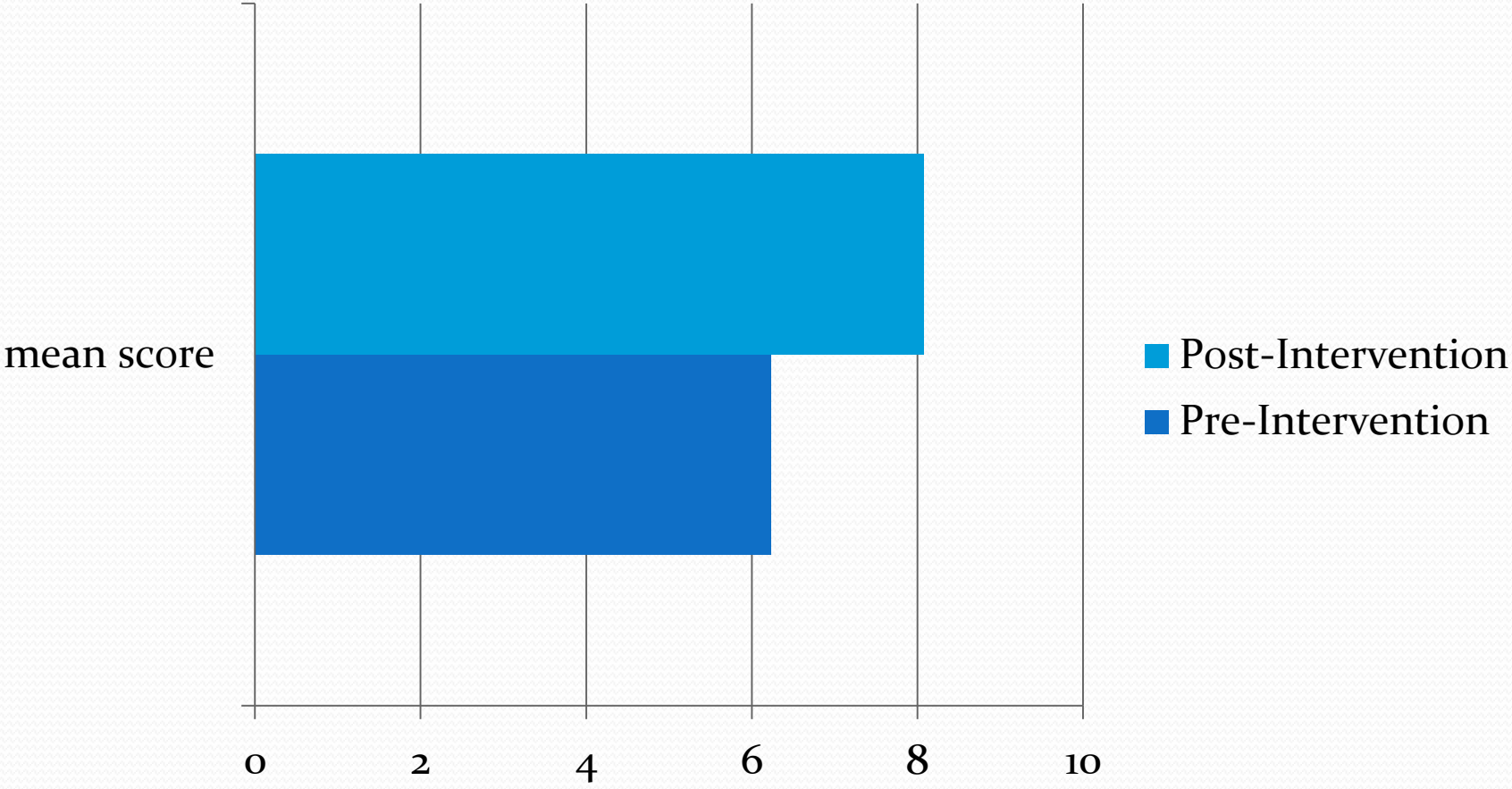
Analysis of data – Pre/Post-Intervention Surveys

- Descriptive statistics, Nonparametric due to small sample size.
- Post-test Cronbach's alpha 80.5%
- 3 questions from the surveys were found to be significant with p values of .007, .007, and .023 respectively.

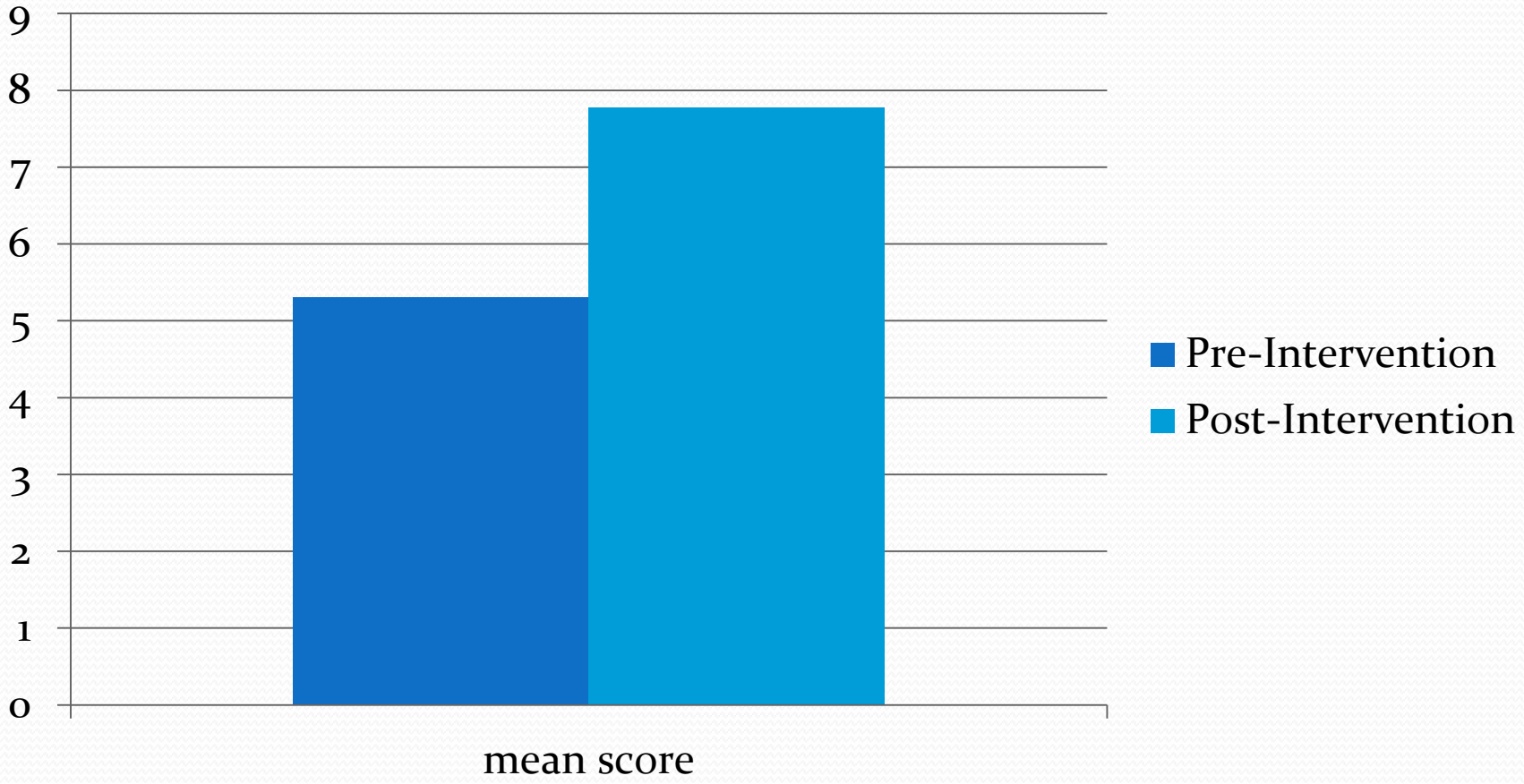
Results – Pre/Post-Intervention Surveys

- All 13 participants completed pre-intervention and post-intervention surveys.
- **Confidence** of nurses/providers did increase after the intervention based on Pre-test/Post-test results. Pre-test confidence score compared to post-test confidence score Wilcoxon p value 0.033.
- Decreasing **barriers** was not found to be statistically significant.
  - Staffing and time may be the issue with this.

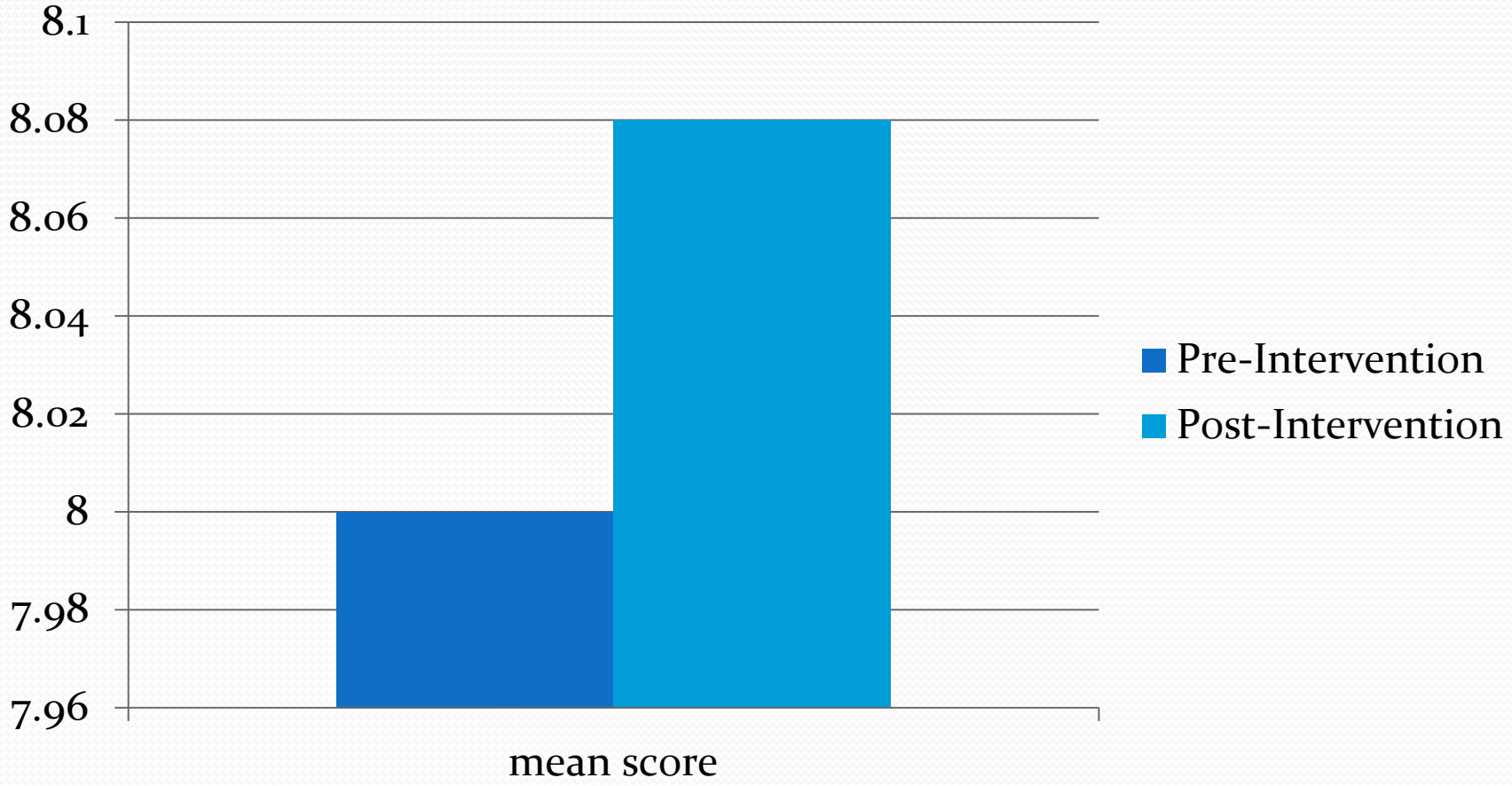
How confident are you in using motivational interviewing to help a patient lose weight?



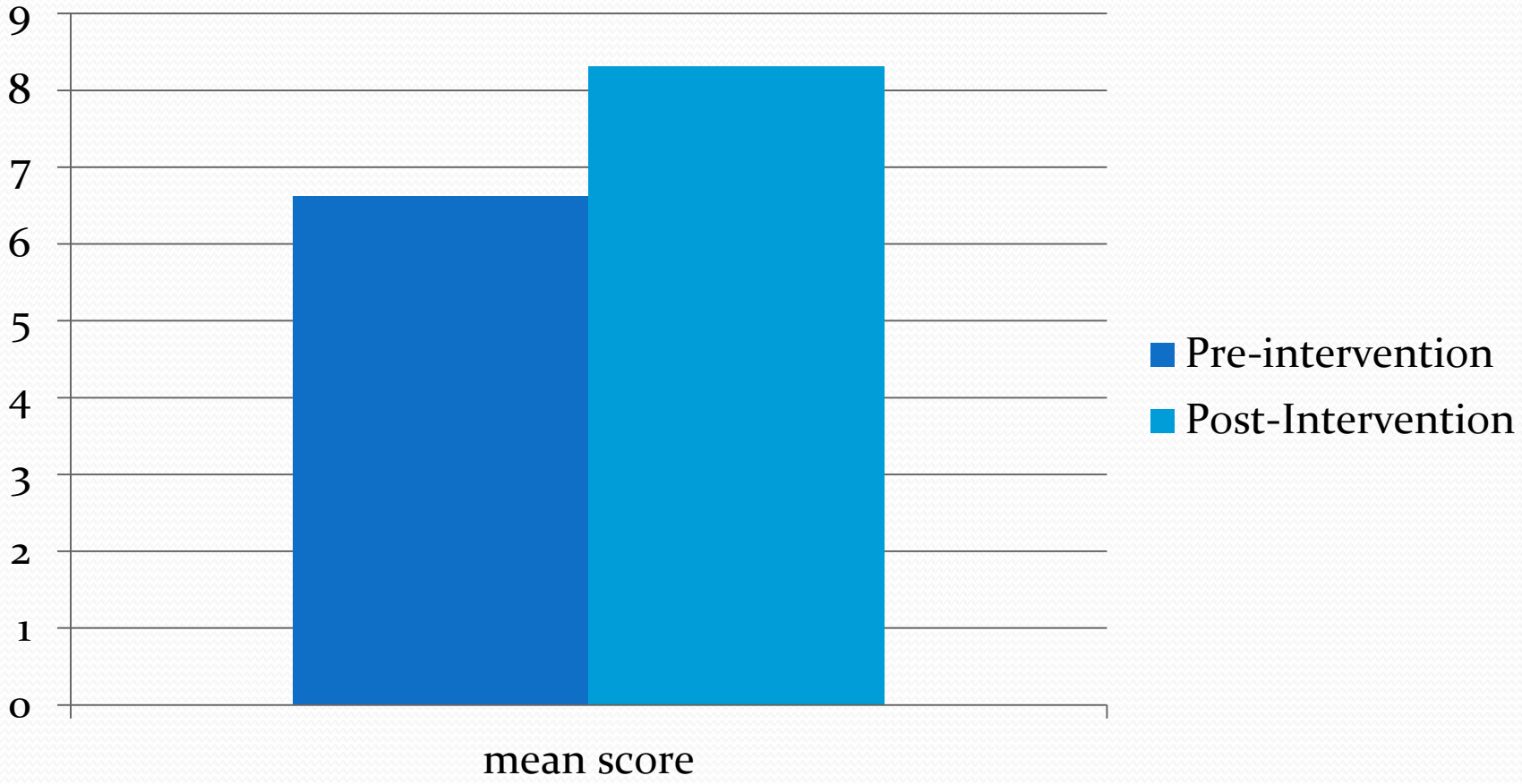
How confident are you in using the 5As as a counseling strategy to assist a patient with weight loss management?



How confident are you that you can ascertain a patient's readiness and ability to work on weight loss based on stage of readiness for change?



How confident are you that you can respond to a patient's questions regarding weight management?



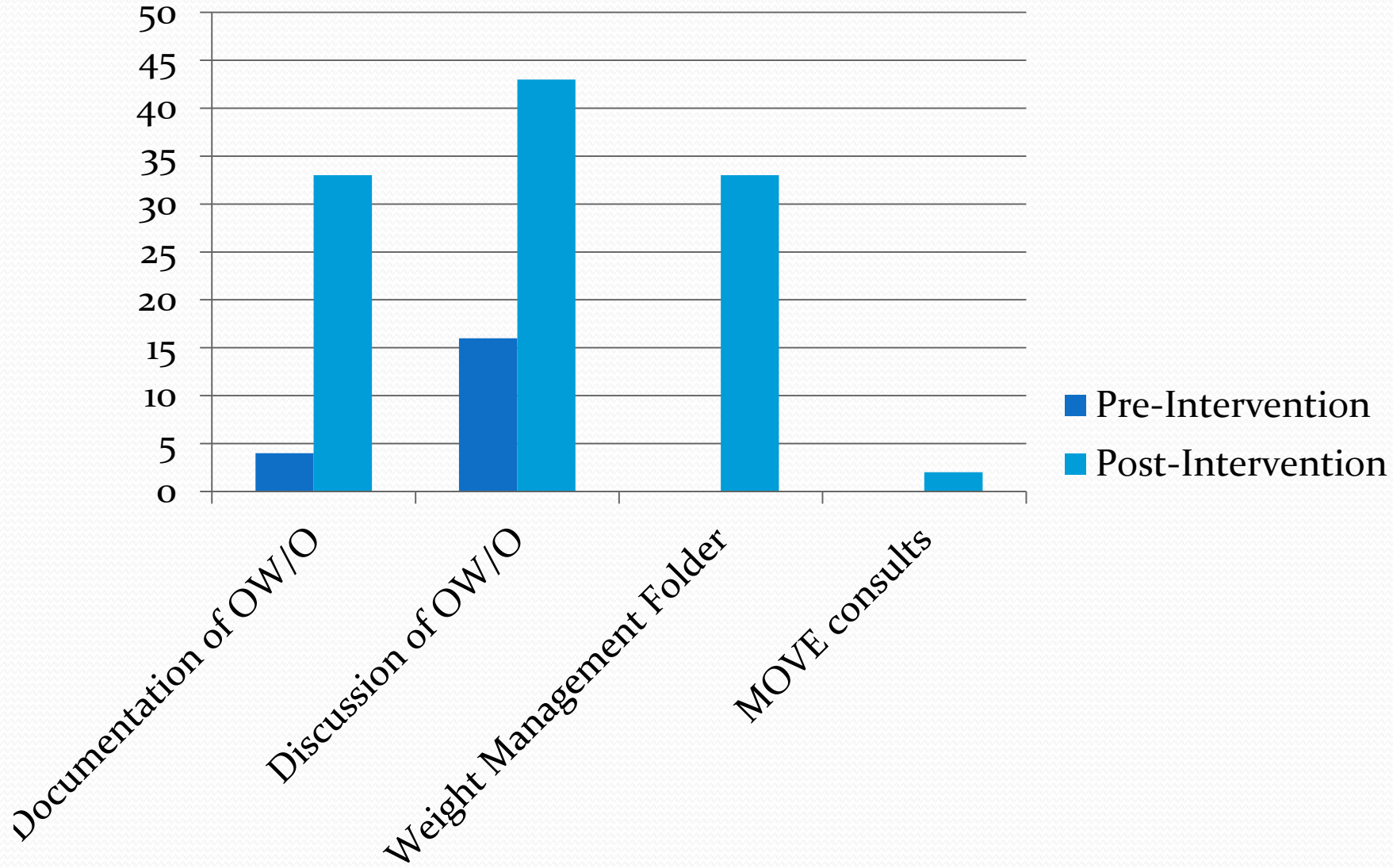
Methods of Evaluation of Outcomes

- Pre-intervention and post-intervention chart reviews
- Assess documentation of discussion of weight management with OW/O patients
- Assess documentation of provision of education materials on weight loss
- Assess documentation of MOVE consults

Results – Pre/Post-Intervention Chart Audits

- 150 charts audited pre and post-intervention
- 10 charts for each participant pre and 10 charts post-intervention.
- Based on chart reviews, there was **increased discussion** of weight management with Veterans.

Pre/Post Intervention Chart Reviews



Clinical Reminder Data

- Total number of patients who were offered the Weight Management Folder: **949**
- Total number of patients who accepted the Weight Management Folder: **288**
- Total number of patients who refused the Weight Management Folder: **661**

Clinical Reminder Data (cont'd)

- Total number of patients (returning) who reported making changes in their physical activity: **4**
- Total number of patients (returning) who reported making changes in their diet: **4**
- Total number of patients (returning) who reported NOT making changes in their physical activity: **2**
- Total number of patients (returning) who reported NOT making changes in their diet: **2**

Discussion

- Summary
- Relation to other evidence
- Limitations
- Interpretation
- Conclusions/Implications for Practice/Recommendations
- Questions?

Summary – Intervention Implementation

- Successes:
  - All participants completed the education component, pre and post-intervention surveys, and voiced positive comments that the project was enlightening/helpful for Veterans.
  - There was a great response from the nurses (especially the LPNs), who were champions at discussing weight with patient and offering the Patient Weight Management Folder.

Summary—Intervention Implementation

- Difficulties:
  - Staffing and time were barriers that could not be changed.
    - All facilities at VANIHCS continue to have less staffing than what is needed, leaving remaining nurses and providers to take on more work.
    - There are multiple clinical reminders to complete each time a patient is seen, and even the addition of one takes more time.
    - This clinical reminder was not mandatory, so it could have been easy for participants to skip when seeing the patient in clinic.

Summary – Strengths of Conceptual Model Framework

- This trilogy of education (TTM, MI, and Modified 5As) includes important aspects of self-efficacy, collaboration, patient-centered care, and when utilized together, provides a comprehensive approach to improving confidence among nurses/providers in management of obese patients.
- Utilization of the TTM, MI and 5As in educational programs of nurses/providers to increase confidence may lead to increased discussion of weight management with patients.

Relation to Other Evidence

- Sutton et al (2000), nurse administered a staging questionnaire to determine what stage of change a patient was in. Patients in later stages of change had smaller BMI and waist circumference.
- Macqueen, Brynes, and Frost (2001), the Transtheoretical Model helped health care providers recognize patients who were motivated to change.
- Marino, et al (2007), students taught MI noted increased confidence in using MI, and increased knowledge.
- Physician attitudes and confidence increased after review of the components of 5As (Jay et al, 2009).

Limitations

- Lack of time
- Staffing issues
- Obesity not the reason for the patient's visit.
- Short duration of the project (3 months)

Interpretation

- Confidence increased
- Trying to decrease barriers is difficult

Interpretation (cont.)

- Why did perceived barriers not decrease?
  - Time was the barrier that continually was noted in most of the surveys as being a barrier to weight management.
  - Participants did note an improved knowledge, and felt better qualified to treat overweight/obese patients, but the majority of participants were neutral with the following statement, “I am usually successful in helping overweight/obese patients lose weight.” (8 participants were neutral).
- Why did so many patients refuse the folders?
  - Time may have been an issue with this as well—it can be easy to click through a clinical reminder and check that the patient refused, or if it is not explained well, the patient may be more prone to refuse.

Interpretation (cont'd)

- Why weren't more MOVE consults made?
  - In general, the MOVE program is utilized at only about 2.5%, and one comment that I heard from nurses/providers before the educational program was, "the MOVE program doesn't work." I have also heard this from patients.
  - MOVE only meets once per month, and there are only 5 classes. There are not enough staff to have larger groups.

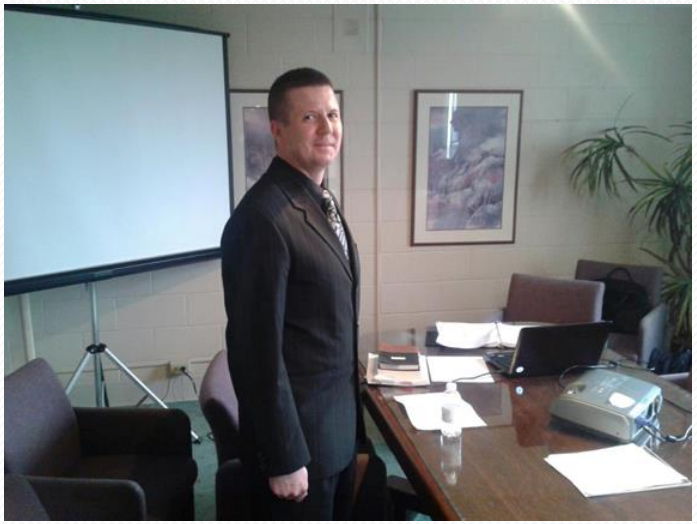
Comments from Surveys

- Hard to change habits
- Inability to afford healthy foods
- Not having enough **time** to discuss weight management.
- Patients are in denial about what they eat/amount eaten daily.
- **Time** and willingness of patient to hear.
- **Time** allowed with patients.
- Patient is embarrassed and not willing to discuss.
- Provider **time** and patient motivation.
- Patients want an easy way out to lose weight.
- **Time** during clinic visits.
- **Time** of MOVE appointments are not conducive for individuals who work
- TeleMOVE is not beneficial.

Conclusion/implications for practice/recommendations

- Improving population health
- Sustaining the change
- Engaging/mentoring individuals to champion the cause
- Sharing work through publication of articles
- Poster presentations
- Bigger sample size
- Larger setting

Questions?



References

- Canadian Obesity Network. (2012). 5As Tool. Retrieved from http://www.obesitynetwork.ca/5As.
- CDC. (2013). Obesity prevalence maps. Retrieved from http://www.cdc.gov/obesity/data/table-adults.html.
- Croston, M. (2010). Motivational interviewing: An overview. HIV Nursing, Autumn, 15-18.
- Finkelstein, E., Trogdon, J., Cohen, J., & Dietz, W. (2009). Annual medical spending attributable to obesity: Payer and service-specific estimates. Health Affairs, 28(5), w822-w831. Retrieved from http://content.healthaffairs.org/content/28/5/w822.full.
- Hauer, K. E., Carney, P. A., Chang, A., & Satterfield, J. (2012). Behavior change counseling curricula for medical trainees: A systematic review. Academic Medicine: Journal of the Association of American Medical Colleges, 87(7), 956-968. doi:10.1097/ACM.0b013e31825837be

References (cont'd)

- Nursing Theories. (2012). Stages of change model: Transtheoretical model (TTM). Retrieved from http://currentnursing.com/nursing_theory/transtheoretical_modelhtml.
- Preventing and managing overweight and obesity in adults. (2007). The New York Department of Health and Mental Hygiene, 26(4), 23-30.
- US Department of Veterans Affairs (2014). National center for veterans' analysis and statistics. Retrieved from http://www.va.gov/vetdata/Report.asp.